EXECUTIVE DOCUMENT SUMMARY

State Form 41221 (R10/4-06)

Instructions for completing the EDS and the Contract process.

1. Please read the guidelines on the back of this form.
2. Please type all information.
3. Check all boxes that apply.
4. For amendments / renewals, attach original contract.
5. Attach additional pages if necessary.

RECEIVED AUG 02 2018 IDOA CONTRACTS

1. EDS Number:	2. Date prepared:
A53-19-17230	6/15/2018

3. CONTRACTS & LEASES

- X Professional/Personal Services
- ___ Grant
- ___ Lease
- ___ Attorney
- ___ MOU
- ___ QPA _____
- ___ Contract for procured Services
- ___ Maintenance
- ___ License Agreement
- ___ Amendment# _____
- ___ Renewal # _____
- ___ Other _____

FISCAL INFORMATION

4. Account Number:	5. Account Name:
10850-19000.539035	REVENUE DEPT COLL - ADM
6. Total amount this action: $77,680,000.00	7.New contract total: 77,680,000.00
8. Revenue generated this action: $0.00	9.Revenue generated total contract: $0.00

10.New total amount for each fiscal year :

Year 2019	$20,250,000.00	Year 2024	$1,600,000.00
Year 2020	$13,500,000.00	Year 2025	$1,675,000.00
Year 2021	$14,750,000.00	Year 2026	$1,675,000.00
Year 2022	$11,650,000.00	Year 2027	$1,750,000.00
Year 2023	$1,600,000.00	Year 2028	$1,750,000.00

TIME PERIOD COVERED IN THIS EDS

11. From (month, day, year):	12. To (month, day, year):
8/20/2018	7/31/2032

13. Method of source selection:

___ Bid/Quotation ___ Emergency ___ Negotiated ___ Special Procurement

X RFP# 17-082 ___ Other *(specify)* _____

AGENCY INFORMATION

14. Name of agency:	15. Requisition Number:
Revenue	19-17230

16. Address: Indiana Dept of Revenue
Finance Division
100 N SENATE AVE IGCN 248
INDIANAPOLIS, IN 46204

AGENCY CONTACT INFORMATION

17. Name:	18. Telephone #:
JO ANNE JONES	317.233.5220

19. E-mail address: JJONES@DOR.IN.GOV

COURIER INFORMATION

20. Name:	21. Telephone #:
JO ANNE JONES	317.233.5220

22. E-mail address: JJONES@DOR.IN.GOV

VENDOR INFORMATION

23 Vendor ID # 0000363065

24. Name:	25. Telephone #:
FAST LP	(877) 275-3278

26. Address: FAST ENTERPRISES LLC
7229 S ALTON WAY
CENTENNIAL, CO 80112

27. E-mail address: jharrison@fastenterprises.com

28. Is the vendor registered with the Secretary of State? (Out of State Corporations, must be registered) X Yes ___ No

29. Primary Vendor: M/WBE/IN-Vetera

Minority:	___ Yes	X No
Women:	___ Yes	X No
IN-Veteran	___ Yes	X No

30. Primary Vendor Percentages: 93.0 %

31. Sub Vendor: M/WBE/IN-Veteran

Minority:	X Yes	___ No
Women:	X Yes	___ No
IN-Veteran	X Yes	___ No

32. If yes, list the %:

Minority:	0.7 %
Women:	0.7 %
IN- Veteran	5.5 %

33. Is there Renewal Language in

X Yes ___ No

34. Is there a "Termination for Convenience" clause in the document? X Yes ___ No

35. Will the attached document involve data processing or telecommunications system X Yes: IOT or Delegate has signed off on contract

36. Statutory Authority *(Cite applicable Indiana or Federal Codes)*:
IC 5-22

37. Description of work and justification for spending money. *(Please give a brief description of the scope of work included in this agreement.)*

Contractor will design, implement, install, and test a new integrated tax system for the DOR. Upon acceptance of this new system, DOR will also pay for maintenance and support services for 10 years after implementation. DOR current tax system was implemented in 1998 and is sorely outdated

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38. Justification of vendor selection and determination of price reasonableness:

The Contractor was selected as a result of RFP 17-082 process and evaluation and was deemed the most suited for the DOR requirements at the best possible price.

39. If this contract is submitted late, please explain why: *(Required if more than 30 days late.)*

40. Agency fiscal officer or representative appro	41. Date Approved	42. Budget agency approval	43. Date Approved
Adam M Vanee	8/2/2018		8/3/18
44.Attorney General's Office approval	45. Date Approved	46. Agency representative receiving from AG	47. Date Approved
	8/7/18		

113111-000

PROFESSIONAL SERVICES CONTRACT
EDS# A53-19-17230

This Contract, including all Exhibits ("Contract"), is entered into by and between the State of Indiana ("State"), acting on behalf of the Indiana Department of Revenue, and Fast Enterprises, LLC, a New York limited liability company ("FAST" or the "Contractor"), pursuant to the terms and conditions set forth herein. The State and the Contractor are referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, the Indiana Department of Revenue ("Department") is a large and complex State organization that employs numerous business processes in the administration and collection of the State's taxes. Such business processes are supported by a variety of applications and technology products, including its legacy tax systems. To assure the integrity and reliability of its tax administration and collection responsibilities, the State has determined that it is in the best interests of the Department to replace its legacy tax systems with an upgraded, improved and more efficient modernized system.

WHEREAS, the Contractor is a leader in tax modernization solutions, licenses a GenTax® Integrated Tax System and offers implementation, maintenance and support services for GenTax® that the Contractor has proposed will meet the State's requirements – including an integrated solution that will provide the State, at a minimum: (a) the same business capabilities that are currently provided by the legacy system being replaced; (b) additional capabilities enabled by the GenTax® solution functionality that is not being provided by the current legacy systems; and (c) capabilities outlined in this Contract.

WHEREAS, in accordance with the State's RFP# 17-082 (the "RFP"), the State and the Contractor have negotiated the terms of this Contract, based in part, on the Contractor's Best and Final Revised Response (the "RFP Response"), which the State and the Contractor have determined to be the most advantageous in accomplishing the State's requirements and objectives in modernizing and upgrading its business processes utilizing the GenTax® Integrated Tax System.

WHEREAS, the Parties have agreed that for a fixed price, the Contractor shall provide to the State licenses for the GenTax® Integrated Tax System, Implementation Services, certain Maintenance and Support Services, and additional responsibilities described herein.

NOW, THERFORE, in consideration of the above recitals, the mutual undertakings of the Parties as contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Contract hereby agree as follows:

ARTICLE I: DEFINITIONS

As used in this Contract, the following words and phrases shall have the following meanings, with grammatical variations thereof having corresponding meanings (the singular shall be interpreted as including the plural and vice versa, unless the context clearly indicates otherwise).

1. "APRA" means the Access to Public Records Act set forth in IC §5-14-3, as amended.

2. "Base Contract" means this Contract excluding all Exhibits and Attachments.

3. "Change Order" has the meaning ascribed to such term in Article III, Section 9 herein.

4. "Contract" means this Contract, including all Exhibits attached hereto, between the State, acting on behalf of the Department, and the Contractor.

5. "Contract Modification" has the meaning ascribed to such term in Article III, Section 9 herein.

6. "Contractor" means FAST.

7. "Contract Value" means the total remuneration to be paid under this Contract as provided in Article III, Section 3 herein.

8. "Contractor's Solution" or "Solution" has the meaning ascribed to such term in Article II, Section 2 herein.

9. "Core Functionality" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

10. "Department" means the Indiana Department of Revenue.

11. "Effective Date" has the meaning ascribed to such term in Article III, Section 2 herein.

12. "Exit Assistance Notice" has the meaning ascribed to such term in Article III, Section 50.B herein.

13. "Exit Assistance Period" has the meaning ascribed to such term in Article III, Section 50.B(1) herein.

14. "Exit Assistance Services" has the meaning ascribed to such term in Article III, Section 50.B(2) herein.

15. "Exit Plan" has the meaning ascribed to such term in Article III, Section 50.B(2) herein.

16. "Expiration Date" has the meaning ascribed to such term in Article III, Section 2 herein.

17. "FAST" means, FAST Enterprises, LLC, a New York limited liability company.

18. "FAST Implementation Methodology" has the meaning ascribed to such term in the SOW.

19. "FIPS" means the Federal Information Processing Standard.

20. "Force Majeure Event" has the meaning ascribed to such term in Article III, Section 20 herein.

21. "IAC" means the Indiana Administrative Code.

22. "IC" means the Indiana Code.

23. "IDOA" means the Indiana Department of Administration.

24. "IDOA Commissioner" means the Commissioner of IDOA.

25. "IOT" means the Indiana Office of Technology.

26. "IRS" means the Internal Revenue Service.

27. "IV&V" means independent verification and validation.

28. "Implementation Period" means the period commencing on the Effective Date and ending on the later of (a) the date of successful completion of the Implementation Services or (b) the last day of the 47th month after the Effective Date.

29. "Implementation Services" means those Services described in the SOW until the fourth rollout goes live.

30. "Incident" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

31. "Indemnification Claims" has the meaning ascribed to such term in Article III, Section 24 herein.

32. "Level of Maintenance and Support Services" means Level 1, Level 2, Level 3 or Time and Materials Maintenance and Support Services.

33. "Maintenance and Support Services" means those Services described in Article III, Section 51 herein.

34. "Materials" has the meaning ascribed to such term in Article III, Section 35 herein.

35. "Measurement Period" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

36. "OAG" means the Office of the Indiana Attorney General.

37. "Ongoing Maintenance and Support Period" has the meaning ascribed to such term in Article III, Section 51 herein.

38. "Ongoing Maintenance and Support Services" means the Maintenance and Support Services to be performed by the Contractor upon the completion of the Implementation Services.

39. "Party" means, as applicable, the State or FAST.

40. "Payment Trigger" means the meeting of all conditions under the SOW by the Contractor for a payment to be made by the State to the Contractor as set forth in the Implementation Period Costs and Payment Schedule attached hereto as Exhibit A.

41. "Principal" has the meaning ascribed to such term in Article III, Section 14.A herein.

42. "Protected Characteristics" has the meaning ascribed to such term in Article III, Section 32 herein.

43. "Resolution" and "Resolve" have the meanings ascribed to such terms in Section 1 of Exhibit C, Service Levels.

44. "Response Time" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

45. "RFP" means the State's RFP# 17-082.

46. "RFP Response" means the Contractor's Best and Final Revised Response.

47. "Scheduled Maintenance" has the meaning ascribed to such term in Section 4 of Exhibit C, Service Levels.

48. "Selective Entries" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

49. "Service Levels" has the meaning ascribed to such term in Section 1 of Exhibit C, Service Levels.

50. "Services" has the meaning ascribed to such term in Article III, Section 1 herein.

51. "Severity Level 1 Incidents" and "Severity Level 2 Incidents" have the meanings ascribed to such terms in Section 1 of Exhibit C, Service Levels.

52. "SOW" means the Statement of Work attached hereto as Exhibit D.

53. "SLA" has the meaning ascribed to such term in the first paragraph of Exhibit C, Service Levels.

54. "Software" has the meaning ascribed to such term in Section 1.1 of Exhibit E, Gentax® Software Licensing Agreement.

55. "State" means the State of Indiana.

56. "STIG Certification" means: (a) strict compliance with Cat I STIGs; (b) resolution of all Cat II STIGs where resolution can be (i) strict compliance, (ii) POA&M to resolve, or (iii) compensating controls negotiated with the Department; and (c) only STIGs which are part of the GenTax architecture (to include the application) will apply.

57. "STIGs" means the Security Technology Implementation Guides.

58. "Subcontractor" has the meaning ascribed to such term in Article III, Section 5.1 herein.

59. "Technology Stack" means the inventory of all third-party technologies used in the computing environment between the computer hardware and the application itself and all third-party technologies used to create the application.

60. "Term" has the meaning described in Article III, Section 2 herein.

61. "Zero Day Vulnerability," as used in Exhibit C, means a flaw in software, hardware or firmware that is unknown to the Party or Parties responsible for patching or otherwise fixing the flaw. Zero day may refer to the vulnerability itself, or it may refer to a zero-day exploit, an attack that uses the zero-day vulnerability to attack vulnerable systems.

ARTICLE II: CONTRACT GOALS AND OBJECTIVES

1. The overarching goals, objective, and intent of this Contract are: (a) to upgrade and modernize the business processes and technologies within the Department to assure the delivery of reliable and effective tax administration and collection services; (b) to implement a reliable and user-friendly modernized system that closes internal control gaps, provides enhanced capabilities, and improves the functionality of the legacy systems being replaced; (c) to assure the protection and integrity of confidential information gathered in the administration and collection of taxes; (d) to improve services to taxpayers and stakeholders, while maximizing revenues and improving the efficiency of internal operations in the Department's tax administration and collection responsibilities; and (e) to meet the State's functional, technical, and project-related requirements as determined in the RFP Response and the SOW, or as otherwise agreed by the Parties.

2. To accomplish the Contract goals and objectives, the Contractor has proposed, and the State has accepted, a solution, as negotiated in the terms of this Contract, based, in part, on the RFP and RFP Response, which includes the licensing of a GenTax® Integrated Tax System to the State and providing Implementation Services, certain Maintenance and Support Services (during the Implementation Period and the Ongoing Maintenance and Support Period), Exit Assistance Services, and additional responsibilities described herein, which together will provide the State enhanced capabilities in architecture, technology, functionality, and usability that will meet the State's requirements goals and objectives (the "Contractor's Solution" or "Solution").

3. This Contract includes the provisions of this Base Contract and the following exhibits, which are attached hereto and incorporated herein by reference:

EXHIBIT A:	Implementation Period Costs and Payment Schedule
EXHIBIT B:	Post-Implementation Maintenance and Support Costs
EXHIBIT C:	Service Levels
EXHIBIT D:	Statement of Work
EXHIBIT E:	GenTax® Software Licensing Agreement
EXHBIIT F:	GenTax® Maintenance and Support Agreement
EXHIBIT G:	Contractor's Best and Final Revised Response
EXHIBIT H:	State's RFP# 17-082

ARTICLE III: PERFORMANCE TERMS AND CONDITIONS

1. Duties of Contractor. The Contractor shall perform all commitments and requirements of this Contract, including providing all services described below (collectively the "Services"), in an effective, timely, and accurate manner and that meet or exceed all required performance standards and Service Levels, including:

(a) Implementation Services as described in the SOW;
(b) Maintenance and Support Services as described in Article III, Section 51 herein;
(c) Exit Assistance Services;
(d) All other services provided or to be provided by the Contractor under this Contract, in connection with the Implementation Services, the Maintenance and Support Services and the Exit Assistance Services, as the same may be amended from time to time pursuant to a Change Order or a Contract Modification authorized pursuant to Article III, Section 9 herein; and
(e) All tasks or activities necessary or which may reasonably be inferred from this Contract, for the performance of such Services by the Contractor.

2. Term. This Contract, unless earlier terminated or as otherwise provided herein, shall be effective for a period of thirteen years (13) and eleven (11) months. It shall be performed in two phases: (a) the first for the completion of Implementation Services; and (b) the second for the performance of Maintenance and Support Services upon the completion of Implementation Services ("Ongoing Maintenance and Support Services"). Implementation Services shall commence on August 20, 2018 ("Effective Date") and shall continue as described in this Contract until the completion of the Implementation Period. Upon completion of Implementation Services, Ongoing Maintenance and Support Services shall be provided, pursuant to Article III, Section 51 herein, for up to an additional ten (10) years ("Ongoing Maintenance and Support Period"), through the tenth (10th) anniversary of the completion of Implementation Services ("Expiration Date").

3. Consideration. Total remuneration to be paid under this Contract ("Contract Value") shall be paid, in accordance with Article III, Section 36 herein, in two phases: (a) during the Implementation Period; and (b) during the Ongoing Maintenance and Support Period.

A. Unless otherwise amended by a duly executed Change Order, the total payment by the State to the Contractor during the Implementation Period shall not exceed sixty million one hundred fifty thousand dollars ($60,150,000), which shall be allocated, divided, and paid upon the completion of each Payment Trigger, and in corresponding amounts, identified in the Implementation Period Costs and Payment Schedule attached hereto as Exhibit A.

B. Unless otherwise amended by a duly executed Change Order, the total payment by the State to the Contractor during the Ongoing Maintenance and Support Period shall not exceed seventeen million five hundred thirty thousand dollars ($17,530,000), which shall be divided and paid in monthly installments in accordance with the Post-Implementation Maintenance and Support Costs schedule attached hereto as Exhibit B. Provided however, the total payment by the State during the Ongoing Maintenance and Support Period shall be consistent with the State's option to upgrade or decrease Ongoing Maintenance and Support Services pursuant to Article III, Section 51 herein. For such time and for such Level of Maintenance and Support Services the State selects, the State shall pay the corresponding amounts reflected in the Post-Implementation Maintenance and Support Costs schedule (Exhibit B), except to the extent otherwise provided in Article III, Section 51 herein.

4. Access to Records. The Contractor and its Subcontractors, if any, shall maintain all books, documents, papers, accounting records, and other evidence pertaining to all work performed and costs incurred under this Contract. The Contractor and its Subcontractors shall make such materials available at their respective offices at all reasonable times during this Contract, and for three (3) years following the date of final payment under this Contract, for inspection by the State or its authorized designees. Copies shall be furnished at no cost to the State if requested.

5. Assignment; Successors and Subcontractors. The Contractor binds its successors and assignees to all the terms and conditions of this Contract. The Contractor shall not assign the whole or any part of this Contract without the State's prior written consent. The Contractor may assign its right to receive payments to such third parties as the Contractor may desire without the prior written consent of the State, provided that the Contractor gives written notice (including evidence of such assignment) to the State thirty (30) days in advance of any payment so assigned. The assignment shall cover all unpaid amounts under this Contract and shall not be made to more than one assignee.

5.1 Subcontractors: The Contractor shall be permitted to utilize subcontractors to perform portions of the Services (each, a "Subcontractor"), provided that the Subcontractor(s) is approved by the State and the Contractor maintains full responsibility and liability for the performance of

such Subcontractor(s) in compliance with the terms of this Contract. The State reserves the right, but does not assume the obligation, to: (a) reject any proposed subcontract with any Subcontractor; (b) suggest modifications to any such proposed subcontract; and (c) object to the selection of any Subcontractor to perform any obligations or Services under this Contract. The Contractor remains fully responsible for all obligations, Services and functions performed by its Subcontractors to the same extent as if such obligations, Services and functions were performed by the Contractor directly, and for purposes of this Contract, such work will be deemed work performed by the Contractor.

5.1.1 Notice of Proposed Subcontractors: At least ten (10) days prior to entering into an agreement with a Subcontractor, the Contractor must provide the State with the following: (a) the identity of any proposed Subcontractor; (b) evidence reasonably satisfactory to the State regarding the proposed Subcontractor's ability to perform the subcontracted Services; and (c) a duly executed certificate from such Subcontractor.

5.1.2 Approved Subcontractors:. The Contractor previously proposed and the State has approved the Contractor's use of the following Subcontractors in the capacities represented by the Contractor in its RFP Response:

(a) Quinn David & Associates, LLC
(b) Guidesoft, Inc. dba Knowledge Services
(c) Professional Management Enterprises (PME)

6. Assignment of Antitrust Claims. As part of the consideration for the award of this Contract, the Contractor assigns to the State all rights, title and interest in and to any claims the Contractor now has, or may acquire, under state or federal antitrust laws relating to the products or Services which are the subject of this Contract and owned by the State under the Contract.

7. Audits. The Contractor acknowledges that it may be required to submit to an audit of funds paid through this Contract. Any such audit shall be conducted in accordance with IC §5-11-1, *et seq.*, and audit guidelines specified by the State.

The State considers the Contractor to be a "Contractor" under 2 C.F.R. 200.330 for purposes of this Contract. However, if it is determined that the Contractor is a "subrecipient" and if required by applicable provisions of 2 C.F.R. 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements), Contractor shall arrange for a financial and compliance audit, which complies with 2 C.F.R. 200.500 *et seq.*

8. Authority to Bind Contractor. The signatory for the Contractor represents that he/she has been duly authorized to execute this Contract on behalf of the Contractor and has obtained all necessary or applicable approvals to make this Contract fully binding upon the Contractor when his/her signature is affixed, and accepted by the State.

9. Changes in Work. This Contract and any increase in costs described in the Implementation Period Costs and Payment Schedule, Exhibit A, the Post-Implementation Maintenance and Support Costs, Exhibit B, and Article III, Section 51 herein related to Exhibit B, may only be amended, supplemented or modified by a written document executed by both Parties, including duly authorized representatives of each State signatory to the Contract, (each, a "Change Order"). The Contractor shall make no claim for additional compensation not authorized in this Contract in the absence of a duly executed Change Order. Exhibits C, D, E and F may only be amended, supplemented or modified by a written document executed by the Department and the Contractor (each, a "Contract Modification"). Any unauthorized changes in

scope or other such additional or modified work performed by the Contractor shall be the responsibility of the Contractor "at risk" and the Contractor agrees to be responsible for any and all costs associated with any such unauthorized changes or additional work: (a) if no mutually signed Change Order, prior to such work, was executed by the Parties; and (b) if applicable, no mutually signed Contract Modification, prior to such work, was executed by the Department and the Contractor. Change Orders and Contract Modifications shall be incorporated into the Contract as executed. Annually, throughout the Term of the Contract, all "Contract Modifications" executed within the previous twelve (12) months during the period of September 1 through the following August 31, shall be incorporated into the Contract as an exhibit or exhibits to a Contract amendment executed by all State signatories prior to each September 30 following such twelve (12) month period. Notwithstanding the foregoing, the failure to accomplish such amendment by September 30 shall not affect the enforceability of any such Contract Modification.

10. Compliance with Laws.

A. The Contractor shall comply with all applicable federal, state, and local laws, rules, regulations, and ordinances, and all provisions required thereby to be included herein are hereby incorporated by reference. The enactment or modification of any applicable state or federal statute or the promulgation of rules or regulations thereunder after execution of this Contract shall be reviewed by the State and the Contractor to determine whether the provisions of this Contract require formal modification.

B. The Contractor and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State as set forth in IC §4-2-6, *et seq.*, IC §4-2-7, *et seq.* and the regulations promulgated thereunder. **If the Contractor has knowledge, or would have acquired knowledge with reasonable inquiry, that a state officer, employee, or special state appointee, as those terms are defined in IC §4-2-6-1, has a financial interest in this Contract, the Contractor shall ensure compliance with the disclosure requirements in IC §4-2-6-10.5 prior to the execution of this Contract.** If the Contractor is not familiar with these ethical requirements, the Contractor should refer any questions to the Indiana State Ethics Commission, or visit the Inspector General's website at http://www.in.gov/ig/. If the Contractor or its agents violate any applicable ethical standards, the State may, in its sole discretion, terminate this Contract immediately upon notice to the Contractor. In addition, the Contractor may be subject to penalties under IC §§ 4-2-6, 4-2-7, 35-44.1-1-4, and under any other applicable laws.

C. The Contractor certifies by entering into this Contract that neither it nor its Principal(s) is presently in arrears in payment of taxes, permit fees or other statutory, regulatory or judicially required payments to the State. The Contractor agrees that any payments currently due to the State may be withheld from payments due to the Contractor for work performed under this Contract. Additionally, further work or payments may be withheld, delayed, or denied and/or the State's performance may be suspended until the Contractor is current in its payments and has submitted proof of such payment to the State.

D. The Contractor warrants that it has no current, pending or outstanding criminal, civil, or enforcement actions initiated by the State, and agrees that it will immediately notify the State of any such actions. During the term of such actions, the Contractor agrees that the State may delay, withhold, or deny work under any Change Order, Contract Modification or other contractual device issued pursuant to this Contract.

E. If a valid dispute exists as to the Contractor's liability or guilt in any action initiated by the State or its agencies, and the State decides to delay, withhold, or deny work to the Contractor, the Contractor may request that it be allowed to continue, or receive work, without delay. The Contractor must submit, in writing, a request for review to the IDOA following the procedures for disputes outlined herein. A

determination by IDOA shall be binding on the Parties. Any payments that the State may delay, withhold, deny, or apply under this Section shall not be subject to penalty or interest, except as permitted by IC §5-17-5.

F. The Contractor warrants that the Contractor and its Subcontractors, if any, shall obtain and maintain all required permits, licenses, registrations, and approvals, and shall comply with all health, safety, and environmental statutes, rules, or regulations in the performance of work activities for the State. Failure to do so may be deemed a material breach of this Contract and grounds for immediate termination and denial of further work with the State.

G. The Contractor affirms that, if it is an entity described in IC Title 23, it is properly registered and owes no outstanding reports to the Indiana Secretary of State.

H. As required by IC §5-22-3-7:

(1) The Contractor and any Principals of the Contractor certify that:

(A) the Contractor, except for de minimis and nonsystematic violations, has not violated the terms of:

(i) IC §24-4.7 [Telephone Solicitation Of Consumers];

(ii) IC §24-5-12 [Telephone Solicitations]; or

(iii) IC §24-5-14 [Regulation of Automatic Dialing Machines];

in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and

(B) the Contractor will not violate the terms of IC §24-4.7 for the duration of this Contract, even if IC §24-4.7 is preempted by federal law.

(2) The Contractor and any Principals of the Contractor certify that an affiliate or Principal of the Contractor and any agent acting on behalf of the Contractor or on behalf of an affiliate or Principal of the Contractor, except for de minimis and nonsystematic violations,

(A) has not violated the terms of IC §24-4.7 in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and

(B) will not violate the terms of IC §24-4.7 for the duration of this Contract, even if IC §24-4.7 is preempted by federal law.

11. Condition of Payment. All commitments and requirements, including, without limitation, all Services provided by the Contractor under this Contract, must be performed to the State's reasonable satisfaction, as determined at the discretion of the State. The State shall not be required to pay for work found to be unsatisfactory or inconsistent with this Contract.

12. Confidentiality.

A. **Confidentiality of State Information.** The Contractor understands and agrees that data, materials, and information disclosed to the Contractor may contain confidential and protected information. The Contractor covenants that data, material, and information disclosed to the Contractor for the purpose of this Contract or based upon such data will not be disclosed to or discussed with third parties without the prior written consent of the State.

The Parties acknowledge that the Services to be performed by the Contractor for the State under this Contract may require or allow access to data, materials, and information containing Social Security numbers maintained by the State in its computer system or other records. In addition to the covenant made above in this Section and pursuant to 10 IAC 5-3-1(4), the Contractor (and its Subcontractors) and the State agree to comply with the provisions of IC §4-1-10 and IC §4-1-11. If any Social Security number(s) is/are wrongfully disclosed by the Contractor or its Subcontractors, the Contractor agrees to

reimburse the State for the cost of the notice of disclosure of a breach, if such notice is required by law, in addition to any other claims, damages and expenses for which it is liable under the terms of this Contract. Notwithstanding the foregoing, Contractor's liability under this Section to the State shall not exceed the amount covered by Contractor's Cyber Liability insurance up to the amount required under this Contract.

B. **Contractor Confidential Information.** State shall hold the Contractor confidential information in confidence using the same care that the State uses to protect its own confidential information, but in no case less than reasonable care, and will not use such confidential information except to fulfill its obligations under this Contract and applicable State and federal law. The Contractor acknowledges and agrees that any disclosures of its proprietary information that the Contractor makes under this Contract are subject to APRA.

The Contractor confidential information includes the following information, but only to the extent that such information is deemed to be information that the State shall not or may not disclose under APRA: (a) any data, products, inventions, innovations, program source code, program object code, program executables, data designs, data definitions, programming aids, tools, utilities, configurations, drawings, formulae, algorithms, ideas, designs, concepts, knowhow, discoveries, techniques, training material, documents, manuals, methodologies, specifications, models, and other knowledge capital, electronic or otherwise, owned by the Contractor whether copyrightable or patentable or not; (b) information relating to the technology, customers, business plans, promotional and marketing activities, pricing policies, finances and other business affairs of the Contractor; (c) any information which, under the circumstances, ought to be treated as confidential; and (d) any documents or material which are marked "Confidential".

Notwithstanding the preceding paragraph, the Contractor confidential information does not include: (a) information exposed to the public through use of the System's e-services function; (b) information that becomes part of the public domain through lawful means; (c) information subsequently and rightfully received from third parties who have the necessary rights to transfer the information without any obligation of confidentiality; (d) information known to the State prior to the Effective Date of this Contract without obligation of confidentiality; (e) information independently developed by the State without use of, or reference to, any the Contractor proprietary information; (f) information approved for release by written authorization of the Contractor; or (g) information required to be disclosed by compulsory judicial or administrative process or by law or regulation; provided that if the State is required to disclose the Contractor confidential information under clause (g) above, the State will first give the Contractor notice and provide such information as may reasonably be necessary to enable the Contractor to take action to protect its interests.

The State will not reverse engineer, decompile or disassemble any Software disclosed to it and must not remove any notice of copyright or trademark or other notices of ownership from any originals or copies of the Contractor confidential information.

Any non-government employees that may be exposed to or require access to the Contractor confidential information must sign a reasonable non-disclosure agreement provided by the Contractor prior to receiving access to the Contractor confidential information.

13. Reserved.

14. Debarment and Suspension.

A. The Contractor certifies by entering into this Contract that neither it nor its Principals nor any of its Subcontractors are presently debarred, suspended, proposed for debarment, declared ineligible or

voluntarily excluded from entering into this Contract by any federal agency or by any department, agency or political subdivision of the State. The term "Principal" for purposes of this Contract means an officer, director, owner, partner, key employee or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor.

B. The Contractor certifies that it has verified the state and federal suspension and debarment status for all Subcontractors receiving funds under this Contract and shall be solely responsible for any recoupment, penalties or costs that might arise from use of a suspended or debarred Subcontractor. The Contractor shall immediately notify the State if any Subcontractor becomes debarred or suspended, and shall, at the State's request, take all steps required by the State to terminate its contractual relationship with the Subcontractor for work to be performed under this Contract.

15. Default by State. Subject to the dispute resolution provisions of Section 16 herein, if the State, sixty (60) days after receipt of written notice, fails to correct or cure any material breach of this Contract, the Contractor may cancel and terminate this Contract and institute measures to collect monies due up to and including the date of termination.

16. Disputes.

A. Should any disputes arise with respect to this Contract, the Contractor and the State agree to act immediately and in good faith to resolve such disputes informally and in the normal course of business, prior to invoking any formal remedy or proceeding. Time is of the essence in the resolution of disputes.

B. The Contractor agrees that, the existence of a dispute notwithstanding, it will continue without delay to carry out all of its responsibilities under this Contract while the dispute is being resolved, except to the extent performance is prevented by the State or the issue in dispute precludes performance. Should the Contractor fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional costs incurred by the State or the Contractor as a result of such failure to proceed shall be borne by the Contractor, and the Contractor shall make no claim against the State for such costs.

C. If the Parties are unable to resolve a Contract dispute between them after good faith attempts to do so, a dissatisfied Party shall submit the dispute to the IDOA Commissioner for resolution. The dissatisfied Party shall give written notice to the IDOA Commissioner and the other Party. The notice shall include: (1) a description of the disputed issues; (2) the efforts made to resolve the dispute; and (3) a proposed resolution. The IDOA Commissioner shall promptly issue a notice setting out documents and materials to be submitted to the IDOA Commissioner in order to resolve the dispute; such notice may also afford the Parties the opportunity to make presentations and enter into further negotiations. Within thirty (30) business days of the conclusion of the final presentations, the IDOA Commissioner shall issue a written decision and furnish it to both Parties. The IDOA Commissioner's decision shall be the final and conclusive administrative decision unless either Party serves on the IDOA Commissioner and the other Party, within ten (10) business days after receipt of the IDOA Commissioner's decision, a written request for reconsideration and modification of the written decision. If the IDOA Commissioner does not modify the written decision within thirty (30) business days, either Party may take such other action helpful to resolving the dispute, including submitting the dispute to an Indiana court of competent jurisdiction – provided however, the Parties agree to provide thirty (30) days' notice to the other prior to filing a lawsuit. If the Parties accept the IDOA Commissioner's decision, it may be memorialized as a written Amendment to this Contract if appropriate.

D. The State may withhold payments on disputed items pending resolution of the dispute. The State's withholding of payment of disputed charges, however, will not be considered to prevent the

Contractor from performing. The unintentional nonpayment by the State to the Contractor of one or more invoices not in dispute in accordance with the terms of this Contract will not be cause for the Contractor to terminate this Contract.

E. With the written approval of the IDOA Commissioner, the Parties may agree to forego the process described in subdivision C. relating to submission of the dispute to the Commissioner.

F. This Section shall not be construed to limit either Party's right to terminate this Contract. Nor shall it be construed to abrogate provisions of IC § 4-6-2-11 in situations where dispute resolution efforts lead to a compromise of claims in favor of the State as described in that statute. In particular, releases or settlement agreements involving releases of legal claims or potential legal claims of the State should be processed consistent with IC § 4-6-2-11, which requires approval of the Governor and Attorney General.

17. Drug-Free Workplace Certification. For purposes of this Section, "Workplace" shall mean the offices of the Department located in the State. For purposes of this Section, "Employee" shall mean the employees of the Contractor working in the State on the Contractor's Solution. As required by Executive Order No. 90-5 dated April 12, 1990, issued by the Governor of Indiana, the Contractor hereby covenants and agrees to make a good faith effort to provide and maintain a drug-free workplace. The Contractor will give written notice to the State within ten (10) days after receiving actual notice that the Contractor, or an Employee of the Contractor in the State, has been convicted of a criminal drug violation occurring in the workplace. False certification or violation of this certification may result in sanctions including, but not limited to, suspension of Contract payments, termination of this Contract and/or debarment of contracting opportunities with the State for up to three (3) years.

In addition to the provisions of the above paragraph, the Contractor certifies and agrees that it will provide a drug-free workplace by:

(a) Publishing and providing to all of its Employees a statement notifying them that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace, and specifying the actions that will be taken against Employees for violations of such prohibition;

(b) Establishing a drug-free awareness program to inform its Employees of: (1) the dangers of drug abuse in the workplace; (2) the Contractor's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation and Employee assistance programs; and (4) the penalties that may be imposed upon an Employee for drug abuse violations occurring in the workplace;

(c) Notifying all Employees in the statement required by subparagraph (a) above that as a condition of continued employment, the Employee will: (1) abide by the terms of the statement; and (2) notify the Contractor of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;

(d) Notifying the State in writing within ten (10) days after receiving notice from an Employee under subdivision (c)(2) above, or otherwise receiving actual notice of such conviction;

(e) Within thirty (30) days after receiving notice under subdivision (c)(2) above of a conviction, imposing the following sanctions or remedial measures on any Employee who is convicted of drug abuse violations occurring in the workplace: (1) taking appropriate personnel action against the Employee, up to and including termination; or (2) requiring such Employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for

such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and

(f) Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (a) through (e) above.

18. Employment Eligibility Verification. As required by IC §22-5-1.7, the Contractor swears or affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien. The Contractor further agrees that:

(a) The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC §22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

(b) The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

(c) The Contractor shall require his/her/its Subcontractors, who perform work under this Contract, to certify to the Contractor that the Subcontractor does not knowingly employ or contract with an unauthorized alien and that the Subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a Subcontractor.

The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

19. Employment Option. If the State determines that it would be in the State's best interest to hire an employee of the Contractor, the Contractor will release the selected employee from any non-competition agreements that may be in effect. This release will be at no cost to the State or the employee.

20. Force Majeure. In the event that either Party is unable to perform any of its obligations under this Contract or to enjoy any of its benefits because of acts of God or the public enemy, government actions, public disturbances, labor disturbances, fires, floods, epidemics, quarantines, restrictions, freight embargoes or unusually severe weather, that are not the fault of the affected Party (hereinafter referred to as a "Force Majeure Event"), the Party who has been so affected shall immediately or as soon as is reasonably possible under the circumstances give notice to the other Party and shall do everything reasonably possible to resume performance, to the extent practicable, despite the Force Majeure Event. Upon receipt of such notice, all obligations affected by such Majeure Event under this Contract shall be immediately suspended, but only to the extent and for the time so affected and so long as the Party continues to use commercially best efforts to recommence performance. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the Party whose ability to perform has not been so affected may, by giving written notice, terminate this Contract.

21. Funding Cancellation. When the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this Contract, this Contract shall be canceled. A determination by the Director of State Budget Agency that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

22. Governing Law and Venue. This Contract shall be governed, construed, and enforced in accordance with the laws of the State of Indiana, without regard to its conflict of laws rules. Suit, if any, must be brought in the State of Indiana.

23. HIPAA Compliance. This Contract does not involve services, activities or products subject to the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

24. Indemnification.

A. The Contractor agrees to indemnify, defend, and hold harmless the State, its agents, officials, and employees from all third-party claims and suits, including damages, court costs, attorney's fees, and other expenses ("Indemnification Claims") to the extent caused by any negligent or wrongful act or omission, or breach of this Contract, by Contractor and/or its Subcontractors. The State shall not provide such indemnification to the Contractor and the Contractor shall not be required to defend, indemnify and hold harmless the State to the extent such damages are caused by the State or an unrelated third party.

B. Promptly after the receipt of any Indemnification Claims hereunder, the State shall provide to the Contractor written notice of such claims and shall permit the Contractor to assume, at its own expense, the defense of any such claims, and, upon such assumption, the State shall cooperate with the Contractor in the conduct of such defense. The State shall permit the Contractor, at its discretion, to settle any such claims, provided that such settlement does not adversely affect the State's rights hereunder or impose any obligations on the State in addition to those set forth in this Contract. If the Contractor does not assume the defense of any such Indemnification Claims, the State may defend against such Claims in such manner as it may deem appropriate and the State may settle such Claims on such terms as it may deem appropriate, and the Contractor shall promptly reimburse the State for the amount of all costs incurred by the State in connection with the defense against and/or settlement of such Claims.

25. Independent Contractor; Workers' Compensation Insurance. The Contractor is performing as an independent entity under this Contract. No part of this Contract shall be construed to represent the creation of an employment, agency, partnership or joint venture agreement between the Parties. Neither Party will assume liability for any injury (including death) to any persons, or damage to any property, arising out of the acts or omissions of the agents, employees or subcontractors of the other Party. The Contractor shall provide all necessary unemployment and workers' compensation insurance for the Contractor's employees, and shall provide the State with a Certificate of Insurance evidencing such coverage prior to starting work under this Contract.

26. Information Technology Enterprise Architecture Requirements. All information and communication technology-related products or services that are provided to the State must be compatible with the accessibility principles and goals of Section 508 of the Federal Rehabilitation Act of 1973, 29 U.S.C. § 794d, as well as the Indiana Office of Technology's policies, procedures, and standards which can be found at http://iot.in.gov/architecture/, unless a waiver is granted by the Office of Technology in advance, which shall not be unreasonably withheld. The State agrees to work in good faith to secure any necessary waiver. The State and Contractor shall cooperate to ensure such compliance before beginning Implementation Services. After Implementation Services begin, any costs to comply may be subject to a Change Order. The State may terminate this Contract for convenience if the Contractor fails to comply with the terms of this Section.

27. Insurance.

A. The Contractor shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which

may in any manner arise out of or result from the Contractor's performance under this Contract. If the Contractor's approved Subcontractors do not maintain similar limits, the Parties shall mutually agree on the insurance required to be maintained by the Contractor's Subcontractors.

(1) Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than $700,000 per person and $5,000,000 per occurrence unless additional coverage is required by the State. The Department is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.

(2) Automobile liability for owned, non-owned and hired autos with minimum liability limits of $700,000 per person and $5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.

(3) Errors and Omissions liability with minimum liability limits of $1,000,000 per claim and in the aggregate. Coverage for the benefit of the State shall continue for a period of two (2) years after the date of service provided under this Contract. The Department is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.

(4) The Contractor shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the Services provided under this Contract involve work outside of Indiana.

(5) Cyber Liability Insurance. The Contractor shall maintain insurance to cover claims which may arise from failure of the Contractor's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of non-public data, including, but not limited to, confidential or private information, transmission of a computer virus, or denial of service. The Contractor is required to carry the following limits: $5,000,000 – per claim or event and $10,000,000 – annual aggregate.

B. The Contractor's insurance coverage must meet the following additional requirements:

(1) The insurer must have a certificate of authority or other appropriate authorization to operate in the state in which the policy was issued.

(2) Any deductible or self-insured retention amount or other similar obligation under the insurance policies shall be the sole obligation of the Contractor.

(3) The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract, except for claims related to Contractor's breach of cyber security obligations which is limited as set forth in Article III, Sections 12(a) and 27A(5) herein.

(4) The insurance required in this Contract, through a policy or endorsement(s), shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.

(5) The Contractor waives and agrees to require their insurer to waive their rights of subrogation against the State.

C. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.

28. Key Person(s).

A. For key persons designated in the SOW, the Parties agree that should such individual(s) leave their employment, other than due to the fault of the Contractor, during the term of the Implementation Period for whatever reason, the State shall have the right to terminate this Contract for convenience pursuant to Article III, Section 44 herein. If the State elects not to terminate this Contract for convenience, then the Contractor shall replace such individual to the State's satisfaction within thirty (30) days of the date such individual left the employment of the Contractor or another mutually agreed upon timeframe. Otherwise, the State shall have the right to terminate this Contract for cause.

B. Nothing in subsection A shall be construed to prevent the Contractor from using the services of others to perform tasks ancillary to those tasks which directly require the expertise of the key person. Examples of such ancillary tasks include secretarial, clerical, and common labor duties. The Contractor shall, at all times, remain responsible for the performance of all necessary tasks, whether performed by a key person or others.

C. Key person(s) to this Contract are identified in the SOW.

29. Licensing Standards. The Contractor, its employees and Subcontractors shall comply with all applicable licensing standards, certification standards, accrediting standards and any other laws, rules, or regulations governing services to be provided by the Contractor pursuant to this Contract. The State will not pay the Contractor for any services performed when the Contractor, its employees or Subcontractors are not in compliance with such applicable standards, laws, rules, or regulations. If any license, certification or accreditation expires or is revoked, or any disciplinary action is taken against an applicable license, certification, or accreditation, the Contractor shall notify the State immediately and the State, at its option, may immediately terminate this Contract.

30. Merger & Modification. This Contract constitutes the entire agreement between the Parties. No understandings, agreements, or representations, oral or written, not specified within this Contract will be valid provisions of this Contract. This Contract may not be modified, supplemented, or amended, except by written agreement signed by the Parties pursuant to Article III, Section 9 herein.

31. Minority and Women's Business Enterprises Compliance. Award of this Contract was based, in part, on the MBE/WBE participation plan. Contractor shall utilize agreed certified MBE or WBE Subcontractors for at least 9.485% of the cost of Implementation Services. As such, the following will be participating in this Contract:

MBE/WBE	PHONE	COMPANY NAME	SCOPE OF PRODUCTS and/or SERVICES	UTILIZATION	DATE	PERCENT
(1) Quinn David & Associates, LLC						0.718%
(2) Guidesoft, Inc. dba Knowledge Services						0.718%
(3) TBD						8.049%
					PERCENTAGE TOTAL	9.485%

A copy of the Subcontractor agreement with Quinn David & Associates, LLC, and a copy of the Subcontractor agreement with Guidesoft, Inc. dba Knowledge Services, must be submitted to IDOA's Division of Supplier Diversity ("DSD") within thirty (30) days of the Effective Date, or another mutually agreed upon time period.

The parties acknowledge that the State does not ordinarily award a contract that pledges MBE/WBE participation on the basis of a TBD, or "to be determined" basis. Accordingly, within sixty (60) days of the effective date of this Contract, Contractor shall select one or more certified MBE or WBE Subcontractors for the remaining 8.049% of the cost of Implementation Services, currently identified as "TBD," and shall, within thirty (30) days of said selection, submit a copy of each Subcontractor agreement to IDOA's DSD.

Failure to provide a copy of any Subcontractor agreement will be deemed a violation of the rules governing MBE/WBE procurement, and may result in sanctions allowable under 25 IAC 5-7-8. Failure to provide any Subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA's MBE/WBE Division before changing the committed percentage total.

The Contractor shall report payments made to MBE/WBE Division Subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as "Pay Audit." MBE/WBE Division Subcontractor payments shall also be reported to the Division as reasonably requested and in a format to be determined by Division.

32. Nondiscrimination. Pursuant to the Indiana Civil Rights Law, specifically including IC §22-9-1-10, and in keeping with the purposes of the federal Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act, the Contractor covenants that it shall not discriminate against any employee or applicant for employment relating to this Contract with respect to the hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of the employee's or applicant's race, color, national origin, religion, sex, age, disability, ancestry, status as a veteran, or any other characteristic protected by federal, State, or local law ("Protected Characteristics"). The Contractor certifies compliance with applicable federal laws, regulations, and executive orders prohibiting discrimination based on the Protected Characteristics in the provision of Services. Breach of this paragraph may be regarded as a material breach of this Contract, but nothing in this paragraph shall be construed to imply or establish an employment relationship between the State and any applicant or employee of the Contractor or any Subcontractor.

33. Notice to Parties. Any notice, statement or other communication required under this Contract shall be in writing and delivered (a) personally, (b) by first class mail, (c) via an established courier/delivery service, or (d) by email with confirmation of receipt (with the original promptly sent in accordance with clauses (a) - (c) above). The effective date of any notice hereunder shall be the date of receipt by the receiving Party.

A. Notices to the State shall be sent to:

Commissioner, Department of Revenue, and
Chief Information Officer, Department of Revenue
100 N. Senate Ave. - IGCN, Room N248
Indianapolis, IN 46204
akrupp@dor.IN.gov

kgulley@dor.IN.gov

B. Notices to the Contractor shall be sent to:

Megan Mooney, General Counsel
6225 N. Meeker Pl. Suite 100
Boise, ID 83712
mmooney@fastenterprises.com
with a copy to legal@fastenterprises.com

34. Order of Precedence; Incorporation by Reference. In the event of any uncertainties regarding the interpretation of any particular provision or term used in this Contract, or in the event of any ambiguity, vagueness or inconsistency, such provisions and terms shall be read in a manner consistent with achieving the Contract Goals and Objectives described herein. Questions concerning the interpretation of any term or provision of this Contract shall be resolved by giving precedence in the following order:

(1) Terms of this Base Contract;
(2) Implementation Period Costs and Payment Schedule (Exhibit A);
(3) Post-Implementation Maintenance and Support Costs (Exhibit B);
(4) Service Levels (Exhibit C);
(5) Statement of Work (Exhibit D);
(6) GenTax® Software Licensing Agreement (Exhibit E);
(7) GenTax® Maintenance and Support Agreement (Exhibit F);
(8) Contractor's Best and Final Revised Response (Exhibit G); and
(9) State's RFP# 17-082 (Exhibit H).

35. Ownership of Documents and Materials.

A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials developed or created by the Contractor for the sole use of the State (the "Materials") shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.

B. Use of the Materials, other than related to Contract performance by the Contractor, without the prior written consent of the State, is prohibited. During the performance of this Contract, the Contractor shall be responsible for any loss of or damage to the Materials developed for or supplied by the State and used to develop or assist in the Services provided while the Materials are in the possession of the Contractor. Any loss or damage thereto shall be restored at the Contractor's expense. The Contractor shall provide the State full, immediate, and unrestricted access to the Materials and to the Contractor's work product during the term of this Contract.

36. Payments.

A. All payments shall be made thirty-five (35) days in arrears in conformance with State fiscal policies and procedures and, as required by IC § 4-13-2-14.8, the direct deposit by electronic funds transfer to the financial institution designated by the Contractor in writing unless a specific waiver has been obtained from the Indiana Auditor of State. No payments will be made in advance of receipt of the goods or Services that are the subject of this Contract except as permitted by IC § 4-13-2-20.

B. The State Budget Agency and the Contractor acknowledge that, during the Implementation Period, the Contractor is being paid in advance for the maintenance of equipment and/or software. Pursuant to IC § 4-13-2-20(b)(14), the Contractor, during the Implementation Period, agrees that if it fails to perform the maintenance required under this Contract, upon receipt of written notice from the State, it shall promptly refund the consideration paid, pro-rated through the date of non-performance.

37. Penalties/Interest/Attorney's Fees. The State will in good faith perform its required obligations hereunder and does not agree to pay any penalties, liquidated damages, interest or attorney's fees, except as permitted by Indiana law, in part, IC § 5-17-5, IC § 34-54-8, IC § 34-13-1 and IC § 34-52-2-3.

Notwithstanding the provisions contained in IC §5-17-5, any liability resulting from the State's failure to make prompt payment shall be based solely on the amount of funding originating from the State and shall not be based on funding from federal or other sources.

38. Progress Reports. The Contractor shall submit progress reports to the State upon request. The report shall be oral, unless the State, upon receipt of the oral report, should deem it necessary to have it in written form. The progress reports shall serve the purpose of assuring the State that work is progressing in line with the agreed schedule, and that completion can be reasonably assured on the scheduled date.

39. Public Record. Except as marked in the RFP Response in accordance with and subject to the RFP, the Contractor acknowledges that the State will not treat this Contract as containing confidential information, and will post this Contract on its website as required by Executive Order 05-07. Use by the public of the information contained in this Contract shall not be considered an act of the State.

40. Interpretation of Laws for Implementation into the Solution. The Contractor will inform the State if it knows that proposed requirements violate any federal, State or local statute, ordinance, rule or regulation. However, the Contractor is not required or obligated to interpret how any law, ordinance, statute or regulation is or should be implemented into the system. The State is solely responsible for any damages resulting from the system performing in accordance with instructions from the State.

41. Severability. The invalidity of any section, subsection, clause or provision of this Contract shall not affect the validity of the remaining sections, subsections, clauses or provisions of this Contract, unless such invalidation materially alters the bargain.

42. Substantial Performance. This Contract shall be deemed to be substantially performed only when fully performed according to its terms and conditions and any written Change Orders or Contract Modifications.

43. Taxes. The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract. However, if the State becomes required to pay taxes that a buyer of goods would pay, like a sales tax, or the goods or services provided under this Contract become subject to a tax, like a gross receipts tax, the State will

reimburse the Contractor for any such taxes that the Contractor pays in order to carry out the purposes of this Contract.

44. Termination for Convenience. This Contract may be terminated, in whole or in part, by the State, which shall include and is not limited to IDOA and the State Budget Agency whenever, for any reason, the State determines that such termination is in its best interest. Termination of Services shall be effected by delivery to the Contractor of a termination notice at least thirty (30) days prior to the termination effective date, specifying the extent to which performance of Services under such termination becomes effective. The Contractor shall be compensated for Services properly performed prior to the effective date of termination. The State will not be liable for Services performed after the effective date of termination (other than for phase-out services, Exit Assistance Services and/or any other Services requested and contracted by the State). The Contractor shall be compensated for Services herein provided but in no case shall total payment made to the Contractor exceed the original contract price or shall any price increase be allowed on individual line items if canceled only in part prior to the original termination date. For the purposes of this Section, the Parties stipulate and agree that IDOA shall be deemed to be a Party to this agreement with authority to terminate the same for convenience when such termination is determined by the Commissioner of IDOA to be in the best interests of the State.

45. Termination for Default.

A. The State may terminate this Contract, in whole or in part, for cause in any of the following circumstances:

(1) a breach by the Contractor of this Contract occurs, which is material considering this Contract as a whole and cannot reasonably be cured by the Contractor within thirty (30) days after delivery of a termination notice;

(2) a breach by the Contractor of this Contract occurs, which is material considering this Contract as a whole and can reasonably be cured by the Contractor within thirty (30) days, but which has not been cured within thirty (30) days of receiving a notice of breach; provided however, the time to correct or cure the breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the Parties; or

(3) a series of breaches of the Contractor's obligations occurs, none of which individually constitutes a material breach of this Contract as a whole, but which, in view of the Contractor's history of breaches, whether or not cured, collectively constitute a breach of this Contract, which is material when considering this Contract as a whole.

B. A material breach of this Contract by the Contractor will have occurred, if, including, but not limited to:

(1) The Contractor fails to: (a) deliver the product or supplies or to perform any of the Services within the time specified in this Contract or any extension or in accordance with the Service Levels required to be maintained pursuant to this Contract; (b) make progress so as to endanger performance of this Contract; (c) perform any of the terms, commitments, obligations or requirements of this Contract according to related timelines or performance standards or to the State's satisfaction; (d) satisfy and comply with all representations and warranties herein; or (e) complete the Implementation Services by the expiration of the Implementation Period;

(2) Any certification, representation or warranty in this Contract made by the Contractor or any certificate, schedule, report, instrument or other document delivered by or on behalf of the Contractor to the State pursuant to this Contract is false, misleading or inaccurate in any material respect when made or omits material information when made;

(3) The Contractor: (a) commences a voluntary case seeking: (i) liquidation, reorganization or other relief with respect to itself or its debts under any U.S. or foreign bankruptcy, insolvency or other similar law now or hereafter in effect; or (ii) the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its assets; (b) becomes insolvent, or generally does not pay its debts as they become due; (c) admits in writing its inability to pay its debts; (d) makes an assignment for the benefit of creditors; or (e) takes any action to authorize any of the foregoing; or

(4) An involuntary case is commenced against the Contractor: (a) seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to the Contractor or the Contractor's debts under any U.S. or foreign bankruptcy, insolvency or other similar law now or hereafter in effect; (b) seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of the Contractor or any substantial part of the Contractor's assets; (c) seeking the issuance of a writ of attachment, execution or similar process; or (d) seeking like relief; and, in any such case, such involuntary case shall not be contested by the Contractor in good faith or shall remain undismissed and unstayed for a period of 60 days.

C. The State shall pay the prices agreed to under this Contract for completed supplies delivered and Services accepted. The Contractor and the State shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under Article III, Section 16 herein. The State may withhold from these amounts any sum the State determines to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders.

D. If the State terminates this Contract in whole or in part, but the State wants to use the services provided by any Subcontractor of the Contractor for the provision of any Services under this Contract or the terminated portion thereof, as applicable, the Contractor shall assign any or all of the contracts it has entered into with such Subcontractor to the State with respect to this Contract or the terminated portion thereof, as applicable. To the extent any money remains owed by the Contractor to such Subcontractor upon or after such assignment and the State pays such amount to the Subcontractor, the State may deduct such payment from any amount owed to the Contractor under this Contract

E. The rights and remedies of the State in this clause are in addition to any other rights and remedies provided by law or equity or under this Contract.

46. Travel. No expenses for travel will be reimbursed unless specifically permitted under the SOW. Expenditures made by the Contractor for travel will be reimbursed at the current rate paid by the State and in accordance with the State Travel Policies and Procedures as specified in the current Financial Management Circular. Out-of-State travel requests must be reviewed by the State for availability of funds and for appropriateness per Circular guidelines.

47. Indiana Veteran's Business Enterprise Compliance. Award of this Contract was based, in part, on the IVBE participation plan. Contractor shall utilize agreed certified IVBE Subcontractors for at least 5.515% of the cost of Implementation Services. The following IVBE Subcontractors will be participating in this Contract:

VBE	PHONE	COMPANY NAME	SCOPE OF PRODUCTS and/or SERVICES	UTILIZATION	DATE	PERCENT
(1)		Professional Management Enterprises				5.515%
(2)						
(3)						
					PERCENTAGE TOTAL	5.515%

A copy of each Subcontractor agreement shall be submitted to IDOA within thirty (30) days of the request. Failure to provide any Subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA before changing the IVBE participation plan submitted in connection with this Contract.

The Contractor shall report payments made to IVBE Subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as "Pay Audit." IVBE Subcontractor payments shall also be reported to IDOA as reasonably requested and in a format to be determined by IDOA.

48. Waiver of Rights. No right conferred on either Party under this Contract shall be deemed waived, and no breach of this Contract excused, unless such waiver is in writing and signed by the Party claimed to have waived such right. Neither the State's review, approval or acceptance of, nor payment for, the Services required under this Contract shall be construed to operate as a waiver of any rights under this Contract or of any cause of action arising out of the performance of this Contract, and the Contractor shall be and remain liable to the State in accordance with applicable law for all damages to the State caused by the Contractor's negligent performance of any of the Services furnished under this Contract.

49. Performance and Representations of Contractor. The Contractor represents, warrants and covenants to the State that:

(a) the Contractor has full right, power and authority to enter into this Contract and to perform its obligations under this Agreement.

(b) the Contractor's execution, delivery and performance of this Contract and the performance or provision of Services, and delivery of the portions thereof (including all deliverables), to the State shall be in accordance with the terms and conditions of this Contract and the SOW, including meeting the description, features, Service Levels, timelines and specifications, and to the State's satisfaction.

(c) the Contractor shall diligently and timely provide the Services in a professional and workmanlike manner in accordance with the highest professional and technical guidelines and industry standards. The Contractor's personnel and Subcontractors shall have the necessary experience, qualifications, knowledge, competency and skillset to perform the work pursuant to this Contract, and if such Services or deliverables are to be provided as an article or good, such article or good will be free from material defects in material and workmanship, of merchantable quality and suitable to the Contractor's intended uses and purposes to the extent that such uses and purposes are known or reasonably should be known to the Contractor. This warranty as it relates to the Software terminates upon the termination or expiration of the State's subscription to Level 1 Maintenance and Support Services. This warranty as it relates to the Contractor's Solution continues, as long as, and for such time as, the State purchases Level 2 or Level 3 Maintenance and Support Services.

(d) the Contractor's execution, delivery and performance of this Contract, and the performance or provision of Services hereunder shall not violate or infringe upon the rights of any third

party or conflict with or violate any agreement the Contractor has or will have with any third party.

(e) the Contractor shall provide to the State all reports and information required to be prepared by the Contractor and provided to the State pursuant to this Contract in a timely, complete, and accurate manner.

(f) None of the Services, nor any portion thereof, infringes, misappropriates or violates any patent, copyright, trademark, trade secret, database, or other intellectual property right or right of publicity or privacy or other proprietary rights of any third party, and the Contractor has all rights and licenses necessary to (i) perform the Services, (ii) permit the Contractor to grant to the State all licenses granted herein, and (iii) obtain, develop and deliver all products provided to the State pursuant to this Contract.

If the State becomes dissatisfied with the work product of or the working relationship with those individuals assigned to work on this Contract, the State may, in addition to all other rights and remedies, request in writing the replacement of any or all such individuals, and the Contractor shall grant such request.

50. Exit Assistance Services.

A. The Contractor recognizes that the Services to be performed under this Contract are vital to the State and must be continued without interruption and that, upon termination or expiration of this Contract, a successor, either the State or another contractor, may continue them. The Contractor agrees to:

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

B. The Contractor shall, upon the State's written notice ("Exit Assistance Notice"):

(1) Furnish Exit Assistance Services for up to twelve (12) months after this Contract expires or is terminated ("Exit Assistance Period").

(2) Negotiate in good faith a plan with the State and the State's chosen successor, if any, to establish the nature and extent of phase-in, phase-out services required ("Exit Plan"). The Exit Plan shall: (a) specify the respective tasks to be performed by the Contractor and the State, or its chosen successor, in connection with the transition and migration of Services; (b) specify a training program and a date for transferring responsibilities for each division of work described in the Exit Plan; (c) establish a schedule pursuant to which such phase-in, phase-out Services are to be completed (the Services set forth in clauses (a) – (c) above constitute the "Exit Assistance Services"); and (d) identify the cost related to the Exit Assistance Services to be provided.

C. Except as agreed otherwise in the Exit Plan, the Services provided during the Exit Assistance Period shall be at the same Service Levels and according to the same performance standards as when the Services were provided during the Term of this Contract.

D. The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the Services required by this Contract.

E. The Contractor shall be reimbursed for all Exit Assistance Services at the Contractor's agreed hourly rates (i.e., costs incurred within the agreed period after Contract expiration that result from phase-in, phase-out operations) and paid pursuant to the terms of the Exit Plan and Article III, Section 36 herein. If this Contract is terminated due to the State's failure to timely pay undisputed amounts, then the Contractor's obligation to perform Exit Assistance Services shall be conditioned upon payment by the State in advance of estimated monthly amounts for the Exit Assistance Services.

51. Contractor Maintenance and Support Services.

A. During the Implementation Period and Ongoing Maintenance and Support Period, the Contractor shall perform the Maintenance and Support Services described in the GenTax® Maintenance and Support Agreement, attached hereto as Exhibit F, according to the following schedule:

(a) **Contractor Maintenance and Support Services during Implementation Period.** For the duration of the Implementation Period, the Contractor shall perform Level 3 Maintenance and Support Services as described in the GenTax® Maintenance and Support Agreement (Exhibit F). The cost for Level 3 Maintenance and Support Services are included in Exhibit A, Implementation Period Costs and Payment Schedule, and are included in the remuneration described in Article III, Section 3 herein.

(b) **Contractor Maintenance and Support Services during the Ongoing Maintenance and Support Period.** For the duration of the Ongoing Maintenance and Support Period, the Contractor shall perform, at a minimum, Level 1 Maintenance and Support Services as described in the GenTax® Maintenance and Support Agreement (Exhibit F). The cost for Level 1 Maintenance and Support Services are reflected in Exhibit B, Post-Implementation Maintenance and Support Costs, and are included in the remuneration described in Article III, Section 3 herein.

(c) **Optional Maintenance and Support Services During Ongoing Maintenance and Support Period.** The Contractor also commits to providing Level 2 or Level 3 Maintenance and Support Services, at the State's option, during the Ongoing Maintenance and Support Period. Level 2 and Level 3 Maintenance and Support Services are defined in the GenTax® Maintenance and Support Agreement (Exhibit F). The State may, at its option and sole discretion, upgrade to Level 2 or Level 3 Maintenance and Support Services at any time, for any portion, or for the full duration, of the Ongoing Maintenance and Support Period. Such option and discretion also includes the right for the State to decrease the Level of Maintenance and Support Services at any time, and for any duration, after any increasing to Level 2 or Level 3. The State's option and discretion to increase or decrease the Level of Maintenance and Support Services may be exercised by the State at any time prior to or during the Ongoing Maintenance and Support Period by notifying the Contractor in writing. Provided however, if the State at any time upgrades to Level 3, such Level 3 Maintenance and Support Services shall commence ninety (90) days after providing notice to the Contractor. All other options to increase or decrease Maintenance and Support Services shall commence upon notice to the Contractor.

(d) **Cost for Optional Maintenance and Support Services.** The costs for Level 2 and Level 3 Maintenance and Support Services during the Ongoing Maintenance and Support Period are reflected as Discounted Maintenance and Support Services in the Post-Implementation Maintenance and Support Costs, attached as Exhibit B. Provided however, should the State decide to increase the Level of Maintenance and Support Services and should the State's

prior Level of Maintenance and Support Services not include the latest commercially available Service Pack or version of GenTax®, then the State shall be responsible for the additional cost to obtain and install such Service Pack or version. Should the State decide to increase the Level of Maintenance and Support Services and should the State's prior Level of Maintenance and Support Services include the latest commercially available Service Pack or version of GenTax®, but the State has not implemented such Service Pack or version, then the State shall be responsible for the additional cost to install and implement such Service Pack or version. Such services shall be performed by the Contractor pursuant to the Contractor's current and reasonable hourly rates or at a mutually agreed upon fixed price.

(e) **Time and Material Maintenance and Support Services.** In addition to Level 1, Level 2 and Level 3 Maintenance and Support Services, the Contractor shall also provide to the State Maintenance and Support Services on an, as needed, time and material basis ("Time and Material Maintenance and Support Services"). Such Time and Material Maintenance and Support Services shall be provided in hourly increments, at the State's request, for an agreed scope and at the Contractor's then current and reasonable hourly rate.

B. The Contractor warrants that it shall discharge its Maintenance and Support Services obligations under this Contract in a proper, timely and efficient manner, using that standard of care, skill, diligence and foresight that would be expected of an expert and experienced contractor delivering services wholly similar or partially similar to the Services, and consistent with the performance standards of this Contract.

52. Security Requirements. The Department has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the Department's data confidential, available, and with high integrity. The Department's systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The Department uses the highest intolerance for risk in its assessment of the system and thus the Department intends to implement all security controls appropriate for a moderate-impact system. The Department requires that the Contractor be compliant with such a security scheme for its system and operations if the Department will be transmitting its data to the Contractor. The Contractor expressly agrees that the Contractor's Solution is capable of being configured and deployed to meet the Department's security requirements as specified in the NIST and IRS documents and the Department's system requirements as itemized in the Department's RFP Attachments.

The Department will evaluate all system security models based on the Department's reading of FISMA, NIST SP800-53 (Rev 4), IRS Publication 1075 (issued September 2016) and security best practices. The Contractor agrees to abide by the Department's interpretations of these requirements as applicable and unless otherwise agreed to herein. The Contractor further agrees that new or different requirements specified in later versions of these standards may be incorporated into this Contract at the Department's request and subject to additional cost.

The Department requires each system provide or use data security for handling input and output by providing or using native encryption functions that utilize a FIPS 140-2 validated encryption algorithm. The Department utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Security Technology Implementation Guides (STIGs) as an objective way to evaluate compliance with the Department's security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. Before Implementation Services commence, the Parties shall certify that GenTax® operates correctly with all applicable STIGs applied to the application and infrastructure. Thereafter, the Parties shall perform annual assessments using the most current STIGs. After which, they shall implement solutions to remediate grave vulnerabilities, and collaborate to implement solutions that remediate or mitigate significant vulnerabilities, before each of the four rollouts

is certified for production. The Department acknowledges that STIG changes may come at additional cost. The parties acknowledge that the Solution is in production use by many state tax agencies and the Solution cannot be changed for the State's benefit if such change impacts other customers. The State needs to determine if the Solution will meet its security requirements before committing to an implementation.

The IRS requires, and thus the Parties agree, that Pub 1075 Exhibit 7 be incorporated into this Contract in its complete form and unchanged by the Department and the Contractor. The Contractor further agrees to partner with and assist the Department, as permitted and applicable, with IRS Safeguard Audits after the system is in production and provided the State is paying for on-site resources). The Contractor agrees to the inclusion of these terms.

53. Software Escrow. For the duration of the Term of this Contract, the Contractor shall at its cost and expense deposit, maintain and update source code Materials to the Software with a third party escrow agent. Within ten (10) days following the Effective Date, the Contractor shall add the State to the Contractor's approved escrow agreement that will be used during the Contractor's performance of this Contract. The State has approved and the Contractor has agreed to add the State to the Contractor's Lincoln Parry Softescrow, Inc. Escrow Agreement. The Contractor agrees to maintain updated Software source code through this escrow service or a similar escrow service for the duration of the Term of this Contract.

54. Solution License. The Contractor hereby grants to the State a royalty-free, non-exclusive license to use the Contractor intellectual property rights to use the Contractor's Solution, and to use the Services and all deliverables during the Term of this Contract and the Exit Assistance Period. This license is subject to the terms of the GenTax® Software Licensing Agreement attached to this Contract as Exhibit E.

55. Communications and Announcements. The Contractor shall not make any press release, public announcement, advertisement, promotional material or other form of publicity whatsoever concerning or referring to the State or the existence of subject matter of this Contract without the prior written approval of the State. The provisions relating to Communications and Announcements shall continue to apply after termination. However, Contractor may publicize (i) that Contractor has a contract with the State and (ii) the Contract effective date, the Contract term, the Contract scope, and the Contract Value, as provided in Article III, Section 3 herein, without prior written approval from the State.

56. State Use of Additional Contractors and Consultants. The Parties understand that the Services provided by third-party vendors may be required in the performance of this Contract. Based on that understanding, the Parties agree as follows:

A. **Personnel.** Unless otherwise agreed to by the Parties, which shall be negotiated and agreed in good-faith, all personnel that directly or indirectly impact Contractor's performance of this Contract or the provision of Services hereunder, in any capacity and for any period of time, shall consist of any of the following:

(1) Employees of the State;

(2) Employees of Contractor or its approved Subcontractors;

(3) Third-party programming and IT staff, supplied under a staff augmentation agreement, whose primary responsibility will be to provide technical services, including conversion, programming, database administration, hardware management, network administration or disaster recovery planning, and who will be supervised by the Parties and have executed the

Nondisclosure Agreement included as attachment A to the GenTax® Software Licensing Agreement, Exhibit E; or

(4) Third-party vendors performing IV&V responsibilities, provided that such third-party vendors;

(a) execute the Nondisclosure Agreement included as attachment A to the GenTax® Software Licensing Agreement, Exhibit E;

(b) perform only IV&V functions including verifying that the Solution is being followed or that the Solution is proceeding according to schedule;

(c) take direction from, report to, and be answerable to the State Project Director;

(d) engage in only the following activities necessary to perform IV&V: review Solution Materials, conduct interviews, and observe (but not participate in or direct) work on the Solution such as meetings, testing, or training;

(e) make no attempt to influence, affect or change the FAST Implementation Methodology that the Solution is following beyond identification of risks and concerns within the IV&V vendor's reports to State leadership; and

(f) are not competitors of FAST in providing tax or motor vehicle modernization services, as reasonably agreed upon in good faith by the Parties.

B. **IV&V Services.** In the event the State elects to retain IV&V vendors as described within this Section, the following shall apply:

(1) the State will address or provide any reports or deliverables that are required by IV&V or by the State that are outside of the scope of this Contract and not produced as part of the FAST Implementation Methodology; and

(2) the Parties agree that the members of the full-time project team, as described in the SOW, attached as Exhibit D, shall not be required to train any individual performing IV&V services in the functions of the Department, GenTax® Integrated Tax System, or the FAST Implementation Methodology.

C. **Approval of Materials and Invoices.** For any Material requiring approval, only an employee of the State may approve such Material. Moreover, all Contractor invoices will be approved by State employees only.

57. Limitations of Liability. Except to the extent damages are required to be paid to a third party under a claim for indemnification, or are based on a breach of cyber-security obligations (which limitation is set forth in Article III, Sections 12(a) and 27A(5) herein), the Parties agree that: (a) neither the Contractor nor the State shall be liable to each other for consequential, incidental, indirect, or special damages; and (b) for any cause of action that arises, regardless of when it is discovered, (i) during the Implementation Period, the Parties' total liability shall not exceed the Contract Value during the Implementation Period, and (ii) during any Ongoing Maintenance and Support Period, the Parties' liability shall not exceed the annual Contract Value during the Contract year the cause of action arose.

Pursuant to the preceding paragraph, the Parties may pursue any equitable remedies and/or expectation/direct damages resulting from a material breach of this Agreement. For the State, expectation and/or direct damages shall include, but are not limited to: (a) the costs incurred by the State during the Term that resulted from the Contractor's failed performance; (b) the costs to bring the Services and modernized system into compliance with the Contract; and (c) the costs to transition to a newly-managed (if applicable) and compliant system. Such direct/expectation damages include, but are not limited to, Reprocurement Costs.

Reprocurement Costs shall include: the reasonable costs and expenses incurred by the State to bring the applicable terminated services in-house or to procure services similar to the applicable terminated Services from an alternate source to the extent such costs and expenses would not have otherwise been incurred by the State but for the termination, including: (a) the cost differential between the fees paid under this Contract and the replacement costs of such Services from another contractor, (b) administrative costs and expenses reasonably necessary to replace the applicable terminated portion of this Contract, including the costs and expenses of staff time and costs and expenses of external advisors, consultants and attorneys to assist with such procurement, and (c) other reasonable costs necessary to such procurement or in-sourcing.

Contractor's liability for all Reprocurement costs shall be limited to the amount previously paid to Contractor for the applicable terminated Services and such limit is included under and not in addition to the limit on liability specified in the first paragraph of this Section 57.

58. State Boilerplate Affirmation Clause. I swear or affirm under the penalties of perjury that I have not altered, modified, changed or deleted the State's Boilerplate contract clauses (as contained in the *2016* OAG/ IDOA *Professional Services Contract Manual*) in any way except for the following clauses which are named below:

(a) Recitals (Added)
(b) Contract Goals and Objectives (Added)
(c) Performance Terms and Conditions
    1. Duties of Contractor
    2. Consideration
    3. Term
    4. Access to Records
    5. Assignment; Successors
    6. Assignment of Antitrust Claims
    9. Changes in Work
    10. Compliance with Laws
    11. Condition of Payment
    12. Confidentiality of State Information
    13. Continuity of Services
    14. Debarment and Suspension
    15. Default by State
    16. Disputes
    17. Drug-Free Workplace Certification
    18. Employment Eligibility Verification
    20. Force Majeure
    22. Governing Law and Venue
    23. HIPAA Compliance
    24. Indemnification
    26. Information Technology Enterprise Architecture Requirements

27. Insurance
28. Key Persons
29. Licensing Standards
30. Merger & Modification
31. Minority and Women's Business Enterprise Compliance
32. Nondiscrimination
33. Notice to Parties
34. Order of Precedence; Incorporation by Reference
35. Ownership of Documents and Materials
36. Payments
38. Progress Reports
39. Public Record
40. Renewal Option (now, Interpretation of Laws for Implementation into the Solution)
41. Severability
42. Substantial Performance
43. Taxes
44. Termination for Convenience
45. Termination for Default
46. Travel
47. Indiana Veteran's Business Enterprise Compliance
48. Waiver of Rights
49. Work Standards
50. Exit Assistance Services (Added)
51. Contractor Maintenance and Support Services (Added)
52. Security Requirements (Added)
53. Solution Escrow (Added)
54. Solution License (Added)
55. Communications and Announcements (Added)
56. State Use of Additional Contractors and Consultants (Added)
57. Limitations of Liability (Added)

* * *

NON-COLLUSION AND ACCEPTANCE

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. **Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC § 4-2-6-1, has a financial interest in this Contract, the Contractor attests to compliance with the disclosure requirements in IC § 4-2-6-10.5.**

In Witness Whereof, the Contractor and the State have, through their duly authorized representatives, entered into this Contract. The Parties, having read and understood the foregoing terms of this Contract, do by their respective signatures dated below agree to the terms thereof.

Fast Enterprises, LLC

By: _____
James G. Harrison, Authorized Signatory

Date: August 1, 2018

State of Indiana, on Behalf of Indiana Department of Revenue

By: _____
Adam J. Krupp, Commissioner

Date: 8-2-18

Approved by:
Indiana Department of Administration

By: _____ (for)
Lesley A. Crane, Commissioner

Date: 8/2/18

Approved by:
State Budget Agency

By: _____ (for)
Jason D Dudich, Director

Date: 8-3-18

APPROVED as to Form and Legality:
Office of the Attorney General

_____ (for)
Curtis T. Hill, Jr., Attorney General

Date: August 7, 2018

Approved by:
Indiana Office of Technology

By: _____ (for)
Dewand Neely, Chief Information Officer

Date: 8/2/18

EXHIBIT A

IMPLEMENTATION PERIOD COSTS AND PAYMENT SCHEDULE

The committed costs and payment schedule for the Implementation Period (including Implementation Services and Level 3 Maintenance and Support Services) are reflected in the tables below:

Implementation Period Costs:

IMPLEMENTATION LICENSES AND SERVICES	TOTAL	Phase 1	Phase	Phase	Phase 4
Timeline (Beginning - Ending Months)		1 - 11	12-23	24-35	36-47
Solution Products And Services					
GenTax v10 License	$ 7,000,000	$ 7,000,000			
SUBTOTAL	$ 7,000,000	$ 7,000,000			
Implementation Services					
Rollout 1	$13,000,000	$13,000,000			
Rollout 2	$13,000,000		$13,000,000		
Rollout 3	$14,000,000			$14,000,000	
Rollout 4	$10,400,000				$10,400,000
SUBTOTAL	$50,400,000	$13,000,000	$13,000,000	$14,000,000	$10,400,000
TOTAL IMPLEMENTATION LICENSES AND SERVICES COSTS	$57,400,000	$20,000,000	$13,000,000	$14,000,000	$10,400,000

IMPLEMENTATION MAINTENANCE AND SUPPORT SERVICES	TOTAL	Phase 1	Phase	Phase	Phase 4
Timeline (Beginning - Ending Months)		1 - 11	12-23	24-35	36-47
Maintenance Products And Services					
GenTax Maintenance and Support - Level 3	$ 2,750,000	$ 250,000	$ 500,000	$ 750,000	$ 1,250,000
SUBTOTAL	$ 2,750,000	$ 250,000	$ 500,000	$ 750,000	$ 1,250,000
TOTAL IMPLEMENTATION MAINTENANCE AND SUPPORT COSTS	$ 2,750,000	$ 250,000	$ 500,000	$ 750,000	$ 1,250,000

TOTAL FAST IMPLEMENTATION PERIOD COSTS	$60,150,000	$20,250,000	$13,500,000	$14,750,000	$11,650,000

IMPLEMENTATION PERIOD COSTS AND PAYMENT SCHEDULE (Cont'd)

Implementation Period Payment Schedule: Payments shall be allocated and paid upon the completion of each Payment Trigger, and in corresponding amounts, as follows.

Payment Trigger	Month 1	Month 2	Month 3	Month 7	Month 12	Month 13	Month 15	Month 19	Month 23	Month 25	Month 27	Month 30	Month 35	Month 37	Month 40	Month 41	Month 47
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
GenTax License Installation	$7,000,000																
R1 Definition Complete		$1,950,000															
R1 Base Configuration Complete			$1,300,000														
R1 Testing Preparation Complete				$4,550,000													
R1 System Acceptance, Production Rollout					$5,200,000												
R2 Definition Complete						$1,950,000											
R2 Base Configuration Complete							$1,300,000										
R2 Testing Preparation Complete								$4,550,000									
R2 System Acceptance, Production Rollout									$5,200,000								
R3 Definition Complete										$2,100,000							
R3 Base Configuration Complete											$1,400,000						
R3 Testing Preparation Complete												$4,900,000					
R3 System Acceptance, Production Rollout													$5,600,000				
R4 Definition Complete														$1,600,000			
R4 Base Configuration Complete															$1,100,000		
R4 Testing Preparation Complete																$3,600,000	
R4 System Acceptance, Production Rollout																	$4,100,000
Maintenance - Year 1	$250,000																
Maintenance - Year 2						$500,000											
Maintenance - Year 3										$750,000							
Maintenance - Year 4														$1,250,000			

***** The payment schedule reflected above will be adjusted as necessary to total the TOTAL IMPLEMENTATION PERIOD COSTS reflected in the Implementation Period Costs section of this Exhibit.**

EXHIBIT B

POST-IMPLEMENTATION MAINTENANCE AND SUPPORT COSTS

The Contractor committed Maintenance and Support Costs for the Post-Implementation Period are reflected in the tables below:

POST-IMPLEMENTATION MAINTENANCE AND SUPPORT SERVICES	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project	Post-Project
Timeline (Beginning - Ending Months)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Maintenance Products And Services											
GenTax Maintenance - Level 1	$1,600,000	$1,600,000	$1,675,000	$1,675,000	$1,750,000	$1,750,000	$1,830,000	$1,830,000	$1,910,000	$1,910,000	$ 17,530,000
SUBTOTAL	$1,600,000	$1,600,000	$1,675,000	$1,675,000	$1,750,000	$1,750,000	$1,830,000	$1,830,000	$1,910,000	$1,910,000	$ 17,530,000
Maintenance and Support Products And Services											
GenTax Maintenance and Support - Level 1 and Level 2	$5,100,000	$4,600,000	$4,175,000	$3,675,000	$3,250,000	$2,750,000	$2,330,000	$2,330,000	$2,410,000	$2,410,000	$ 33,030,000
SUBTOTAL	$5,100,000	$4,600,000	$4,175,000	$3,675,000	$3,250,000	$2,750,000	$2,330,000	$2,330,000	$2,410,000	$2,410,000	$ 33,030,000
Maintenance, Support and Upgrade Products And Services											
GenTax Maintenance and Support - Level 1 and Level 3	$5,100,000	$5,100,000	$5,345,000	$5,345,000	$5,595,000	$5,595,000	$5,860,000	$5,860,000	$6,135,000	$6,135,000	$ 56,070,000
SUBTOTAL	$5,100,000	$5,100,000	$5,345,000	$5,345,000	$5,595,000	$5,595,000	$5,860,000	$5,860,000	$6,135,000	$6,135,000	$ 56,070,000

Pursuant to Article III, Sections 3, 36, and 51 of the Base Contract, the amounts reflected in the Post-Implementation Maintenance and Support Costs schedule shall be paid in arrears in equal monthly installments consistent with the State's option to increase or decrease services on a monthly basis. Specifically, during each year of the Ongoing Maintenance and Support Period, the State shall pay to the Contractor the applicable annual amount in equal monthly installments based on such amount divided by 12. The applicable annual amount shall be based on the level of Maintenance and Support Services then being provided by the Contractor to the State. Such monthly amounts shall be due on the 35th day following the end of each monthly period during the Ongoing Maintenance and Support Period.

EXHIBIT C

SERVICE LEVELS

This Service Level Agreement (the "SLA") sets forth the Service Levels (as defined herein) to be maintained by Fast Enterprises, LLC, a New York limited liability company (the "Contractor"), pursuant to the Professional Services Contract (the "Contract"), between the State of Indiana (the "State"), acting on behalf of the Indiana Department of Revenue, and the Contractor. All the capitalized terms herein, unless otherwise defined herein, shall have the meanings ascribed to them in the Contract.

The Parties understand that successful implementation of the Solution requires a joint effort by both Parties and the Parties agree to work together to implement the Solution as described in the Contract. Among its performance obligations, the Contractor shall maintain the performance of the Contractor's Solution at the Service Levels during the Implementation Period, and at all times after the Implementation Period where the State has purchased Level 2, Level 3, or Time and Materials (not Level 1) Maintenance and Support Services.

The Service Levels will be measured only for Production Solution environments described in Exhibit D, Statement of Work, and will commence on the initial implementation of such Production Solution environments. The Service Levels do not apply to transactions once they have left the Production Solution environment, nor do they apply to third-party applications/systems or vendors.

The Service Levels set forth in this SLA for Core Functionalities are intended to cover all material capabilities identified in the RFP and RFP Response. If the Parties subsequently determine that a capability material to the State's operations is not being measured, they will work together in good faith to determine an appropriate method to measure and apply an appropriate performance standard for such capability.

1. Definitions. For purposes of this SLA, the following terms shall have the following meanings:

a. "Core Functionality" means the major groupings (subsystems) of the Contractor Solution which are: (i) Customer, (ii) Revenue, (iii) Workflow, (iv) Information, (v) Compliance, (vi) Management Studio and (vii) Special Functions including Imaging and Inventory Management.

b. "Incident" means a loss of service affecting users and/or taxpayers for one or more subsystems of the Contractor Solution identified as a Core Functionality.

c. "Measurement Period" means the total minutes available in the calendar month being measured, minus Scheduled Maintenance (as defined herein) time.

d. "Resolution" or "Resolve" means, the removal or other remediation of a defect such that the functionality is able to meet the applicable Service Level for the Core Functionality and requirements under the Contract. Resolution may consist of a short term service restoration that may consist of a fallback, patch, or other means that may be temporary in nature until such time that a permanent resolution can be achieved.

e. "Response Time" is the period measured for a Core Functionality from the time a user-initiated server-based transaction starts until the time the server-based transaction is completed.

f. "Selective Entries" means the set of transactions, approved by the State, that are representative of Core Functionality, which will be used for purposes of measuring Response Time.

g. "Service Levels" means the service level categories and performance commitments described in Section 6 herein.

h. "Severity Level 1 Incident" and "Severity Level 2 Incident" have the meanings ascribed to such terms in Section 2 herein.

2. Severity Level Incidents. During the Term, the Contractor will remedy any Severity Level 1 or Severity Level 2 Incidents in the Solution and will report, evaluate and record any other Incident regardless of the severity. Fixes for Severity Level 2 Incidents will be prioritized after all Severity Level 1 Incidents are remedied and shall be remedied with the same urgency as Severity Level 1 Incidents. Remedial actions will commence promptly after the occurrence of an Incident with the Solution and the State hosted support desk has been notified of the occurrence of the Incident, or either Party has or reasonably should have had knowledge of the occurrence of an Incident.

During the Term, the State will provide a support desk via email and/or telephone support. The support desk will be responsible for facilitating the communication and resolution of any Incident. The support desk will be responsible for logging and tracking Incidents after they have been reported; for contacting the Contractor, if deemed necessary, to confirm receipt of an Incident report; for determining the priority level of the Incident; and for requesting remedial action from the Contractor.

Severity levels will be determined as follows:

Severity Level 1 Incident -	An Incident affecting most users and/or most taxpayers such that the loss of service prevents or materially impairs the State's ability to utilize the Contractor Solution effectively.
Severity Level 2 Incident -	An Incident affecting most users and/or most taxpayers where a workaround is available permitting satisfactory use of the Core Functionality.

3. Exceptions to Service Levels. The Contractor shall be excused for the failure of any Service Level if such failure is caused by conditions outside of the control of the Contractor or its Subcontractors. Provided, however, in each case, the Contractor must (i) notify the State in writing promptly of becoming aware of such conditions and its impact on the Service Levels, (ii) take reasonable steps to mitigate the impact thereof and (iii) continue to otherwise perform in accordance with the Contract.

4. Scheduled Maintenance. The Contractor may schedule time for the Contractor's Solution to be completely unavailable due to maintenance and/or modifications ("Scheduled Maintenance"). Scheduled Maintenance shall occur between 6 a.m. and 10 a.m. United States Eastern Time on Sundays, and must be coordinated with the State. The Contractor will provide the State at least fourteen (14) days advance written notice of Scheduled Maintenance and its anticipated duration; provided, however, when Scheduled Maintenance is required to resolve urgent Solution operational requirements, the Contractor will provide a minimum of twenty-four (24) hours advance written notice of the Scheduled Maintenance and its anticipated duration. Any downtime that does not meet the conditions for Scheduled Maintenance shall be considered unscheduled downtime ("Unscheduled Downtime") and shall be counted against the Contractor's obligations to meet the Service Levels. The total of all Scheduled Maintenance should not exceed ninety six (96) hours per calendar year. The Parties understand that migrating new components and configurations to production may cause brief service interruptions to the Contractor Solution and such migrations shall not be considered Scheduled Maintenance. Also, outages due to implementing a project rollout, a service pack, or a version upgrade shall not be considered Scheduled Maintenance.

The Parties will maintain advanced knowledge of upcoming Zero Day Vulnerability patch announcements from vendors supplying the Contractor system's Technology Stack. The Parties will also monitor reports from the US Computer Emergency Response Team (CERT) for any non-proprietary technology used in the Solution. Any vulnerability resulting in a CAT-1 security finding announced via either channel must have a repair available for implementation in the State's environments by zero day plus 30 days if the system is incapable of functioning correctly following application of the Zero Day Vulnerability patch.

5. Monitoring and Reports. The Contractor will implement monitoring systems and/or tools for monitoring the Service Levels, including automated measurement systems utilizing either actual user statistics or data representative of user experience. The SLA reports shall be considered confidential information but only to the extent that such information is deemed to be information that the State shall not or may not disclose under the Access to Public Records Act set forth in IC 5-14-3, as amended. The Contractor will provide the State with the reports described below in connection with the Service Levels.

a. Service Level Reporting - By the fifteenth (15th) day of each month, the Contractor will provide the State with a performance report describing the Contractor's actual performance in comparison to the Service Levels for the prior month.
b. Incident and Root Cause Analysis Reporting – Within 3 days of a Severity Level 1 Incident, the Contractor will provide a Root Cause Analysis and details of the steps that will be taken in order to prevent a reoccurrence of similar issues for all Severity Level 1 Incidents.

6. Service Levels:

Service Level Category	**Service Level Calculation**	**Service Level Performance Commitment**
Core Functionality Availability	The Core Functionality Availability Service Level will be measured using the elapsed time for Severity Level 1 Incidents in relation to Core Functionality in the Production Solution environment. The period of Unscheduled Downtime for Core Functionality refers to all time for Severity Level 1 Incidents. The period of such Unscheduled Downtime shall begin at the point in time when either Party has actual knowledge that the Core Functionality is not available to the State and notifies the other Party. The Unscheduled Downtime shall end at the point in time which is the earlier of a) either Party reporting that the Core Functionality is available for the State's use; or b) actual use of the Core Functionality occurring.	Core Functionality Availability >= 99.50% during business hours
Severity Level 1 Incident	The length of a Severity Level 1 Incident shall be measured from the point in time when either Party has actual knowledge that the Severity 1 Incident has occurred in the Production Solution environment and notifies the other Party. The Severity Level Incident shall end at the point in time which is the earlier of a) either Party reporting that the Core Functionality is available for the State to test ; or b) actual use of the Core Functionality occurring.	No Severity Level 1 Incident shall continue for longer than 1 hour (60 minutes)

Service Level Category	Service Level Calculation	Service Level Performance Commitment
Average Response Time (Core Functionality)	The Average Response Time Service Level for Core Functionality will be measured by the Contractor using the Selective Entries. The State reserves the right to independently measure average Response Time using automated means. Certain large transactions, including reports, file uploading, document images and interfaces, will be excluded from this Service Level	Average Response Time for Core Functionality transactions shall not exceed 2 seconds for 95% or more of transactions
Online Portal Availability	The percentage of time the Online Portal is unavailable for operational use according to the following formula: Online Portal Availability = [Measurement Period – Unscheduled Downtime] ÷ Measurement Period x 100%. The period of Unscheduled Downtime for Online Portal refers to any period that the Online Portal is not available to the State due to Solution failure. The period of such Unscheduled Downtime shall begin at the point in time when either Party has actual knowledge of the Unscheduled Downtime and notifies the other Party. The Unscheduled Downtime shall end at the point in time which is the earlier of a) either Party reporting that the Online Portal is available for the State's use; or b) actual use of the Online Portal occurring.	Online Portal Availability >= 99.9%

7. Service Level Changes. The State or the Contractor can request additions or changes to the Service Levels at any time pursuant to a Change Order or a Contract Modification authorized pursuant to Article III, Section 9 of the Base Contract.

STATEMENT OF WORK

This Statement of Work (this "SOW") describes the scope and services to be provided by FAST Enterprises, LLC (the "Contractor" or "FAST") to the State of Indiana, acting on behalf of the Indiana Department of Revenue (the "State"), in order to implement and deliver a successful Solution. This SOW constitutes Exhibit D to the Professional Services Contract (the "Contract"), between the State and FAST. All the capitalized terms herein, unless otherwise defined herein, shall have the meanings ascribed to them in the Contract to the extent that they are defined therein.

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SECTION I. INTRODUCTION

Approach Summary.

FAST will use its proprietary implementation methodology (also referred to as "FAST Implementation Methodology") to implement the Solution and to conduct the project. The FAST Implementation Methodology addresses numerous aspects of project execution, including how the work will be performed, deliverables, work products, project management, project oversight, governance, status reporting, risk management, communication, organizational change management, training, testing, data conversion, implementation, production support, resource planning, resource allocation, work monitoring, and work tracking.

FAST will use its proprietary tools to manage all aspects of project execution, including the implementation project schedule, work tasks, and the maintenance of the project decisions and risk registers. Some of the tools the team will use include the Delivery Workbench (the "Workbench"), the FAST Central Repository (FCR), and the Solution Request System (SQR). The team will store and track other tasks and project documentation in the Workbench and the FCR Content Manager.

Where inconsistencies, contradictions and lack of clarity exist between FAST's Implementation Methodology and the Request for Proposal (RFP), such shall be resolved by mutual agreement between Vendor and Agency. Where mutual agreement cannot be reached, the Vendor's proprietary implementation methodology shall prevail.

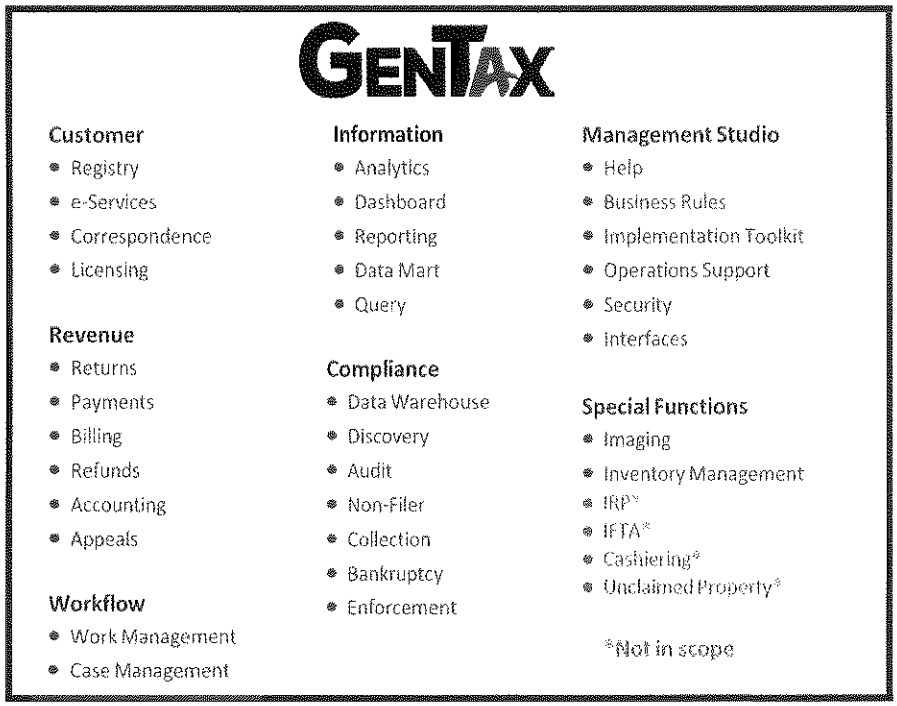
In all cases and in order to provide for the best possible planning, the Parties may adjust the implementation methodology, implementation approach and planned schedule through mutual agreement.

Scope Summary.

In addition to the business requirements identified in the RFP, FAST's Best and Final Revised Response to the RFP, and this SOW, FAST will provide, at a minimum, the same business capabilities that are provided by the legacy systems being replaced and any mutually agreed upon additional capabilities enabled by the GenTax Software that are not currently provided by the legacy systems. It is not the intention to recreate the legacy systems. FAST and State will work together to use the GenTax Software as it was designed and intended to be used, to deliver the necessary business capabilities in the Solution. FAST and State seek to improve business processes and not replicate legacy processes in GenTax. All services and deliverables under this SOW, including the rollout of the completed Solution, are subject to State's acceptance.

SECTION II. IMPLEMENTATION STRATEGY, APPROACH AND PLAN

The modules and subsystems represented in the table below serve as a visual representation of major categories of functionality provided by GenTax. Although these categories are organized, for descriptive purposes, as an integrated collection of modules and subsystem, in reality they are not discrete software components, modules, or subsystems that must be integrated during a project to meet specific State requirements. Rather, all functionality represented in the table is inherent to FAST's single and comprehensive GenTax software.



As such, GenTax provides all the functionality for core business functions and support processes, as well as built-in tools used to manage the software implementation process. Aside from a handful of ancillary support applications for special purposes, there are few additional applications necessary for implementing and maintaining GenTax. Several requirements relating to cashiering were marked as fully met in the RFP Proposal, with the Special Functions > Cashiering Module being listed as the vehicle for meeting the requirement. Although the Cashiering Module in its entirety is not in scope, FAST will deliver the in-scope functions indicated as met by the Cashiering Module in the RFP Response.

The primary third-party applications used for implementing and maintaining GenTax include Windows Server software for infrastructure management, Microsoft Visual Studio Professional software for the development of site-specific code, and VMWare's virtualization hypervisor for server virtualization (Microsoft Hyper-V is also supported).

Although not required for implementing and maintaining GenTax, many of our projects also use Adobe Captivate for the creation of training materials and interactive simulations and Red Gate Software's ANTS Profiler Professional for system-performance monitoring.

All core functions are integrated in GenTax and available in base-configuration mode when the software is installed at the beginning of the project. Through configuration, these core functions will be tailored to meet the specific requirements of the Indiana Department of Revenue ("DOR"), providing full GenTax functionality upon production rollout of each of group of taxes in the respective four rollouts. The proposed 47-month project schedule will deliver corporate taxes in the first rollout, sales and withholding taxes in the second rollout, individual income and fiduciary taxes in the third rollout, and special and miscellaneous taxes in the fourth rollout. In the event that first phase planning determines an approach that better suits a timeline beginning in mid-2018, the Parties may adjust the schedule through mutual agreement.

This approach eliminates the need for parallel system processing and should make transition to the new system essentially transparent to taxpayers, while also posing little to no impact on previously implemented taxes. Rollout of all functions also reduces risk by building interface touch-points once, rather than requiring multiple changes and regression testing for interfaces. Focusing on specific business-area functionality during each of the rollouts also minimizes impact on State staffing and operations resources.

FAST's experience indicates that approximately 80% to 90% of a State's tax administration functions can be implemented in GenTax through configuration. Virtually every aspect of GenTax is configurable, from small items such as tax rate changes, to more complicated activities such as implementation of a new case to support a multi-step business process. Code sets, calculations, lookups, edits, validations, user interfaces, window flows, and security structures are examples of features that can be implemented and maintained without programming. This configurable GenTax architecture minimizes development time and allows project resources to focus on tailoring business processes to meet individual State goals and business and technical requirements. All projects include knowledge-transfer activities to support State users and information technology personnel in their ability to maintain GenTax on an ongoing basis. State personnel at many FAST project sites are involved in configuring the software to accommodate legislative changes, which can be implemented in a fraction of the time required under the State's legacy systems.

While the need to develop custom code is minimal on most GenTax projects, there are three areas in which site components are more prevalent:

- Interfaces – In some cases, custom coding is required to implement interfaces between the solution and other automated systems within, and external to, a state. Straightforward reformatting to enable a scheduled batch interface can usually be accomplished through configuration.

- Specialized letters, notices, and other outbound correspondence – Although a variety of correspondence items are provided by GenTax, most agencies have unique requirements that cannot be satisfied by pre-existing templates. Specific letter, notice, and correspondence needs that are based on user requirements are identified during implementation. Simple correspondence typically requires only a template and a few configuration rules related to security, requesting, and printing. More complex items may require program code.

- Highly complex or unique reports – A variety of mechanisms are available to obtain information from the system, including core product searches and list windows, configurable query-result list windows, and configurable data cubes, as well as formal reports. For reporting requirements that cannot be satisfied through configuration, development of a site-specific component may be required during implementation.

GenTax is built on a VB.Net platform. As such, all development of custom components is built on the same platform and undertaken using the Microsoft Visual Studio Integrated Development Environment ("IDE"). FAST has created a number of add-ins for the IDE that enable developers to create business objects that inherit and reference the appropriate GenTax architectural components. This enables the efficient creation and testing of custom components that conform to FAST development standards and seamlessly integrate with the core GenTax product.

The following table outlines the proposed project activities, resources, phase completion months, and standard work products for the GenTax implementation. Due to the iterative nature of the project activities and the collaborative nature of our FAST Implementation Methodology, work in subsequent phases can proceed even though a current phase is not 100% complete. For example, the project can proceed with configurations and site-code development even though all requirements may not have been fully identified and detailed. This is essential to FAST's approach to providing on-time system delivery.

Task Name	Staffing Resources	Completion Month and Standard Work Products
Rollout 1 (corporate taxes) – Contract Effective Date through Month 11 (Parties may adjust schedule through mutual agreement.)		
Preparation Phase		**Month 1**
Establish Team Workspace/Workstations	Project Management (FAST & State)	• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Confirm and Build Infrastructure	Technical Team (FAST & State)	
Prepare Project Plan	Project Management (FAST & State)	
Prepare Business Profiles	State Subject Matter Experts ("SMEs")	
Inventory Inputs & Outputs	State SMEs, State Developers	
Install GenTax Software	Technical Team (FAST & State)	
Conduct Project/Rollout Kick-Off Meeting	Project Management (FAST & State)	
Present GenTax Overview	Project Management (FAST & State)	
Create Environments	Technical Team (FAST & State)	
Definition Phase		**Month 2**
Conduct Definition Meetings	Implementation Teams	• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	
Train State Developers	Technical Team (FAST & State)	
Base Configuration Phase		**Month 3**
Scope Preliminary Configuration	FAST Functional Project Manager	• Preliminary Configuration and Verification • Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		**Month 8**
Build & Test Letters/Correspondence	Implementation Teams	• Interface Design Documentation • Configurations • Site code • Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Prepare Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	
Conversion		**Month 11**
Inventory Data Stores	Conversion Team (FAST & State)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Prepare Conversion Plan	FAST Conversion Manager	
Build/Test Conversion Extract Modules	State Conversion Team	
Build/Test Conversion Load Modules	FAST Conversion Team	
Perform Data Purification	State Conversion Team, State SMEs	
Run Partial Mock Conversions	Conversion Team (FAST & State)	
Run Full Mock Conversions	Conversion Team (FAST & State	

Task Name	Staffing Resources	Completion Month and Standard Work Products
Testing Phase		**Month 11**
Prepare Testing Plan Prepare for Business Testing Conduct Business Testing Conduct Converted Data Testing Conduct Performance Testing Conduct End-to-End Testing	FAST Testing Manager Testing Team (FAST & State) Testing Team (FAST & State) Conversion Team (FAST & State) Technical Team (FAST & State) Implementation Teams	• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results
User Training Phase		**Month 11**
Prepare Training Plan Localize Training Materials Localize Online Help Train Trainers (Train-the-Trainer) Train Users	FAST Training/Business Manager Training Team (FAST & State) Training Team (FAST & State) FAST Training Team State Trainers	• Training Plan • Training Schedule (trainers) • Training Schedule (users) • Training Material o Training Material – Tier 2 o Training Material – Tier 3 • Training Results • User Documentation and Aids
Rollout Phase		**Month 11**
Prepare Maintenance & Support Plan Localize Operations Manual Train Operators Prepare Cutover Plan Prepare Help Desk & Desk-Side Support Plan Production Cutover Production Rollout Day	FAST Project Director, FAST Functional Project Manager Technical Team (FAST & State) Technical Team (FAST & State) FAST Project Director, FAST Functional Project Manager FAST Functional Project Manager Project Team Project Team	• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan Month 11
Production Support Phase		**Month 11**
Perform Desk-Side Support Perform Operations Support	Implementation Teams Technical Team (FAST & State)	• System Maintenance and Support Plan
Rollout 2 (sales and withholding taxes) – Month 12 through Month 23		
Preparation Phase		**Month 12**
Update Project Plan Prepare Business Profiles Inventory Inputs & Outputs Conduct Rollout Kick-Off Meeting Present GenTax Overview	Project Management (FAST & State) State SMEs State SMEs, Agency Developers Project Management (FAST & State) Project Management (FAST & State)	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan

Task Name	Staffing Resources	Completion Month and Standard Work Products
Definition Phase		**Month 13**
Conduct Definition Meetings Prepare Definition Items Review & Modify Definition Items	Implementation Teams Implementation Teams Implementation Teams	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material
Base Configuration Phase		**Month 15**
Scope Preliminary Configuration Conduct Preliminary Configuration Conduct Verification Sessions Update Definition Items	FAST Functional Project Manager Implementation Teams Implementation Teams Implementation Teams	• Preliminary Configuration and Verification • Updated Definition Items
Development Phase		**Month 19**
Build & Test Letters/Correspondence Build & Test Reports Build & Test Interfaces Build & Test Additional Site Functions Update Security Plan Review Implementation	Implementation Teams Implementation Teams Implementation Teams Implementation Teams FAST Technical/Security Manager FAST Functional Project Manager	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan
Conversion		**Month 23**
Inventory Data Stores Prepare Conversion Plan Build/Test Conversion Extract Modules Build/Test Conversion Load Modules Perform Data Purification Run Partial Mock Conversions Run Full Mock Conversions	Conversion Team (FAST & State) FAST Conversion Manager State Conversion Team FAST Conversion Team State Conversion Team, State SMEs Conversion Team (FAST & State) Conversion Team (FAST & State)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Testing Phase		**Month 23**
Prepare Testing Plan Prepare for Business Testing Conduct Business Testing Conduct Converted Data Testing Conduct Performance Testing Conduct End-to-End Testing	FAST Testing Manager Testing Team (FAST & State) Testing Team (FAST & State) Conversion Team (FAST & State) Technical Team (FAST & State) Implementation Teams	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results

Task Name	Staffing Resources	Completion Month and Standard Work Products
User Training Phase		**Month 23**
Update Training Plan Localize Training Materials Localize Online Help Train Trainers (Train-the-Trainer) Train Users	FAST Training/Business Manager Training Team (FAST & State) Training Team (FAST & State) FAST Training Team State Trainers	Rollout-specific updates, as necessary, to: • Training Plan • Training Material o Training Material – Tier 2 • User Documentation and Aids New • Training Schedule (trainers) • Training Schedule (users) • Training Material o Training Material – Tier 3 • Training Results
Rollout Phase		**Month 23**
Update Maintenance & Support Plan Localize Operations Manual Train Operators Prepare Cutover Plan Prepare Help Desk & Desk-Side Support Plan Production Cutover	FAST Project Director, FAST Functional Project Manager Technical Team (FAST & State) Technical Team (FAST & State) FAST Project Director, FAST Functional Project Manager FAST Functional Project Manager Project Team	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan
Production Rollout Day	Project Team	Month 23
Production Support Phase		**Month 24**
Perform Desk-Side Support Perform Operations Support	Implementation Teams Technical Team (FAST & State)	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan
Rollout 3 (individual income tax, fiduciary taxes) – Month 23 through Month 35		
Preparation Phase		**Month 24**
Update Project Plan Prepare Business Profiles Inventory Inputs & Outputs Conduct Rollout Kick-Off Meeting Present GenTax Overview	Project Management (FAST & State) State SMEs State SMEs, State Developers Project Management (FAST & State) Project Management (FAST & State)	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Definition Phase		**Month 25**
Conduct Definition Meetings Prepare Definition Items Review & Modify Definition Items	Implementation Teams Implementation Teams Implementation Teams	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material

Task Name	Staffing Resources	Completion Month and Standard Work Products
Base Configuration Phase		**Month 27**
Scope Preliminary Configuration Conduct Preliminary Configuration Conduct Verification Sessions Update Definition Items	FAST Functional Project Manager Implementation Teams Implementation Teams Implementation Teams	• Preliminary Configuration and Verification • Updated Definition Items
Development Phase		**Month 30**
Build & Test Letters/Correspondence Build & Test Reports Build & Test Interfaces Build & Test Additional Site Functions Update Security Plan Review Implementation	Implementation Teams Implementation Teams Implementation Teams Implementation Teams FAST Technical/Security Manager FAST Functional Project Manager	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan
Conversion		**Month 35**
Inventory Data Stores Prepare Conversion Plan Build/Test Conversion Extract Modules Build/Test Conversion Load Modules Perform Data Purification Run Partial Mock Conversions Run Full Mock Conversions	Conversion Team (FAST & State) FAST Conversion Manager State Conversion Team FAST Conversion Team State Conversion Team, State SMEs Conversion Team (FAST & State) Conversion Team (FAST & State)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Testing Phase		**Month 35**
Prepare Testing Plan Prepare for Business Testing Conduct Business Testing Conduct Converted Data Testing Conduct Performance Testing Conduct End-to-End Testing	FAST Testing Manager Testing Team (FAST & State) Testing Team (FAST & State) Conversion Team (FAST & State) Technical Team (FAST & State) Implementation Teams	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results
User Training Phase		**Month 35**
Update Training Plan Localize Training Materials Localize Online Help Train Trainers (Train-the-Trainer) Train Users	FAST Training/Business Manager Training Team (FAST & State) Training Team (FAST & State) FAST Training Team State Trainers	Rollout-specific updates, as necessary, to: • Training Plan • Training Material o Training Material – Tier 2 • User Documentation and Aids New • Training Schedule (trainers) • Training Schedule (users) • Training Material o Training Material – Tier3 Training Results

Task Name	Staffing Resources	Completion Month and Standard Work Products
Rollout Phase		**Month 35**
Update Maintenance & Support Plan	FAST Project Director, FAST Functional Project Manager	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan
Localize Operations Manual	Technical Team (FAST & State)	
Train Operators	Technical Team (FAST & State)	
Prepare Cutover Plan	FAST Project Director, FAST Functional Project Manager	
Prepare Help Desk & Desk-Side Support Plan	FAST Functional Project Manager	
Production Cutover	Project Team	
Production Rollout Day	Project Team	
Production Support Phase		**Month 36**
Perform Desk-Side Support	Implementation Teams	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan
Perform Operations Support	Technical Team (FAST & State)	
Rollout 4 (special and miscellaneous tax types) – Month 35 through Month 47		
Preparation Phase		**Month 36**
Update Project Plan	Project Management (FAST & State)	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Prepare Business Profiles	State SMEs	
Inventory Inputs & Outputs	State SMEs, State Developers	
Conduct Rollout Kick-Off Meeting	Project Management (FAST & State)	
Present GenTax Overview	Project Management (FAST & State)	
Definition Phase		**Month 37**
Conduct Definition Meetings	Implementation Teams	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	
Base Configuration Phase		**Month 40**
Scope Preliminary Configuration	FAST Functional Project Manager	• Preliminary Configuration and Verification • Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		**Month 43**
Build & Test Letters/Correspondence	Implementation Teams	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Update Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	

Task Name	Staffing Resources	Completion Month and Standard Work Products
Conversion		**Month 47**
Inventory Data Stores Prepare Conversion Plan Build/Test Conversion Extract Modules Build/Test Conversion Load Modules Perform Data Purification Run Partial Mock Conversions Run Full Mock Conversions	Conversion Team (FAST & State) FAST Conversion Manager State Conversion Team FAST Conversion Team State Conversion Team, State SMEs Conversion Team (FAST & State) Conversion Team (FAST & State)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Testing Phase		**Month 46**
Prepare Testing Plan Prepare for Business Testing Conduct Business Testing Conduct Converted Data Testing Conduct Performance Testing Conduct End-to-End Testing	FAST Testing Manager Testing Team (FAST & State) Testing Team (FAST & State) Conversion Team (FAST & State) Technical Team (FAST & State) Implementation Teams	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results
User Training Phase		**Month 47**
Update Training Plan Localize Training Materials Localize Online Help Train Trainers (Train-the-Trainer) Train Users	FAST Training/Business Manager Training Team (FAST & State) Training Team (FAST & State) FAST Training Team State Trainers	Rollout-specific updates, as necessary, to: • Training Plan o Training Material I – Tier 2 • User Documentation and Aids New • Training Schedule (trainers) • Training Schedule (users) • Training Material – Tier 3 Training • Results
Rollout Phase		**Month 47**
Update Maintenance & Support Plan Localize Operations Manual Train Operators Prepare Cutover Plan Prepare Help Desk & Desk-Side Support Plan Production Cutover Production Rollout Day	FAST Project Director, FAST Functional Project Manager Technical Team (FAST & State) Technical Team (FAST & State) FAST Project Director, FAST Functional Project Manager FAST Functional Project Manager Project Team Project Team	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan
Production Support Phase		**Month 47**
Perform Desk-Side Support Perform Operations Support	Implementation Teams Technical Team (FAST & State)	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan

Development of the project plan will be one of the first tasks conducted by the project management team during the project's Preparation Phase. The plan, in large part, will be based on FAST's proposed project schedule above adjusted to begin upon the Effective Date. All FAST project schedules are based on the FAST Implementation Methodology and the following schedule management goals.

- Model a realistic project schedule at an appropriate level of detail to keep the schedule manageable. This facilitates the completion of activities on time, within scope, and at cost.
- Develop scheduling strategies that reduce the project's exposure to issues and risks, making it possible to detect potential impacts in advance.
- Implement repeatable processes for schedule updates and project reporting, ensuring consistency and adherence to best practices for implementing FAST's commercial off-the-shelf (COTS) software.

The following tables identify the phases, milestones, work products, deliverables, and tasks within the FAST Implementation Methodology. The implementation phases are described in Section II.

Deliverable/Milestone*	Deliverable/Milestones Description
Definition Complete	The activities substantially completed at the Definition Complete milestone include the tasks in the Preparation and Definition phases of the FAST Implementation Methodology. Also, the Project Plan will be substantially completed.
Base Configuration Complete	The activities substantially completed at the Base Configuration Complete milestone include the tasks in the Base Configuration phase of the FAST Implementation Methodology.
Testing Preparation Complete	The activities substantially completed at the Testing Preparation Complete milestone include: definition of approach for business testing; identification of test scenarios; identification of testers; training of testers; scheduling of testing; setup of office space for testing; setup of technical environment(s) for testing; migration of software and configurations from development environment to test environment(s); definition and setup of tools and approaches for managing and tracking progress of testing; definition and setup of tools and approaches for managing and resolving defects identified during testing. Also, the Test Plan will be substantially completed.
System Acceptance, Production Rollout	The activities substantially completed at the System Acceptance, Production Rollout milestone include the tasks in the Development, Conversion, Testing, User Training, and Rollout phases and the following documents: Conversion Plan, Training Plan, User Documentation, Technical Documents, and Rollout Plan.

*The Deliverables for each rollout will be the four Deliverable/Milestones identified in this table.

Acceptance.

A finalized project schedule, to include scope and rollout dates, will be confirmed during the Preparation Phase in the FAST Implementation Methodology. This SOW will be updated and mutually agreed upon at that time to address any necessary schedule changes. For example, if the State desires a shorter timeframe for the first rollout, sometimes that can be accomplished by reducing the scope of what is delivered in that first rollout. Schedule and scope may be adjusted, as necessary, on agreed terms, to achieve the State's goals and keep the schedule manageable. This facilitates the completion of activities on time and within scope and reduces the project's exposure to issues and risks.

FAST and the State shall perform activities as described within each phase of the FAST Implementation Methodology. The State shall verify that activities within each phase have been completed. State will provide sign off on deliverables within 3 business days of receipt unless an alternative timeframe is mutually agreed upon.

However, any delay in the acceptance of any work products, milestones, or deliverables shall not delay the progress of the project.

SECTION III. IMPLEMENTATION METHODOLOGY

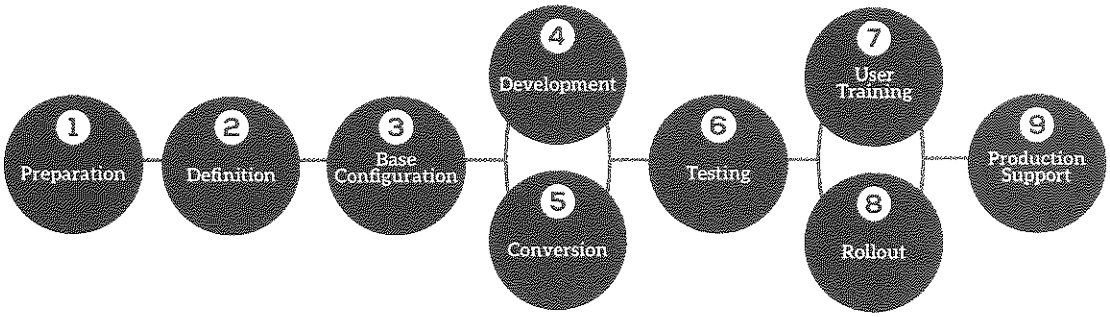
The FAST Implementation Methodology was designed for the implementation of its COTS software and provides a structure for successful implementation. It also facilitates work by providing a common and consistent language, by leveraging existing examples of work products, and by building on a repository of best practices and lessons learned.

A recurring theme in the methodology is the use of iterative cycles to complete tasks. The underlying philosophy is to perform small increments of work, submit those for review and verification, incorporate the feedback from the reviews into the next small increment of work, and continue in this manner until the work products are deemed acceptable. This approach ensures that incremental adjustments or changes required to stay on track can be made without retracing too many steps.

The FAST Implementation Methodology:

- Emphasizes working with actual system components rather than on documents describing the components.
- Acknowledges that in systems implementation, change is inevitable, and communication of process changes increases user acceptance.
- Involves users early and often in an intensely collaborative project environment.
- Empowers project participants to make decisions. A bad decision can be corrected; no decision translates to zero progress.
- Allows for project phases (shown in the following diagram) to be executed out of sequence, to overlap, and to run in parallel.

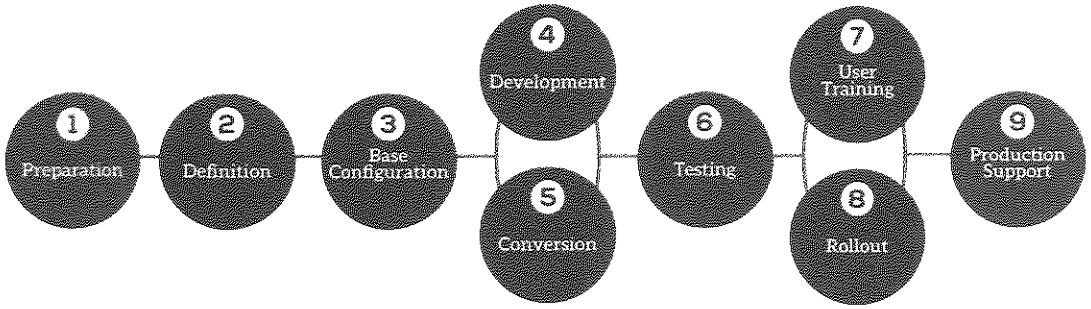
The FAST Implementation Methodology is comprised of the nine phases shown in the following diagram.



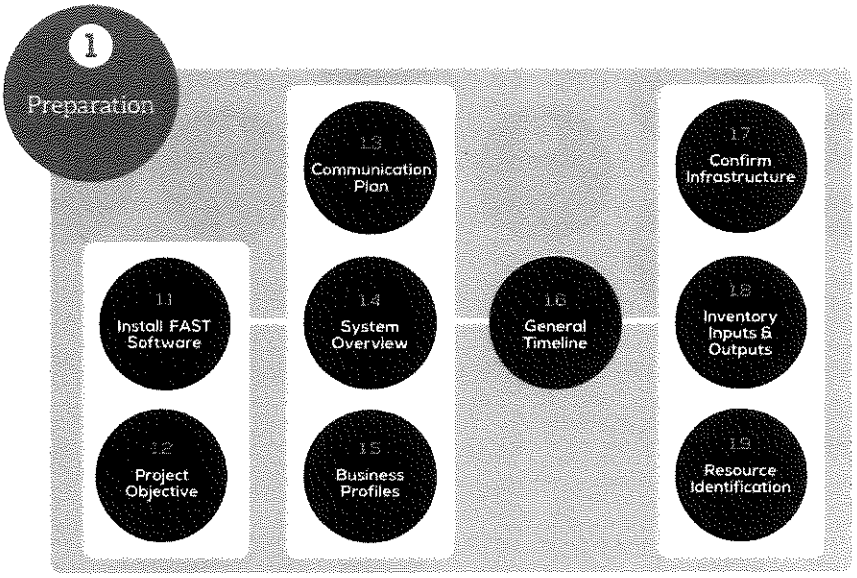
1. The Preparation Phase develops the roadmap that defines the execution of the GenTax implementation project.
2. The Definition Phase is the first step each team takes in defining the work to deliver the scheduled group of tax and revenue programs/lines of business.
3. The Base Configuration Phase structures and implements the starting point for the rollout. Once the baseline is in place, the system supports basic navigation and business function processing.
4. During the Development Phase, the project team uses definition items identified in the Definition Phase to produce work packages that specify parameters, establish options, define thresholds, and perform other types of configuration or development of site-specific extensions.
5. The Conversion Phase provides the new system with a base set of data with which the business functions operate.
6. The Testing Phase ensures that the production system can meet the business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues.
7. During the User Training Phase, user documentation is prepared and users receive training on use of the system. This includes organizational change management activities, which start early in the project to transition the organization for acceptance and use of the solution.
8. The Rollout Phase delivers the lines of business to production.
9. The Production Support Phase provides desk-side support and solution-specific help-desk support during the initial production period, and operates and maintains the solution in production over the long term.

Following is an overview of each of these nine FAST Implementation Methodology phases and the high- level activities that are conducted in each phase.

1.Preparation Phase



The Preparation Phase involves the installation of software and the importing of standard configurations. Additional primary implementation activities include: identifying, documenting, and communicating project objectives; developing the project communication plan, system overview, and business profiles; finalizing the scheduling of general timelines for release of the various lines of business; confirmation of project infrastructure; inventory of inputs and outputs for the various lines of business; and resource identification and assignment. These high-level Preparation Phase activities are outlined in the following graphic and text.



1.1 Install FAST Software – The FAST software and its initial configuration will be fully installed during the first weeks of the project. During installation, the technical team runs various tests and diagnostics to verify that the software is operational and to identify and resolve any issues. Since the FAST software is a browser-based application, a desktop browser shortcut can be pushed to Project Team members' workstations at this point.

1.2 Project Objectives – In this step, the Project Team confirms the project objectives and confirms those aspects of the State's strategic objectives that may be impacted by the project. In addition, the Project management Team conducts additional preparation activities for the project. These activities include:

- Reviewing the project charter, confirming the project plan, and establishing the project timeline.
- Identifying internal and external stakeholders and conducting initial communications about the State's new system and its ability to support the State's objectives.
- Establishing project procedures, standing meetings, and reporting mechanisms.

1.3 Communication Plan – The communication plan provides a framework to use when communicating the system's impact and benefits to stakeholders. The team analyzes each stakeholder and determines the mode, method, medium and timing for specific communications. The team consults and follows the plan when changes to processes, procedures, or functions affect stakeholders.

1.4 System Overview – Team managers provide an introduction of the functional capabilities of the Solution. The team demonstrates the core functions of each in-scope module to State team members. Participants develop a common understanding of the approach and begin harmonizing terminology. In addition, the FAST team provides an overview of the integrated FAST Workbench. The Workbench provides functions for creating, organizing, and managing the implementation project.

1.5 Business Profiles – The team prepares a business profile that defines the high-level scope of work that will be implemented. The business profile contains high-level statistical and processing information that the team will use in future decision making for the work. In addition, the team performs an early assessment of the State's capability to make changes. The assessment includes a high-level review of relevant laws, regulations, and standard operating procedures to identify any potential needs or obstacles that may affect the project's acceptance. This will include assessment of functionality that extends beyond the State's current business to include improvements, such as imaging of inbound correspondence or business process improvements to current collections processes. These requirements were included in the State's RFP. Issues identified in this stage are resolved through the change-management-analysis process, which may result in the need for a decision request to DOR leadership.

1.6 General Timeline – The project team confirms the high-level start and end dates for the project rollouts. Project schedules are created within the Fast Deliver Workbench. A high-level project schedule that contains detailed schedules for conversion, testing, and training is created for each rollout. In the event that first phase planning determines an alternate timeline is appropriate, the Parties may adjust the schedule through mutual agreement.

1.7 Confirm Infrastructure – This step validates that the proposed infrastructure can be configured successfully for incorporation into the current technical infrastructure. Working together, the FAST technical manager/lead and State IT personnel develop the strategy and timing for the use of existing inventory and/or new purchases. The project technical team works with the State's technology personnel to ensure server-level hardware and operating systems are configured to function properly with the FAST software. Confirmation includes a review of the existing network, hardware, operating system, storage capacity, storage types, desktop software, and associated logistics.

FAST and State technical personnel need access to install, configure, and maintain the FAST software on the dedicated servers for the project. FAST shall work with the State to develop installation plans that support the security policies of the State.

During the confirmation of the infrastructure, the team will review the following areas.

- Hardware installation and configuration
- Physical server installation/hardening
- Switch and routing
- Virtualization
- Firewall Rules – Implementation and Verification
- Security
- Application Servers – OS installation and system load-balance configuration
- Database servers – OS and SQL Server installation and configuration
- Server OS and Database Hardening
- Web service and file servers – File/folder security and web service configuration
- GenTax secure application configuration
- Disaster recovery planning and installation

1.8 Inventory Inputs and Outputs – Each implementation requires site-specific forms, letters, and interfaces. For each rollout, the team will create or add to the inventory of inputs and outputs. The inventory includes all current items identified by the State and affected by the rollout. The inventory displays the purpose, description, and disposition of each identified item. For the new system, some items are retired, some items are modified, and others are implemented in a manner that mimics the legacy environment. In order to meet State's requirements, additional interfaces may be included to enhance or optimize functionality.

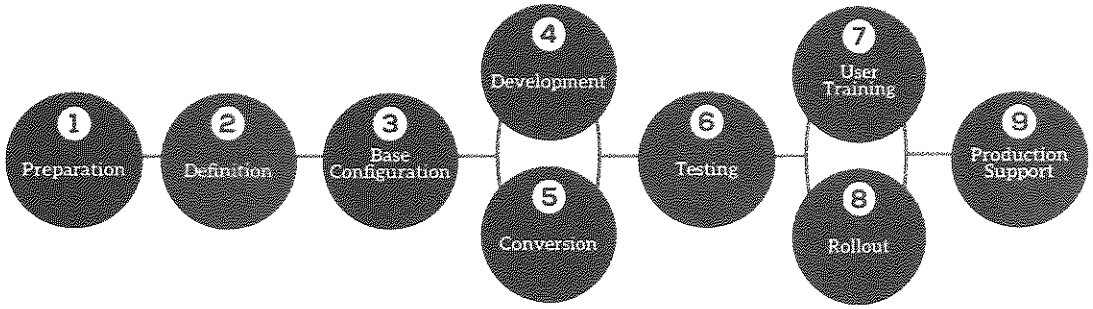
1.9 Resource Identification – The roles needed for the rollout are identified and documented in a Resource Plan. The project manager in partnership with State's project leadership will organize and assign teams by function across all lines of in-scope business. When resources are available, each application team ideally includes a respected SME from the business area, who works side-by-side with a FAST team manager. The ideal team also includes one to five FAST developers and one or more State developers. The ideal team functions as a unit to identify State business practices and then to configure GenTax features and functions accordingly. The ideal team provides the opportunity for SMEs and State developers to learn how to make site-specific modifications to the implementation when necessary.

In addition to the application teams, support teams are formed to address the following aspects of implementation across all phases and business lines:

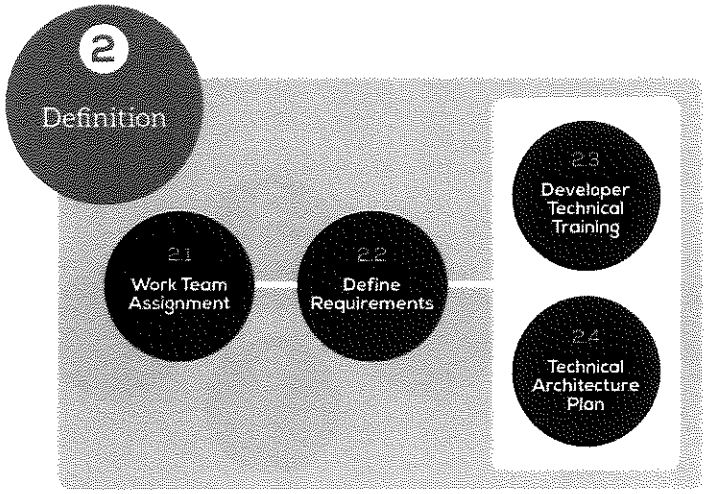
- Conversion
- Security Administration
- Training and Documentation
- Organizational Change Management
- Functional and Technical Support

Preparation Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan

2.Definition Phase



The Definition Phase focuses on defining work necessary to deliver the system functions. This phase includes multiple project definition activities. Some of these activities include assigning personnel to teams, gathering requirements, training developers, creating the technical environments, and finalizing the technical architecture plan. The following graphic and text outline the high-level activities of the Definition Phase.



2.1 Work Team Assignment – The project managers assign project personnel to teams. Please also see the preceding paragraph 1.9.

2.2 Define Requirements - The project team holds definition meetings to define the requirements and work to be done in subsequent phases. These meetings provide the details for how the FAST software will be implemented to meet the State's business needs. The results of the definition meetings are documented in a meeting minute template within the FAST Workbench. Business process changes, conversion and development tasks, and action items are then associated with the meeting minutes.

- Business-process changes will be used by the training team for planning and communication.
- Conversion tasks will be incorporated into the conversion schedule.
- Action Items establish the scope of work via the tasks that will be performed in the Development Phase.

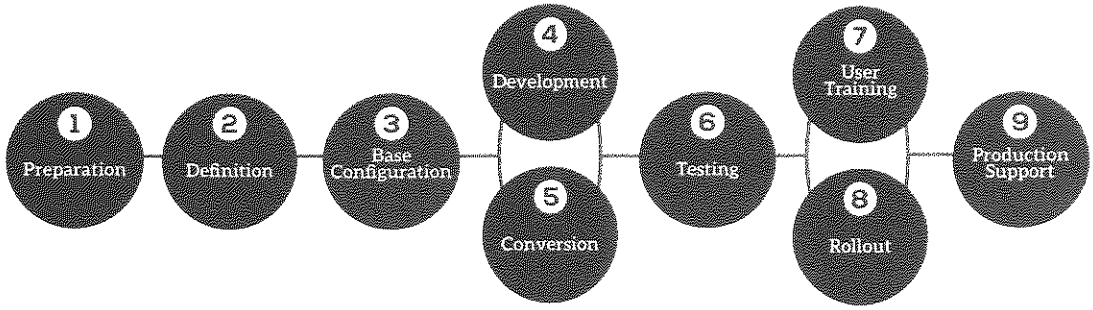
Many requirements will be reflected directly in the software configuration rather than through interim paper documents. Together, the gathered requirements and the base configuration of FAST's software form the starting point for iterative configuration work during the Development Phase of the project. During the Definition Phase, project team members may identify a subset of requirements to be managed and tracked through configuration, testing and migration to the production environment. Contractor will provide an approach and tool(s) for the project team to capture these requirements.

2.3 Developer Technical Training – State developers assigned to the project are trained in the solution's development and configuration environment and tools. In some circumstances, it is possible to begin technical training for developers in the Preparation Phase.

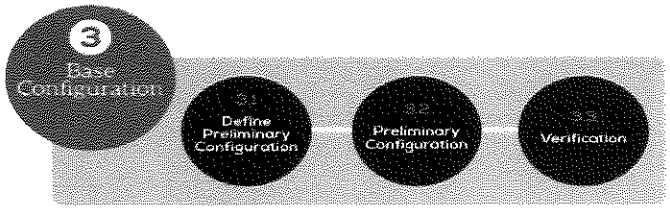
2.4 Technical Architecture Plan – The technical architecture plan provides the final design of the project environments including both production, and if applicable, disaster recovery environments. The technical architecture plan depicts the final design including zone designations and installation validation procedures.

Definition Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material

3.Base Configuration



The Base Configuration Phase is the phase in which the system begins processing the high-level requirements for a given project rollout. Once the baseline is in place, the system will support basic navigation, key functional areas, and account-type processing. High-level activities of this phase are outlined in the following graphic and text.



3.1 Define Preliminary Configuration – Using the requirements gathered in the Definition Phase, a subset of items are identified that will be implemented as the baseline. The baseline normally consists of items that do not require enhancements or programming but such activities may be included, particularly if they are high profile or critical to business operation.

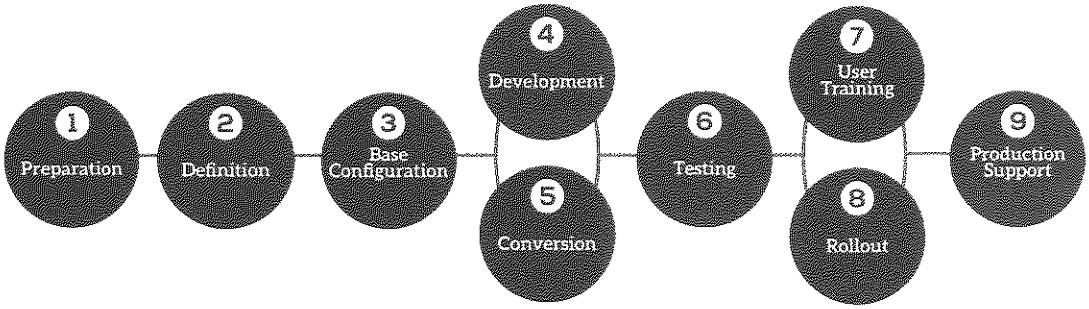
3.2 Preliminary Configuration – The project teams carry out the design and configuration tasks for the items identified in the Define Preliminary Configuration step.

3.3 Verification – At this point, user team members get their first hands-on exposure to their installation of the solution. The Verification step is both a communication and revision mechanism for the teams. At this time, the system is not yet complete and instabilities should be expected.

It is important to remember that the goal of this step is not to present a complete, robust, production-ready system, but rather to confirm the direction being taken using an iterative design-confirm-review approach. Verification, along with the Business Process Changes identified in the Definition Phase, provides the Training and Organizational Change Management team with a foundation of the major areas that will be affected by the implementation of the solution. This understanding helps them prepare the best course of action for a smooth transition of the workforce.

Base Configuration Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items

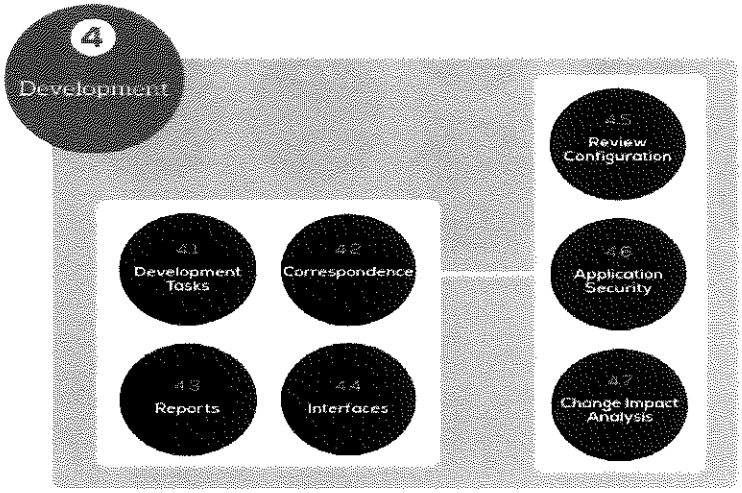
4.Development Phase



Many aspects of development take place in virtually all phases of the project. During the formal Development Phase, however, the gathered requirements are used to produce work packages for developers that are used for specifying parameters, selecting options, defining thresholds, and performing other types of configuration, enhancements, or programming. Work in this phase consists largely of developing correspondence, reports, interfaces, and site-specific programming, as well as reviewing configurations and establishing application security requirements and configuration.

The work packages mentioned above are defined, assigned, and tracked within the Workbench. Developers can then access either a Gantt chart or calendar view of assigned tasks to help manage their workload along with easy tracking by management of task assignments and their associated statuses.

High-level activities of this phase are outlined in the following graphic and text.



4.1 Development Tasks – Development Tasks entail the completion of the identified configuration and site-specific programming tasks needed to meet the requirements identified in the Definition Phase. This activity involves the completion of configurations, the development of necessary site-specific programs, and the confirmation of these tasks. Maximum flexibility is a primary design goal of the software, but not every aspect of the solution is configurable. Some truly unique variations may require programming to support specialized functions. Site components are programmed during the Development Phase and can be maintained, enhanced, or augmented by the State over time. Site components work seamlessly within the software while minimizing the impact to future product upgrades. They are transparent to the user—a single, consistent, and integrated solution makes the user unaware of when they are accessing a core product or site-specific function.

FAST software is built on the VB.Net platform. Consequently, all custom components are developed on the same platform using the Microsoft Visual Studio Integrated Development Environment (IDE). FAST has created a number of add-ins for this IDE that enable developers to create business objects that inherit and reference the appropriate architectural components of the software. This enables the efficient creation and testing of custom components that conform to FAST development standards and seamlessly integrate with the core software product.

4.2 Correspondence – The project team performs the configuration and development necessary to implement the in-scope correspondence. Although a variety of correspondence items are provided as core product models, most agencies have unique business needs that cannot be satisfied by pre-existing templates. Simple correspondence typically requires only a template and a few configuration rules related to security and printing. Items that are more complex may require the team to create site-specific extensions during this phase.

4.3 Reports – The project team performs the configuration and development needed to implement the in-scope reports and confirm the configuration. A variety of mechanisms are available to obtain information from the system, including core product searches and list windows, configurable query result list windows, configurable data cubes, and formal reports. For business reporting needs that cannot be satisfied through configuration, development of a site-specific extension may be required.

4.4 Interfaces – The project team performs the configuration and development needed to implement the in-scope interfaces. Configuration and development are based on the completed Interface Design Documents (IDDs) linked to the interface development task in the Delivery Workbench. The IDDs identify each interface, the data required, the interfacing organization, and other key factors. The team evaluates the required interfaces during the Development Phase and selects an appropriate approach given the source, platform, and volume of data. FAST and the State will partner to communicate, plan and coordinate activities with all interface partners, customers, agencies, and third-parties.

FAST software architecture is designed for ease of interface implementation. The software includes a number of tools and standard configurations the team can use to implement interfaces for a wide array of transfer protocols and data formats. In addition, FAST software can be configured so that FAST core objects are exposed as web services.

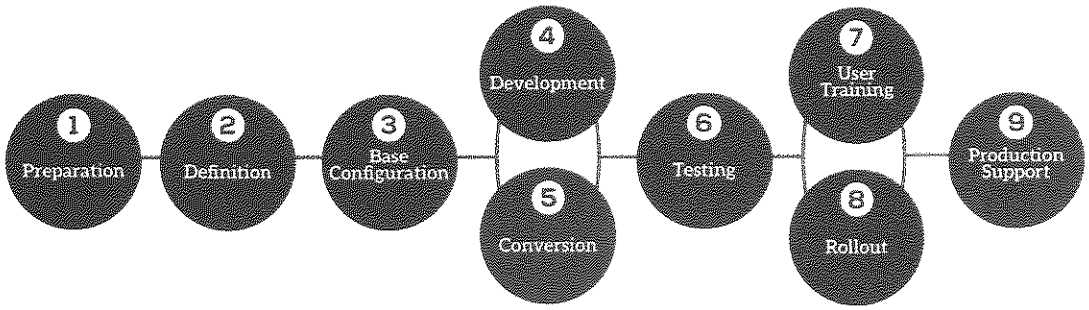
4.5 Review Configuration – Prior to completing the Development Phase, each confirmed module is made available to the users to allow hands-on review and configuration verification. This iterative practice allows the project team to quickly identify and remedy issues prior to the start of formal business testing.

4.6 Application Security – A security implementation strategy, structure, and plan are developed. The State begins to gather user functional access requirements.

4.7 Change-Impact Analysis – Throughout the implementation, the team constantly identifies, assesses, and plans for the potential impact of organizational changes associated with the software implementation. For each significant change identified, the team, with the assistance of State management, determines affected stakeholders, how they will be affected, known resistances to the change, and the most effective methods of assimilating each change into the organization. Project managers will work with State managers to determine who will implement the change-management methods identified during the implementation phases (assignments may be both internal and external to the project team).

Development Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Interface Design Documentation • Configurations • Site code • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan

5.Conversion Phase

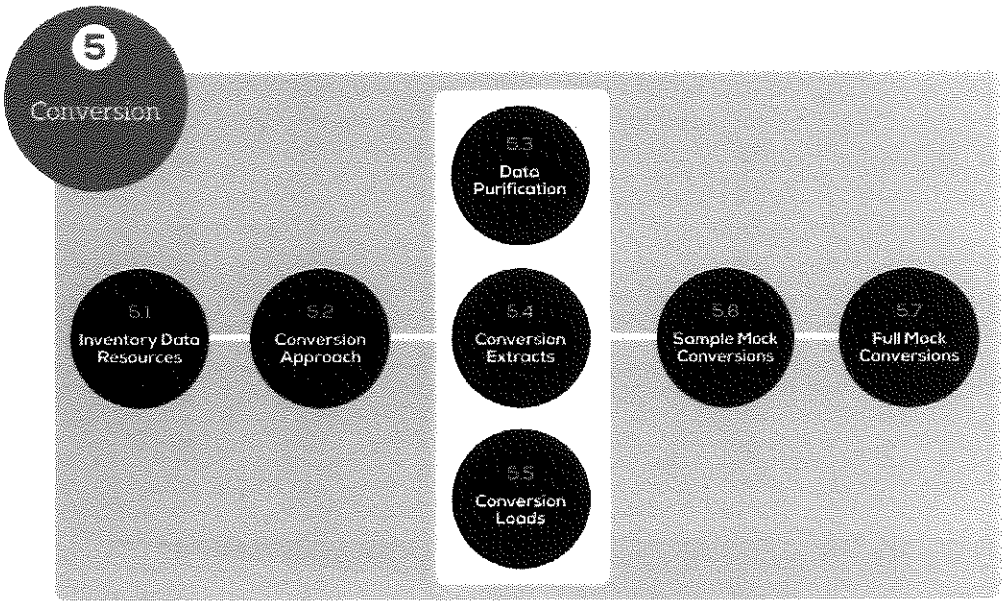


Conversion is an iterative process to extract, convert, purify, verify, and reconcile legacy data for use in the new system. In the Conversion Phase, legacy data from various sources is converted into the target database of our software. Final conversion to the production environment happens once per rollout.

CONVERSION PROCESS



Through a series of mock conversions, in environments separate from the production environment, the project team builds a database optimized for the new system. The conversion process starts early in the project to allow time for purification and to allow a fully converted database to be used during end-to-end testing. As the cutover date approaches, the mock conversion activity includes optimizing the time it takes to convert the whole database, so that conversion is completed in the time allotted during cutover. At cutover, the production database and feeder systems are addressed according to a cutover checklist so that conversion can be conducted without conflict. The following graphic and text outline the high-level activities of the Conversion Phase.



5.1 Inventory Data Resources – Existing data sources are inventoried for each rollout. The inventory of data sources is used to define the scope of State data that is available to the conversion process. Each data source is reviewed for integrity and quality.

5.2 Conversion Approach – The conversion approach work product defines how the business data will be converted and includes details on items such as:

- Manual versus automated processes
- Customer information
- Approach to historical data
- Number of years of financial data
- Financial detail versus summaries
- Approach to work in progress
- Impact on new system processes and organizations
- Interim conversion manual or automated processes

The team creates a conversion schedule for timing of key activities. In addition, the team creates a conversion task list that provides an inventory and schedule for completing the conversion tasks.

5.3 Data Purification – Prior to the execution of the conversion, the team inspects the data from each legacy source to determine if there are inconsistencies in the data. These inconsistencies are resolved by developing and executing strategies to purify the data prior to (the preferred option), during, or after conversion.

5.4 Conversion Extracts – Conversion extract processes are developed and led by State IT staff to access conversion data sources and create standard extract files. The conversion-extract process also provides control reports that detail the extraction process and are used to confirm the load processes.

5.5 Conversion Loads – Conversion loads include functionality to:

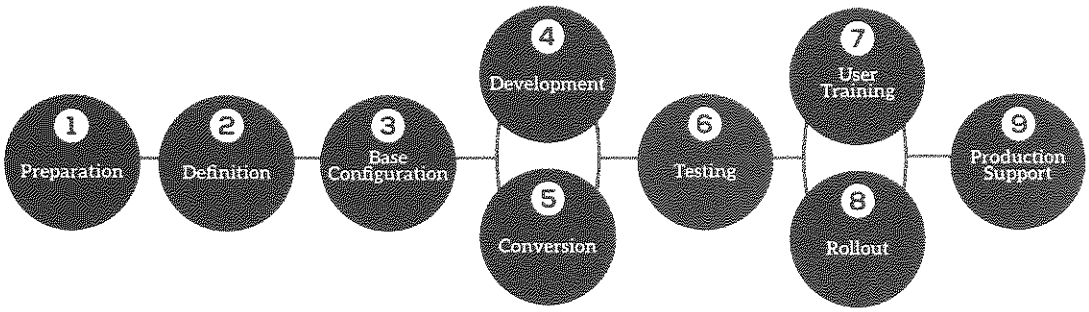
- Validate the extract files
- Reformat and load the extract files into the new data structures
- Produce conversion load control reports detailing the validation and load process

5.6 Sample Mock Conversions – The conversion team practices extracting and converting data multiple times through mock conversions. With each mock conversion, more data and more functions are added to the process until the full complement of data is extracted, purified, and formatted. The team makes available sample sets of converted data from early mock conversion for users to perform verification and comparison back to the legacy sources.

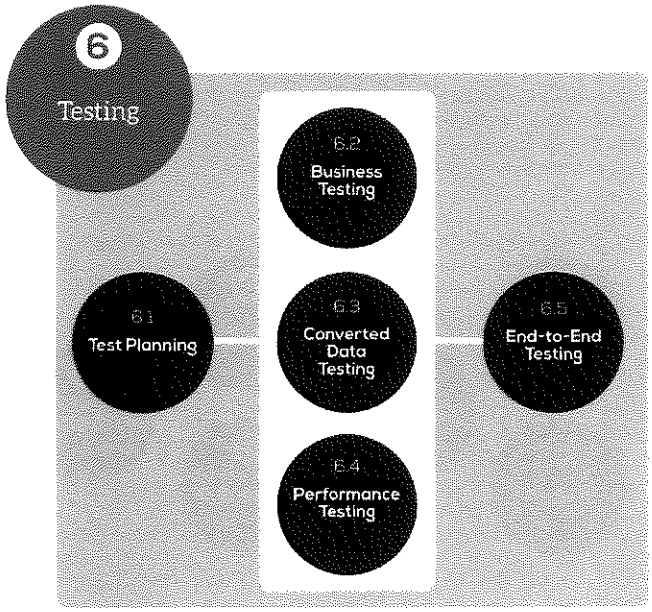
5.7 Full Mock Conversions – One or more complete mock conversions are performed to provide the basis for the timing and user verification of the converted data. Verification is supported by a reconciliation document that describes how converted data is reconciled to its legacy source.

Conversion Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation

6.Testing Phase



The Testing Phase ensures that the production system is able to meet the business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues. High-level activities of the Testing Phase are outlined in the following graphic and text.



6.1 Test Planning – This step begins while the configuration is being confirmed and verified by developers and business staff toward the end of the Development Phase. Testing is focused on testing business functions and outcomes as opposed to individual screens or background processes. The test plan identifies:

- Business test conditions
- Business test cycles
- Approach to executing business testing
- Modules targeted for performance testing
- End-to-end testing approach
- Acceptance criteria

6.2 Business Testing – The purpose of business testing is to ensure functions in testing meet the State's business requirements. State business analyst/subject-matter experts and the implementation teams jointly create test cases and scenarios. The business test scenarios are executed per the test plan. Anomalies identified during testing are recorded and tracked to resolution in the FAST Workbench. During this step, State testers may identify additional high-impact business-process changes that can be addressed within the change-impact analysis.

6.3 Converted Data Testing – When the system goes live, it will be operating on converted data. Converted data testing is performed to confirm that new system processes execute correctly on the converted data and users can perform the functions necessary to manipulate the converted data.

6.4 Performance Testing – A selection of high-volume items, both online and batch, are selected and used to:

- Plan background processes
- Ensure response times
- Validate network throughput

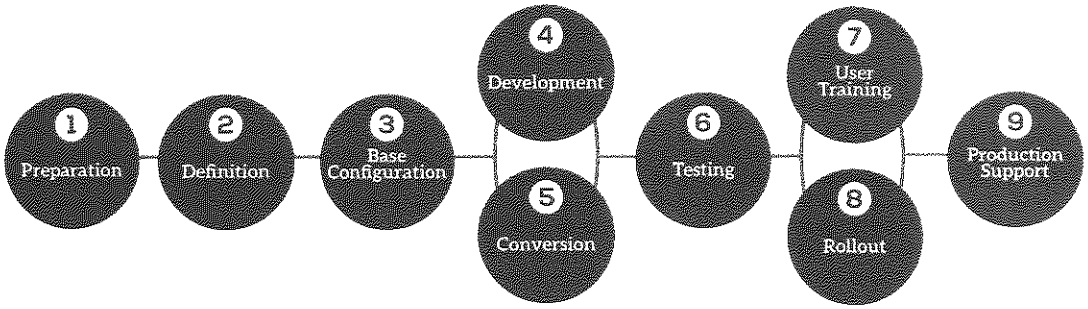
6.5 End-to-End Testing – End-to-end testing is the final step in the FAST Testing Phase. End-to-end Testing is conducted in the staging environment with a State's converted data from full mock conversions. This test is often performed in parallel with the final steps of converted-data testing. This testing activity uses the full functionality of the system to replicate daily business activities with converted data. End-to-end testing has the following objectives:

- Ensure that the system correctly executes business functions.
- Ensure that the system correctly executes external interfaces (inputs and outputs).
- Ensure that system functions triggered by a production job correctly execute required functionality.
- Ensure that database adds, reversals, modifications, and tracing are correct.

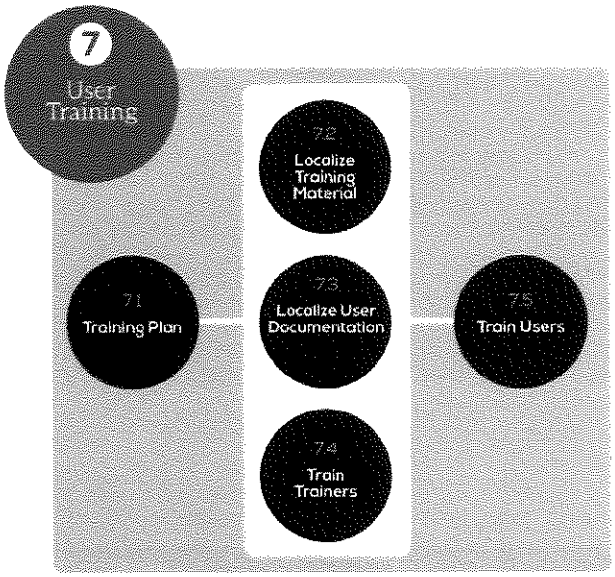
During end-to-end testing, an emphasis is placed on testing interfaces. The FAST team manager(s) responsible for handling interfaces on the project works closely with the State to ensure the full participation of the State's business partners in the testing process. Note that business testing and end-to-end Testing constitute what is commonly referred to as user-acceptance testing.

Testing Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results

7.User Training Phase



The purpose of the User Training Phase is to prepare users to navigate the software and complete their assigned business functions using the new tools and software. During this phase, most business users are provided hands-on, instructor-led exercises that allow them to become acquainted with new or modified business processes. The materials prepared during this phase may include step-by-step instructions, concept guides, functional flow diagrams, videos, or other creative learning materials. Trainers design and create these materials to help users understand how to accomplish their tasks using the software. Additionally, this phase may include the creation of process documentation and Help topics for new or changed processes. State Trainers will partner with FAST to determine Indiana specific training material changes. The following graphic and text outline high-level activities of the User Training Phase.



7.1 Training Plan – The Training Plan lays out the approach to training, including:

- Identifying trainers and trainees
- Selecting the training venue and equipment
- Deciding on the format – presentation versus hands-on
- Coordinating with testing activities
- Analyzing the impact of training on day-to-day operations and scheduling
- Preparing the training schedule – a delivery schedule for the training modules

7.2 Localize Training Material – In this step, trainers prepare site-specific exercises to accompany core e-training modules and face-to-face training workshops. There is often a need to customize classroom training modules and exercises to reflect the State's configuration and changed business processes.

7.3 Localize User Documentation – During this step, the team defines the user documentation needed, translates core documentation as needed, and creates additional documentation as necessary. Trainers may deliver documentation to users through multiple mediums, such as online text, videos, and paper. Trainers serve on the front lines and are therefore in the best position to be made aware of issues regarding documentation. As soon as process changes are identified, they must be analyzed for their impact on the organization as a whole or on specific departments or personnel classifications. The change-impact analysis step helps identify additional documentation needs.

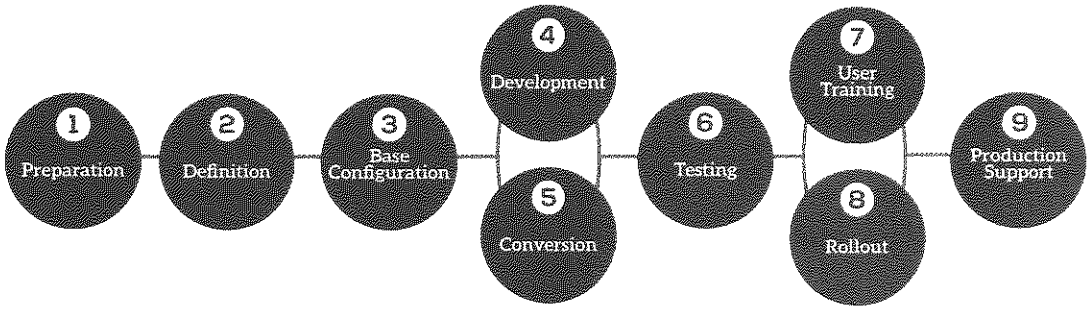
7.4 Train Trainers – The train-the-trainer approach is FAST's preferred approach to training. The goal in training trainers is to prepare State personnel to deliver training to State business users. When successful, this approach provides an in-house capability the State can leverage for training new personnel. The State is responsible for selecting the right person to train, which is critical to this approach.

7.5 Train Users – Typically, users are trained by State trainers with coaching and assistance from FAST trainers. FAST implementation consultants and State project personnel support the trainers by providing technical assistance and specialized instruction during training delivery.

User Training Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**

• Training Plan
• Training Schedule (trainers)
• Training Schedule (users)
• Training Material
  o Training Material – Tier 2
  o Training Material – Tier 3
• Training Results
• User Documentation and Aids
	Rollout-specific updates, as necessary, to:
	• Training Plan
	• Training Material
	  o Training Material – Tier 2
	• User Documentation and Aids
	
	New
	• Training Schedule (trainers)
	• Training Schedule (users)
	• Training Material
	  o Training Material – Tier 3
	• Training Results
		Rollout-specific updates, as necessary, to:
		• Training Plan
		• Training Material
		  o Training Material – Tier 2
		• User Documentation and Aids
		
		New
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  o Training Material – Tier 3
		• Training Results
			Rollout-specific updates, as necessary, to:
			• Training Plan
			• Training Material
			  o Training Material – Tier 2
			• User Documentation and Aids
			
			New
			• Training Schedule (trainers)
			• Training Schedule (users)
			• Training Material
			  o Training Material – Tier 3
			• Training Results

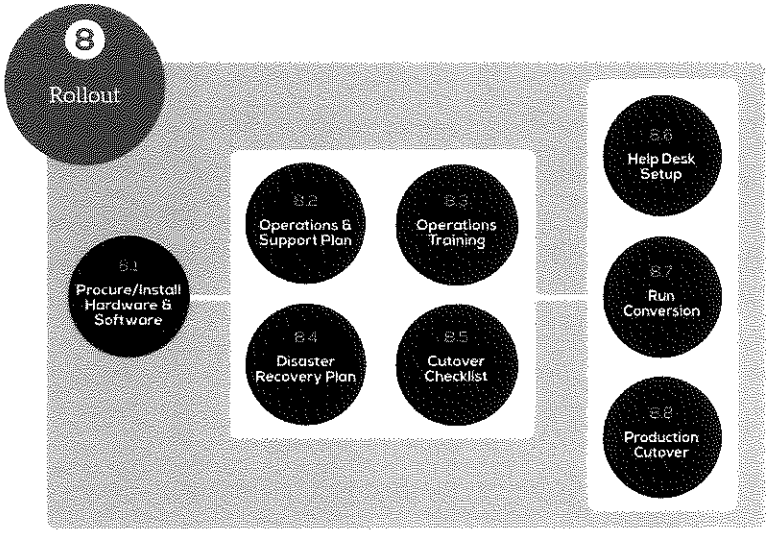
8.Rollout Phase



Preparations for the rollout are captured in a series of cutover checklists created and managed within the FAST Workbench. Cutover checklists provide a list of interrelated steps and activities that must be coordinated to ensure a smooth and successful rollout. Examples include which systems to shut down and when shutdown should take place, which batch jobs to run or cancel, and which external interfaces to redirect. Checklists also contain the steps to perform final data conversion and reconciliation. The communication plan is updated to keep all project team members, management, and other stakeholders aware of progress toward cutover. A Go-Live process will be mutually agreed upon prior to each rollout.

Upon completion of the final conversion into production, selected users enter real transactions into the production system to verify that key transactions can be completed. This is the final verification by business users that the system is ready for production. Upon successful completion of all steps in the cutover checklists, the system is declared ready for production.

During the first week or so of production, the project team deploys to strategic locations around the State to perform desk-side support to assist users and bolster their confidence. If users encounter issues, the project team members take action to ensure they capture details about the issue. All issues are reported, analyzed, and resolved. When completed, the team ensures the affected stakeholders learn about the change. The project team logs all issues requiring team action in the FAST Solution Manager. The team resolves logged issues according to the project plan. The following graphic and text outline the high-level activities of the Rollout Phase.



8.1 Procure/Install Hardware & Software – The hardware and software for the production platform are purchased, installed, configured, and tested. Normally, this step will take place much earlier in the project timeline but confirmation and final setups may be necessary.

8.2 Operations and Support Plan – The operations and support plan details how the new system will be supported in production. This includes hours of operation, on-call support, hardware responsibilities, application responsibilities, and support team structure.

8.3 Operations Training – The operations manual details the processes associated with the day-to-day operations required, including:

- Bringing the application up or down
- Executing scheduled tasks
- Diagnosing and remedying common problems
- Scheduling backups

State personnel are trained in carrying out these tasks.

8.4 Disaster Recovery Plan – The implementation team assists the State in updating their existing disaster-recovery plan to cover the new application and its platform. Alternatively, a new plan is developed collaboratively with the State. The plan details which strategies the State has, or will implement, to mitigate the impact of unforeseen events.

8.5 Cutover Checklist – A cutover checklist provides a list of interrelated steps and activities that must be coordinated to ensure a smooth and successful rollout. A high-level checklist is prepared for general consumption within the State to communicate the general schedule. A step-by-step checklist is prepared for the project team to follow.

8.6 Help Desk Setup – A transitory solution-specific help desk provides a triage function—routing nonsolution-related calls, responding to and managing help calls related to the software, and sometimes dispatching a specialist from the project team to provide assistance in person. As the number of calls to the help desk dwindle, the solution-specific help desk services shift back to the State's general help desk service.

During the early stages of system-adoption within a production environment, it is important to provide enhanced support to first-time users. Deskside support goals are to:

- Provide guidance to any user performing a regular activity for the first time
- Identify any conversion or software distribution/installation problems as soon as possible for escalation and resolution
- Catch any common user mistakes or bad habits early and address with ad hoc training and/or general communications to the user community

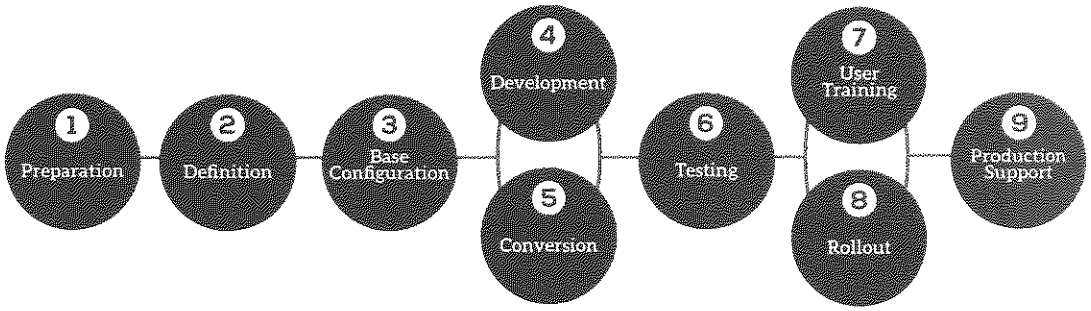
During this 10-15 day window, an application support team is established from project resources to cover the period. When appropriate, other members of the project team will assess and assist in problem solving or creating longer-term solutions. Not all regular business activities may be performed during the rollout support period. For example, there may be monthly, quarterly or annual activities that do not fall within the immediate post-implementation support dates. The project team provides deskside support for such activity and the 10-15 day deskside support timeline may be extended as mutually agreed upon by the project teams.

8.7 Run Conversion – Conversion processes are executed, databases are backed up, application servers are readied, and application shortcuts are installed to user desktops.

8.8 Production Cutover – The system goes live. Desk-side support is provided to users and operations are carefully monitored.

Rollout Phase – Standard Work Products			
Rollout 1	**Rollout 2**	**Rollout 3**	**Rollout 4**
• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan

9.Production Support Phase



Immediately after transitioning to production, a desk-side support team is deployed in user work areas affected by the rollout. This team is comprised of project team members and State staff who are most familiar with the software solution and new business processes. They remain on duty for the initial days or weeks that the new system is in production. Desk-side support personnel are available to answer any questions that arise during those initial weeks. Users may have questions or may simply want someone standing by as they perform new tasks.

FAST's experience has shown that deploying a desk-side support team is a highly effective means of managing anxiety and boosting confidence of State staff as they first start to use the new system. Desk-side support may be extended, day-by-day or week-by-week, at the joint discretion of State and FAST management. The location, duration, and amount of desk-side support are determined through discussions between the State and the FAST project team.

As the need for desk-side support diminishes, project team members are no longer deployed on a regular basis to the business areas. At this stage, a system-specific help desk will continue to serve as a first point of contact to users who need assistance.

As the number of actual system-related calls decrease, the help-desk service transitions back into the steady-state help desk. During a transition period, project staff work with State help-desk staff to ensure they have the skills, knowledge, and procedures to take over. This may include training, use of a buddy system, mentoring, and documentation development. The duration of these support periods varies according to the State's comfort level in making the transition and the agreed upon ongoing maintenance and support structure.

Please note that FAST recommends that an agency perform an independent audit of application security after the production system has stabilized in order to confirm appropriate segregation of duties.

Rollout 1	Rollout 2	Rollout 3	Rollout 4
• System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan

FAST Implementation Methodology – Standard Tasks and Work Products

While the FAST Implementation Methodology does not prescribe the use of formal sign-offs, tasks and work products are established by FAST and State project management during the project's Preparation Phase. The following table identifies the standard tasks and work products associated with each phase of the FAST Implementation Methodology. Please note that since the same tasks are conducted for each rollout, some work products created in the first of the proposed four rollouts will be expanded or modified, rather than recreated, to address the specifications of Rollout 2, Rollout 3, and Rollout 4.

Standard Tasks and Work Products by FAST Implementation Methodology Phase

Phase	Tasks	Work Products
Preparation Phase	• Establish Team Workspace/Workstations • Prepare Project Plan • Confirm Infrastructure • Install GenTax Software • Create Environments • Conduct Rollout Kick-Off Meeting • Present GenTax System Overviews	• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Definition Phase	• Conduct Definition Meetings • Prepare Definition Items • Review and Modify Definition Items • Inventory Inputs and Outputs • Train State Developers	• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory
Base Configuration Phase	• Scope Preliminary Configuration • Prepare Preliminary Configuration • Conduct Verification Sessions • Update Definition Items	• Preliminary Configuration and Verification • Updated Definition Items
Development Phase	• Continue configurations • Build and Unit-Test Letters/Correspondence • Build and Unit-Test Reports • Build and Unit-Test Interfaces • Build and Unit-Test Additional Site Functions • Prepare Application Security Plan • Review configured software	• Interface Design Documentation • Configurations • Site code • Application Security Plan
Conversion Phase	• Inventory Data Stores • Prepare Conversion Plan • Build and Test Conversion Extract Modules • Build and Test Conversion Load Modules • Build and Test Reconciliation Reports (extract) • Build and Test Reconciliation Reports (load) • Perform Data Purification • Run Partial Mock Conversions • Run Full Mock Conversions	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation

Phase	Tasks	Work Products
Testing Phase	• Prepare Test Plan • Prepare for Business Testing • Conduct Business Testing • Conduct Converted Data Testing • Conduct Performance Testing • Conduct End-to-End Testing	• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results

User Training Phase	• Prepare Training Plan
	• Localize Training Materials
	• Train Trainers (Train-the-Trainer)
	• Train Users
		• Training Plan
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 2
		  ○ Training Material – Tier 3
		• Training Results
		• User Documentation and Aids

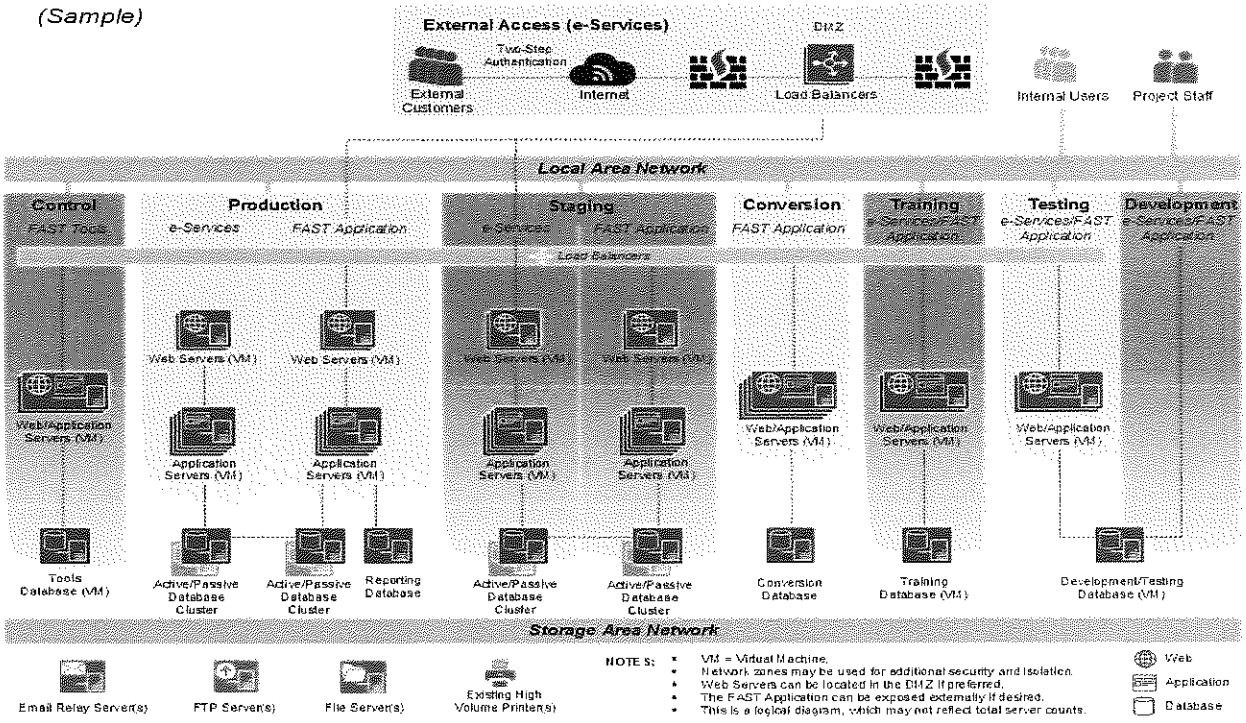
Rollout Phase	• Prepare Operations & Support Plan • Prepare Operations Manual • Prepare Cutover Plan • Prepare Help Desk and Desk-Side Support Plan • Run and Verify Conversion • Production Cutover	• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan
Production Support Phase	• Perform Desk-Side Support • Perform Operations Support	• System Maintenance and Support Plan

Production Rollouts Based on Simultaneous Cutover to GenTax
Each rollout will include the full functionality of relevant, in-scope, GenTax modules and subsystems, providing complete and integrated GenTax functionality for each in-scope tax program on its first day of production.

The FAST approach to implementing groups of tax programs through simultaneous cutover to the new system, rather than a rolling implementation that relies on piece-meal releases of select software functionality, avoids the need to keep both the legacy systems and new system operating in parallel. This approach minimizes data-synchronization risks, is less disruptive to external business partners and internal operations, ensures consistent customer service across the organization, and is the preferred approach due, in part, to the additional factors set forth below:

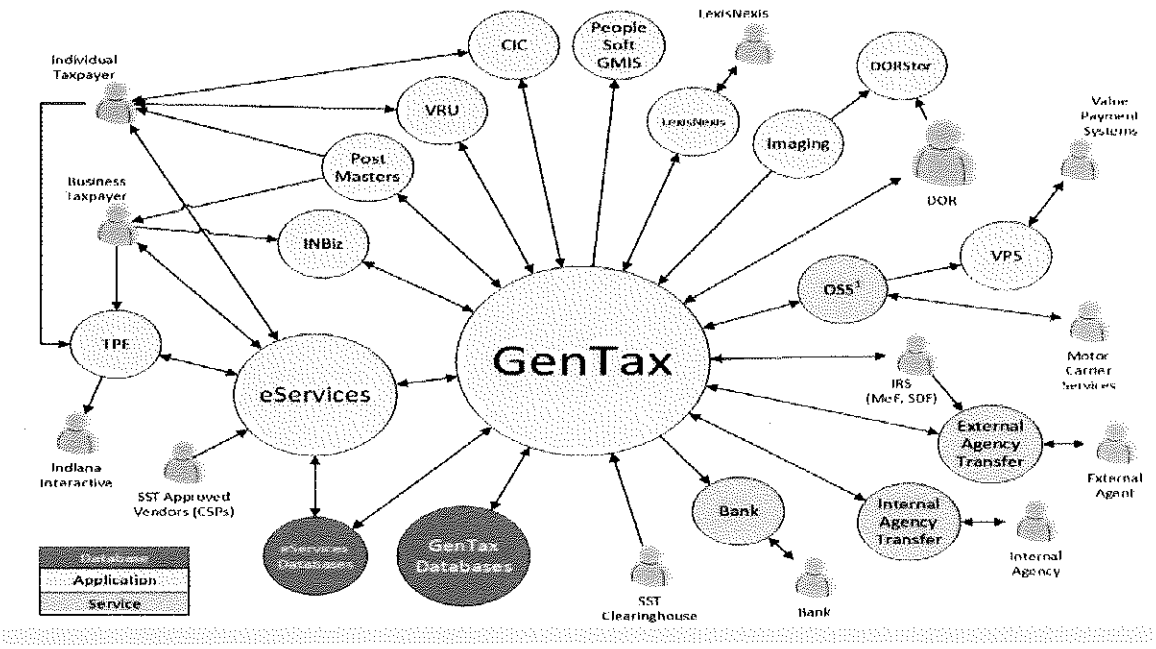
- In a rolling implementation, central help-desk personnel must have access to both the new system and the legacy system to assist field staff with customer issues. Batch jobs must also reconcile records from both the legacy system and the new system for the same customer, which can be problematic due to data transformation during conversion.
- Rolling implementations unnecessarily increase workload since dual interfaces from legacy systems and the new system are necessary to provide the same information to internal users and external partners.
- If a State is operating the new system and legacy system(s) in parallel, users and external partners may make incorrect decisions that negatively impact customers if information presented from one system is uncoordinated with the other(s).
- In rolling implementations, back-bridge code is necessary to handle the synching of information as users enter new data or edit old data in the new system. This back-bridge code, which is temporary and unnecessary after the implementation, can require extensive development resources that can be better utilized on other critical aspects of the project. The time, labor, and other resources used to create, test, and implement the temporary code detracts from the efforts necessary to configure the new system to meet the State's business requirements.

GenTax Architecture
(Sample)



Potential Systems Environment

This is an estimate and not a definitive solution. Interfaces are defined each rollout during the Definition Phase.



GenTax will interface with Motor Carrier Services to provide the same functionality currently provided by existing TAS-RPS interfaces running in production as of the Effective Date. Similar to other interfaces, existing layouts and transmission methods will be utilized for interactions between GenTax and Motor Carrier Services.

SECTION IV. FAST PERSONNEL

FAST Key Named Personnel identified in the table below shall be assigned to the project at least until the go-live date. The State reserves the right to request replacement of underperforming FAST resources without reservation.

FAST Project Personnel – Key Roles and Responsibilities

Role	Names	Responsibilities
FAST Project Director	Myles Larson	• Managing all FAST resources. • Developing and maintaining overall project plan. • Managing the schedules, quality, and functional/technical requirements of the project. • Assuming overall responsibility for ensuring that the delivered solution meets State business requirements while ensuring the project follows best practices. • Serving as a senior FAST subject matter expert on the project.
FAST Functional Project Managers	Jeff Egan Damien Olenslager	• Ensuring implementation consultants conduct work in a manner that conforms to the design criteria, standards, constraints, and interface/integration requirements established for the project. • Working closely with team managers to manage the day-to-day workings of the project as it relates to the solution design. • Reviewing and approving final configurations and subsystem integrations. • Leading the execution of project tasks and overseeing deliverables as outlined in the project plan. • Leading software configuration and development of site-specific components. • Working with State SMEs to ensure the solution meets the needs of users.
FAST Technical Manager	Andy Ribits	• Providing technical support to the project team. • Monitoring the configuration, tools, and repositories to ensure quality processes are maintained. • Assisting technical staff with procurement, installation, and support of the hardware and software platform. • Supporting the FAST and State conversion teams in the organization, management, and

Role	Names	Responsibilities
		execution of the conversion process to move legacy data into GenTax. • Designing and implementing the solution environments. Overseeing adherence to related security and technical standards/policies.
FAST Training Manager	Dani Millican	• Overseeing training plans and supporting State SMEs. • Working with business and technical staff to develop training curriculum and materials. • Overseeing and delivering train-the-trainer sessions. • Assisting in the management and production of the agreed-upon site-specific training documentation. • Assisting in the coordination of testing. • Working closely with State SMEs to ensure the solution meets the needs of users. • Overseeing change management - Working with State personnel to effectively propagate important project information to internal and external stakeholders via communication channels such as email, newsletters, open houses, meetings, demonstrations, etc.; managing communication and outreach to ensure users accept and embrace new system. • Overseeing business processes redesign - Assisting in managing the identification, design, documentation, and training for any new or modified business processes and procedures.
FAST Testing Manager	Brittany Frye	• Managing overall test procedures, including development of test plans, test scripts, and test scenarios. • Training system testers. • Setting up and supporting integrated FAST testing tools. • Reporting test results. • Assisting in the coordination of training. • Working closely with State SMEs to ensure the solution meets the needs of users.

SECTION V. STEERING COMMITTEE.

Executive Steering Committee. An Executive Steering Committee may be established. This committee is responsible for decision making at the strategic organizational level and is not normally involved in the day-to-day work of the project. The committee is comprised of the following members.

- State Executive Sponsor
- State Project Director (non-voting)
- Contractor project director (non-voting)
- State executives
- Other State executives
- Others as mutually agreed (non-voting)

The Executive Steering Committee is the final level for issue, risk, and corrective-action resolution. The executive steering committee typically meets monthly or every two months and makes decisions that are beyond the authority granted to the project directors and project managers. The project directors will jointly prepare and present a project status report to this committee. The executive steering committee will have the final authority to vote on decision requests and will not be subordinate to any other steering committee.

SECTION VI. STATE PERSONNEL

1. State Executive Sponsor. The State will designate an Executive Sponsor. The Executive Sponsor will:
    - be a full time State employee;
    - be the State's senior-most executive for purposes of directing all State employees involved on the project; and
    - lead the Executive Steering Committee
2. State Project Director. The State will designate a Project Director. The Project Director will:
    - be a full time State employee;
    - move their office to the project site for the duration of the project;
    - expend at least 90% of their working hours every week directly on project work;
    - be the State's senior-most manager for purposes of directing all State activities involved on the project; and
    - have the authority to make a final decision on behalf of the State for all matters related to the project including business requirements, prioritization of work, approval of deliverables, personnel assignment, invoice approval, project activities, etc.

SECTION VII. IMPLEMENTATION CHANGE CONTROL PROCESS

Information on the project related change-management approach will be included in the project plan to define the process for introducing, evaluating, and potentially incorporating project changes. Schedule, requirements, deliverables, and scope modifications are controlled through the project related change-management process. The implementation of enterprise-level IT systems is a dynamic process that is best served by flexibility. FAST will address changes to in-scope requirements through a collaborative working relationship between FAST and DOR project personnel.

FAST's objective on this project, as on all projects, is to complete the project on time and within the proposed price. Change orders are rare on FAST projects and in every case have been initiated at the request of our client agencies, typically to add significant scope that was not in the original contract.

Due to the flexibility inherent in FAST's COTS software, formal change requests are needed only when an item of significant scope change is presented, such as the addition of a new tax program or a significant change in project direction that would require a formal Change Order or Contract Modification. Low-level change impacts are considered for implementation based on multiple considerations. The considerations involve if, when, and how the change will be made based on current project bandwidth and answers to questions such as:

- What additional value will the change provide to the State?
- Is the change mandated by law?
- Who or what is affected by the change (for example, all taxpayers, two jurisdictions, or a new interface to an external agency)?
- Does the change fit within the current stage in the project life-cycle (for example, does configuration, testing, and training need to be modified)?
- Is the change a configuration or development modification?
- Does the change impact other modules, and if so, in what way?
- What is the nature of the change (for example, cosmetic, additional business-rule validations, workflow route, and so on)?
- Is the change needed at go live or can it be addressed in post-production?
- What will occur, or not occur, if the change is not performed?
- What are the alternatives, if any, to address the requested change?

Based on the above considerations, FAST and DOR will determine if the change should be implemented without need for a Change Order or Contract Modification or if rework or redirection is needed. If rework or redirection is needed, the amount of necessary work is estimated. Relevant baselines are re-baselined upon Change Order or Contract Modification implementation.

The goal of this process is to:

- Ensure that standardized methods, processes, and procedures are used for changes.
- Facilitate the efficient and prompt handling of changes.
- Maintain the proper balance between the need for a particular change and the potential detrimental impact of the change.
- Improve communication within the organization.
- Provide for a centralized repository and maintenance of project changes. Risk, issues, schedule changes, and Solution Requests may result in a Change Order or Contract Modification.

Project management is ultimately responsible for the Change Order or Contract Modification process. The project managers can delegate responsibilities within the Project Team as appropriate. The project managers, executive sponsor, and executive steering committee typically represent the three progressively authorized levels of change control on FAST implementation projects. Additionally, based on the approved change, steps may be defined for sending requests for a Change Order or Contract Modification to a change-control or change-advisory board.

Because project teams are able to make most decisions without the input of executive management, issues that are escalated to the executive levels are generally those that cannot or should not be decided by lower or mid-level State management. For instance, issues that have a high impact on customers (such as the frequency of which to send customer communications) or the State (such as the automation of a previously manual process, prompting reassignment of State personnel) are examples of issues that are typically escalated to the executive level.

EXHIBIT E

GenTax® Software Licensing Agreement

This Software Licensing Agreement (this "Agreement") is made by and between Fast Enterprises, LLC, a New York limited liability company ("FAST" or "Licensor") and the State of Indiana, acting on behalf of the Indiana Department of Revenue ("State" or "Licensee"). FAST has its principal place of business at 7229 S. Alton Way, Centennial, Colorado, 80112. Licensee has its principle place of business at 100 N. Senate Ave. - IGCN, Room N248, Indianapolis, IN 46204. The State and FAST are referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, FAST and the State, based in part on the State's RFP # 17-082 and Contractor's Best and Final Revised Response, have negotiated and executed a Professional Services Contract (the "Contract") for the implementation of Contractor's Solution described therein.

WHEREAS, Contractor's Solution includes FAST's obligation to license its proprietary software product, GenTax®, to the State and to provide related Implementation Services, Maintenance and Support Services, Exit Assistant Services, and additional responsibilities described therein to meet the State's goals and objectives.

WHEREAS, this Agreement includes terms that relate to the perpetual license to the GenTax® Software which will form the basis of the Solution implemented for the State under the Contract.

NOW, THERFORE, in consideration of the above recitals, the mutual undertakings of the Parties as contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Agreement hereby agree as follows:

1. DEFINITIONS. As used in this Agreement, the following terms shall have the meanings ascribed to them:

1.1. "Software" means the GenTax®[1] Integrated Tax Processing Software that is the subject of this Agreement. Software includes tools and utilities provided by FAST as part of the GenTax® package, as well as any fixes, enhancements, additions, and other modifications to the Software that may be provided.

1.2. "Documentation" means all documentation associated with the Software, including technical data, computer listings and printouts, in human-readable form that:

1.2.1. Documents the design or details of the Software;
1.2.2. Explains the capabilities of the Software; or
1.2.3. Provides operating instructions for using the Software to obtain desired results from a computer.

1.3 "Use" means storing, loading, installing, executing or displaying the Software on a computer, processor, or controller, or making a copy of the Software for archival or backup purposes only.

[1] GenTax® is a registered trademark of Fast Enterprises, LLC.

2. SOFTWARE LICENSE.

2.1. FAST grants the Licensee, in consideration for the license fee paid, a non-transferable, perpetual and non-exclusive right to use the Software, in object code form, and the Documentation furnished under this Agreement (the "License").

2.2. This grant shall allow the Licensee to use the Software to support the administration of and fulfill the business requirements and objectives of the Contractor Solution described in the Contract. The extension of this License to additional tax types or functionality could be subject to additional license fees that are reasonable and commensurate with the License fee charged under the Contract.

2.3. The Licensee may install the Software on any workstation or server within the Licensee's business operation.

2.4. All Software and Documentation furnished to the Licensee under this Agreement shall be used by the Licensee only for the purposes authorized under this Agreement.

2.5. The Licensee agrees to use its best efforts to see that its employees and users of the Software and Documentation comply with the terms and conditions set out in this Agreement.

2.6. The Licensee shall not take any steps, such as reverse assembly or reverse compilation, to derive a source code equivalent of the Software.

2.7. The License extends to new versions of the Software, provided the Licensee has purchased and is current on its optional subscription to annual Maintenance and Support Services under the Contract and the Licensee's subscription to annual Maintenance and Support Services thereunder includes access to new versions of the Software.

2.8. FAST may, at no additional charge, modify the Software to improve operation and reliability or to meet legal requirements.

2.9. Relocation of Software is the Licensee's responsibility and may result in additional support charges and modified service response times under any Support or Maintenance Agreement that FAST has entered into or will enter into with the Licensee.

2.10. The Licensee is responsible for the security of its proprietary and Confidential Information and for maintaining a procedure external to the Software to reconstruct lost or altered files, data or programs.

2.11. The Licensee must notify FAST if the Software is being used in an environment that poses a potential health hazard to FAST's employees or subcontractors.

2.12. The License granted hereunder is not assignable or transferable.

2.13. This Agreement does not grant a license to the Licensee to resell or otherwise redistribute the Software and Documentation.

2.14. Except as provided in this Agreement, use of the Software, Documentation, or License shall be permitted only with FAST's prior written consent, which consent shall not be unreasonably withheld. Any such use shall be subject to FAST's standard fee in effect at the time of the use.

3. REPRODUCTION OF SOFTWARE/DOCUMENTATION.

3.1 The Licensee may not copy or reprint the Software in whole or in substantial part except as described in this Agreement.

3.2 The Licensee may not reproduce or copy the Documentation provided by FAST under this Agreement, in whole or in part, except as necessary for use as authorized under this Agreement. Any copy of the Documentation must contain the same copyright notice and proprietary markings that are on the original Documentation.

4. INTELLECTUAL PROPERTY/OWNERSHIP OF SOFTWARE. The Licensee acknowledges that the Software and Documentation, and all improvements and modifications made to them by any Party, are and remain the sole property of FAST. This Agreement neither expresses nor implies that any interest in the Software and Documentation is assigned or transferred to the Licensee, except to the extent of the License granted by this Agreement.

5. FORM OF SOFTWARE. The Licensee agrees that the Software supplied under this Agreement shall be delivered to the Licensee in object code form only. FAST will maintain the Software source code with an escrow agent and list the Licensee as an authorized recipient of the source code in the event that FAST has not made suitable alternate arrangements for the continued maintenance of the Software and:

5.1 A receiver is appointed for FAST or for its property and assets;

5.2 Proceedings under bankruptcy or insolvency laws are commenced by or against FAST; or

5.3 FAST ceases doing business or discontinues offering maintenance for the Software.

6. CONFIDENTIALITY.

6.1 Licensee acknowledges that all of the Software and Documentation provided to the Licensee pursuant to this License, in any form whatsoever, are FAST's "Confidential Information."

6.2 Licensee hereby agrees: 1) to hold all Confidential Information in confidence; 2) to use FAST Confidential Information only for the purpose for which it is disclosed; 3) to reproduce the Confidential Information only to the extent allowed under this License or as required by state or federal law; and 4) not to disclose the Confidential Information to any third party without FAST's prior written consent or, if subject to legal process, without providing FAST notice and an opportunity to intervene.

6.3 Licensee agrees to take reasonable security precautions, at least as great as the precautions it takes to protect its own Confidential Information, in order to protect the confidentiality of FAST's Confidential Information.

6.4 Licensee may disclose Confidential Information only to the Licensee's employees, or Licensee's agents, contractors, and any other third parties (Non-State Employees) on a need- to-know basis. The Licensee will have executed or will execute appropriate written agreements with such Non-State Employees sufficient to enable it to comply with all the provisions of this Agreement.

6.5 Licensee will segregate all FAST Confidential Information from the confidential materials of others to prevent commingling.

6.6 Unless otherwise obligated by State or Federal law or legal process, at no time, under any circumstance, will any of FAST's Confidential Information be removed from Licensee property without the prior written consent of FAST.

6.7 Licensee will notify FAST immediately upon discovery of any unauthorized use or disclosure of FAST's Confidential Information or any other breach of this Agreement by the Licensee, and will cooperate with FAST in every reasonable way to help FAST regain possession of the Confidential Information and prevent its further unauthorized use.

6.8 If the Licensee becomes legally obligated to disclose FAST's Confidential Information by any governmental entity with jurisdiction over it, the Licensee will give FAST written notice sufficient to allow FAST to seek a protective order or other appropriate remedy. If disclosure cannot be avoided, Licensee will disclose only such information as is legally required and will cooperate with FAST in obtaining confidential treatment for any of FAST's Confidential Information that Licensee is legally required to disclose. To the extent the Licensee incurs any out of pocket expenses associated with obtaining confidential treatment for Licensor's Confidential Information, Licensor will reimburse the Licensee for those out of pocket expenses.

6.9 A Non-Disclosure Agreement in the form attached hereto as Attachment A, and incorporated herein by reference, shall be signed by the Non-State Employees who may be exposed to or gain access to FAST Confidential Information.

7. WARRANTIES. FAST warrants the tapes, diskettes or other media provided under this Agreement to be new, or like new and free of defects in Materials and workmanship under normal use for ninety (90) days from the delivery date unless otherwise agreed to in writing by the Parties. FAST will replace without charge any FAST supplied tapes, diskettes or other media not in good working order if returned to FAST during the warranty period.

8. WARRANTY EXCLUSIONS. Excepted as stated herein or in any other applicable contract between the Parties, FAST, its parents, subsidiaries and their affiliate subcontractors and suppliers make no warranties, express or implied.

8.1 The warranty provided in Section 7 does not cover repair for damages, malfunctions or service failures caused by:

8.1.1 Unauthorized actions of non-FAST personnel;
8.1.2 Failure to follow FAST's installation, configuration, operation or maintenance instructions;
8.1.3 Attachment to the Software of non-FAST software or failure of software not maintained by FAST, unless such installation or use is approved in writing by FAST

9. LIMITATION OF LIABILITY. In the event the Contract expires and there is no other contract governing the implementation, maintenance and/or support of the Software or Solution in effect, the following limitation on liability will apply to claims arising under this Agreement. For purposes of this Section 9, "FAST" shall be deemed to include FAST and its employees, agents, representatives, subcontractors, and suppliers, and "damages" shall be deemed to refer collectively to all injury, damage, loss, liability, expense or cost incurred.

9.1 Neither FAST nor the State shall be liable for indirect, special, collateral, incidental, or consequential damages, or for lost profits, or savings of any kind, whether or not either or both Parties have been advised of the possibility of such damages.

9.2 In no event will FAST be liable for damages in connection with or arising out of the Licensee's negligent or willful misconduct with regard to Licensee's use of the Software or Documentation under this Agreement.

9.3 In no event shall either Party's liability exceed the annual maintenance fee paid by the Licensee in the final year of the Contract.

10. TERMINATION. In the event the Contract expires and there is no other contract governing the implementation, maintenance and/or support of the Software or Solution in effect, the following termination provision will apply. Either Party may terminate this Agreement when the other has been provided written notice of default or non-compliance and has failed to cure the default or non-compliance within a reasonable time, not to exceed thirty (30) calendar days, after receipt of such notice.

11. ASSIGNMENT. This Agreement cannot be transferred or assigned without the mutual written consent of FAST and the Licensee.

12. WAIVER. None of the provisions of this Agreement will be deemed to have been waived by any act or acquiescence by any Party, but only by an instrument in writing signed by an authorized representative of the waiving Party. No waiver of any provision of this Agreement will constitute a waiver of any other provision or of the same provision on another occasion. Failure to enforce any provision of this Agreement will not constitute waiver of such provision or any other provisions of this Agreement.

13. SEVERABILITY. Should any one or more of the provisions of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, it shall be considered severed from this Agreement and shall not serve to invalidate the remaining provisions of this Agreement, unless such excluded provision materially alters the Parties' bargain.

14. BINDING NATURE; NO THIRD PARTY BENEFICIARY. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the Parties, and their respective successors and assigns, and is made solely and specifically for their benefit. No other person shall have any rights, interest or claims hereunder or be entitled to any benefits under or on account of this Agreement as a third-party beneficiary or otherwise.

15. PRECEDENCE. In the event of any uncertainties regarding the interpretation of any particular provision or term used in this Agreement, or in the event of any ambiguity, vagueness or inconsistency, such provisions and terms shall be read in a manner consistent with the Contract or any other contract governing the implementation, maintenance and/or support of the Solution in effect at that time.

16. AMENDMENT. This Agreement may only be enlarged, altered, voided or modified by a written amendment signed by FAST and the Indiana Department of Revenue.

17. HEADINGS. Descriptive headings and Section/Paragraph numbering in this Agreement are for convenience only and shall not affect the construction or meaning of contractual language.

18. SURVIVAL OF CERTAIN AGREEMENT TERMS. Notwithstanding anything herein to the contrary, the Parties understand and agree that all terms and conditions of this Agreement and the attachment hereto which may require continued performance, compliance, or effect beyond the termination or expiration date of this Agreement shall survive such termination or expiration date and shall be enforceable by the Parties as provided herein in the event of a failure to perform or to comply by either Party.

19. NOTICES. In the event the Contract expires and there is no other contract governing the implementation, maintenance and/or support of the Software or Solution in effect, the following notice provision will apply. All deliveries, notices, requests, demands or other communications related to this Agreement that either Party may be required or may desire to give to the other shall be sent to:

Notices to the State shall be sent to:

Commissioner, Department of Revenue, and
Chief Information Officer, Department of Revenue
100 N. Senate Ave. - IGCN, Room N248
Indianapolis, IN 46204
akrupp@dor.IN.gov
kgulley@dor.IN.gov

Notices to the Contractor shall be sent to:

Megan Mooney, General Counsel
6225 N. Meeker Pl. Suite 100
Boise, ID 83712
mmooney@fastenterprises.com
with a copy to legal@fastenterprises.com

ATTACHMENT A
NONDISCLOSURE AGREEMENT

FAST ENTERPRISES, LLC, a New York Limited Liability Company, ("FAST") is providing _____ (the "_____") access to FAST products, tools, inventions, innovations, design concepts, program code, knowledge capital and professional services.

The following articles govern the procedures by which the undersigned ("I", "me", "my") will handle FAST confidential information. Specifically:

1. FAST declares that the following are confidential, but only to the extent that such may or shall not be disclosed by the State of Indiana (the "State") pursuant to the Access to Public Records Act (Indiana Code 5-14-3, as amended) ("Confidential Material"):

    a) Any data, products, inventions, innovations, program source code, program object code, program executables, data designs, data definitions, programming aids, tools, utilities, configurations, drawings, formulae, algorithms, ideas, designs, concepts, know-how, discoveries, techniques, training material, documents, manuals, methodologies, specifications, models, and other knowledge capital, electronic or otherwise, owned by FAST whether copyrightable or patentable or not;

    b) Information relating to the technology, customers, business plans, promotional and marketing activities, pricing policies, finances and other business affairs of FAST;

    c) Any documents or material which are marked "Confidential";

    d) Information which may be treated as confidential.

2. FAST will disclose such Confidential Material to individuals as required for:

    a) The implementation, maintenance and support of FAST software for the use of the State, acting on behalf of the Indiana Department of Revenue (the "Agency");

    b) Use of FAST software by the Agency.

3. I agree to receive any such Confidential Material in confidence and to use such Confidential Material solely for the purpose defined in Section 2 above. I further agree to take either:

    a) Such measures as I would take in protecting the confidentiality of the State's confidential information; or

    b) Such measures as a reasonable person would take in protecting the confidentiality of the State's confidential information, whichever represents the higher standard, in protecting the confidentiality of the Confidential Material.

4. I agree that any Confidential Material that I receive can only be used for purposes outlined in Section 2 above. Other uses can be made only after obtaining the written permission of FAST.

5. I agree not to remove, from Agency's property, any Confidential Material without first obtaining the written permission of FAST.

6. I agree that I will not disclose any Confidential Material, directly or indirectly, to any Party other than the Agency without first obtaining the written permission of FAST.

7. I agree that all Confidential Material provided under the terms of this Agreement shall remain the property of FAST and shall be returned to FAST upon its request, including any and all copies I might produce.

8. Nothing herein shall be construed as giving me any license or right in connection with the Confidential Material disclosed to me.

9. My obligation to maintain information in confidence shall not extend to such portions of the information that, at the time of disclosure to me, are general knowledge in the public domain.

10. I understand that my obligation to protect the confidentiality of the Confidential Material extends beyond my involvement with the Agency and beyond my involvement with FAST. Furthermore, my obligation to protect the confidentiality of the Confidential Material is not subject to changes in my employment status.

11. I understand that access to the Confidential Material is provided on a need-to-know basis. If, for any reason, such need no longer exists, I agree that I will return all Confidential Material to FAST or the Agency, including any and all copies I may have produced.

12. I understand that Confidential Material is provided to me as-is and FAST makes no warranties with respect to Confidential Material.

13. If any term of this Agreement should be declared void or unenforceable, such declaration will have no effect on the remaining terms herein.

I HAVE READ THIS AGREEMENT CAREFULLY AND I UNDERSTAND AND ACCEPT THE OBLIGATIONS WHICH IT IMPOSES UPON ME WITHOUT RESERVATION. NO PROMISES OR REPRESENTATIONS HAVE BEEN MADE TO ME TO INDUCE ME TO SIGN THIS AGREEMENT. I SIGN THIS AGREEMENT VOLUNTARILY AND FREELY.

_____

Print name

_____

Signature

_____

Date

EXHIBIT F

GenTax® Maintenance and Support Agreement

This Maintenance and Support Agreement (this "Agreement") is made by and between Fast Enterprises, LLC, a New York limited liability company ("FAST") and the State of Indiana, acting on behalf of the Indiana Department of Revenue ("State" or "Agency"). FAST has its principal place of business at 7229 S. Alton Way, Centennial, Colorado, 80112. Agency has its principal place of business at 100 N. Senate Ave. - IGCN, Room N248, Indianapolis, IN 46204. The State and FAST are referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, FAST and the State, based in part on the State's RFP #17-082 and Contractor's Best and Final Revised Response, have negotiated and executed a Professional Services Contract (the "Contract") for the implementation of Contractor's Solution described therein.

WHEREAS, Contractor's Solution includes FAST's obligation to license its proprietary software product, GenTax®, to the State and to provide related Implementation Services, Maintenance and Support Services (defined herein), Exit Assistant Services, and additional responsibilities described therein to meet the State's goals and objectives.

WHEREAS, this Agreement is entered into pursuant to rights, promises, and obligations contained in the Contract.

NOW, THERFORE, in consideration of the above recitals, the mutual undertakings of the Parties as contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Agreement hereby agree as follows:

1. DEFINITIONS. As used in this Agreement, the following terms shall have the meanings ascribed to them:

    1.1. "Software" means the GenTax®[1] Integrated Tax Processing Software that is the subject of this Agreement. Software includes tools and utilities provided by FAST as part of the GenTax® package, as well as any fixes, enhancements, additions, and other modifications to the Software that may be provided.

    1.2. "Documentation" means technical data, including computer listings and printouts, in human-readable form that:

        1.2.1. Documents the design or details of the Software;
        1.2.2. Explains the capabilities of the Software; or
        1.2.3. Provides operating instructions for using the Software to obtain desired results from a computer.

    1.3 "Use" means storing, loading, installing, executing or displaying the Software on a computer, processor, or controller, or making a copy of the Software for archival or backup purposes only.

[1] GenTax® is a registered trademark of Fast Enterprises, LLC.

1.4 "Escrow Agreement" means the Software Escrow Agreement, dated October 9, 2013, between FAST and Lincoln Parry Softescrow, Inc. (the "Escrow Agent"), to which the Agency has been added as a Beneficiary.

1.5 "License Agreement" means the GenTax® Software Licensing Agreement between the Parties, which is Exhibit E to the Contract.

2. MAINTENANCE AND SUPPORT SPECIFICATIONS

2.1. FAST's maintenance and support service specifications and related purchase options are described in detail in Attachment B, GenTax® Maintenance and Support Specifications, and Attachment C, Maintenance and Support Packages, (together "Maintenance and Support Services").

2.2. FAST agrees to provide, and the Agency agrees to purchase, Maintenance and Support Services for the Implementation Period and Ongoing Maintenance and Support Period as defined in Section 51 of the Contract.

2.3. FAST may, at no additional charge, modify Software to improve operation and reliability or to meet legal requirements. Any such modifications to the Software will not eliminate or diminish the business capabilities of the Software. In the event FAST imposes such additional charges, they shall be reasonable and commensurate with the charges imposed under the Contract.

2.4. Relocation of Software is the Agency's responsibility and may result in additional on-site support charges and modified service response times.

2.5. FAST is not required to maintain or support nonqualified software. "Nonqualified software" is software not supplied or approved by FAST, and software for which the Agency does not allow FAST to incorporate modifications. The Agency is responsible for removing nonqualified software to allow FAST to provide maintenance and support.

2.6. Maintenance does not cover any damage or failure caused by:

2.6.1. Media and supplies or use of items not designated for use with Software; or
2.6.2. Site conditions that do not conform to FAST's previously established site specifications; or
2.6.3. Neglect, improper use, fire or water damage, electrical disturbances, transportation by the Agency, or work or modification by people other than FAST's employees, subcontractors, or other authorized parties.

2.7. All terms and conditions of the License Agreement between FAST and the Agency remain in full force and effect.

3. TERM AND RENEWAL. The Parties agree that the term of this Agreement corresponds and is consistent with the Term defined in the Contract (the "Term"), unless sooner terminated. This Agreement may be renewed for a mutually agreed upon term.

4. PAYMENT. The Agency will pay to FAST, in full payment and reimbursement for providing the Maintenance and Support Services the fee in the amount, manner and at the times set forth in Article III, Section 51 and Exhibits A and B of the Contract.

5. REPRODUCTION OF SOFTWARE/DOCUMENTATION.

   5.1 The Agency may not copy or reprint the Software in whole or in substantial part except to make archive copies of the Software. Any archive copy of the Software must contain the same copyright notice and proprietary markings that are on the original Software.

   5.2 The Agency may not reproduce or copy the Documentation provided by FAST under this Agreement, in whole or in part, except as necessary for use as authorized under this Agreement and the License Agreement. Any copy of the Documentation must contain the same copyright notice and proprietary markings that are on the original Documentation.

6. INTELLECTUAL PROPERTY/OWNERSHIP OF SOFTWARE. The Agency acknowledges that the Software and Documentation, and all improvements and modifications made to them by either Party, are and remain the sole property of FAST. This Agreement neither expresses nor implies that any interest in the Software and Documentation is assigned or transferred to the Agency.

7. FORM OF SOFTWARE. The Agency agrees that the GenTax® Software supplied under this Agreement shall be delivered to the Agency in object code form only. FAST will maintain the GenTax® source code with the Escrow Agent pursuant to the Escrow Agreement and list the Agency as an authorized recipient in the event that FAST has not made suitable alternate arrangements for the continued maintenance of the GenTax® Software and:

   7.1. A receiver is appointed for FAST or for its property and assets;

   7.2. Proceedings under bankruptcy or insolvency laws are commenced by or against FAST;

   7.3. FAST ceases doing business or discontinues offering maintenance for the Software.

8. CONFIDENTIALITY.

   8.1. Agency acknowledges that all of the Software and Documentation provided to the Agency pursuant to this Agreement, in any form whatsoever, are FAST's "Confidential Information."

   8.2. Agency hereby agrees: 1) to hold all Confidential Information in confidence; 2) to use FAST Confidential Information only for the purpose for which it is disclosed; 3) to reproduce the Confidential Information only to the extent allowed under this Agreement or as required by state or federal law; and 4) not to disclose the Confidential Information to any third party without FAST's prior written consent or, if subject to legal process, without providing FAST notice and an opportunity to intervene.

   8.3. Agency agrees to take reasonable security precautions, at least as great as the precautions it takes to protect its own confidential information, in order to protect the confidentiality of FAST's Confidential Information.

8.4. Agency may disclose Confidential Information only to the Agency's employees, Agency's agents, contractors, and any other third parties (Non-Agency Employees) on a need-to-know basis. The Agency will have executed or will execute appropriate written agreements with such Non-Agency Employees sufficient to enable it to comply with all the provisions of this Agreement.

8.5. Agency will segregate all FAST Confidential Information from the confidential materials of others to prevent commingling.

8.6. Unless otherwise obligated by State or Federal law or legal process, at no time, under any circumstance, will any of FAST's Confidential Information be removed from Agency property without the prior written consent of FAST.

8.7. Agency will notify FAST promptly upon discovery of any unauthorized use or disclosure of FAST's Confidential Information or any other breach of this Agreement by the Agency, and will cooperate with FAST in every reasonable way to help FAST regain possession of the Confidential Information and prevent its further unauthorized use.

8.8. If the Agency becomes legally obligated to disclose FAST's Confidential Information by any governmental entity with jurisdiction over it, the Agency will give FAST written notice sufficient to allow FAST to seek a protective order or other appropriate remedy. If disclosure cannot be avoided, Agency will disclose only such information as is legally required and will cooperate with FAST in obtaining confidential treatment for any of FAST's Confidential Information that Agency is legally required to disclose, but only at the sole expense of FAST.

8.9. A Non-Disclosure Agreement in the form attached hereto as Attachment A, and incorporated herein by reference, shall be signed by the non-Agency Employees who may be exposed to or gain access to FAST Confidential Information.

9. WARRANTIES. FAST warrants the tapes, diskettes or other media provided under this Agreement to be new, or like new and free of defects in materials and workmanship under normal use for ninety (90) days from the delivery date unless otherwise agreed to in writing by the Parties. FAST will replace without charge any FAST supplied tapes, diskettes or other media not in good working order if returned to FAST during the warranty period.

10. WARRANTY EXCLUSIONS.

10.1. The warranty provided in Section 9 does not cover repair for damages, malfunctions or service failures caused by:

10.1.1. Unauthorized actions of non-FAST personnel;
10.1.2. Failure to follow FAST's installation, configuration, operation or maintenance instructions;
10.1.3. Attachment to the Software of non-FAST software or failure of software not maintained by FAST, unless such installation or use is approved in writing by FAST.

11. CONTRACT RELATIONSHIP. The Parties hereby acknowledge and agree that each is an independent contractor, that no Party shall be considered to be the agent, representative, master or servant of any other Party for any purpose whatsoever, and that no Party has any authority to enter into any contract, assume any obligations or to give any warranties or representations on behalf of the other Party. Nothing in this Agreement shall be construed to create a relationship of partners, joint venturers, fiduciaries, or any other similar relationship between the Parties.

12. TERMINATION. Either Party may terminate this Agreement in accordance with the terms of the Contract.

13. ASSIGNMENT. This Agreement cannot be transferred or assigned without the mutual written consent of FAST and the Agency.

14. WAIVER. None of the provisions of this Agreement will be deemed to have been waived by any act or acquiescence by any Party, but only by an instrument in writing signed by an authorized representative of the waiving Party. No waiver of any provision of this Agreement will constitute a waiver of any other provision or of the same provision on another occasion. Failure to enforce any provision of this Agreement will not constitute waiver of such provision or any other provisions of this Agreement.

15. SEVERABILITY. Should any one or more of the provisions of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, it shall be considered severed from this Agreement and shall not serve to invalidate the remaining provisions of this Agreement, unless such excluded provision materially alters the Parties' bargain.

16. BINDING NATURE; NO THIRD PARTY BENEFICIARY. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the Parties, and their respective successors and assigns, and is made solely and specifically for their benefit. No other person shall have any rights, interest or claims hereunder or be entitled to any benefits under or on account of this Agreement as a third-party beneficiary or otherwise.

17. PRECEDENCE. In the event of any uncertainties regarding the interpretation of any particular provision or term used in this Agreement, or in the event of any ambiguity, vagueness or inconsistency, such provisions and terms shall be read in a manner consistent with achieving the State's Goals and Objectives described in the Base Contract. Questions concerning the interpretation of any term or provision of this Agreement shall be resolved in accordance with the Order of Preference described in Article III, Section 34 of the Base Contract.

18. AMENDMENT. This Agreement may only be enlarged, altered, voided or modified by a written amendment signed by FAST and the Indiana Department of Revenue.

19. HEADINGS. Descriptive headings and Section/Paragraph numbering in this Agreement are for convenience only and shall not affect the construction or meaning of contractual language.

20. SURVIVAL OF CERTAIN AGREEMENT TERMS. Notwithstanding anything herein to the contrary, the Parties understand and agree that all terms and conditions of this Agreement and the attachment hereto which may require continued performance, compliance, or effect beyond the termination or

expiration date of this Agreement shall survive such termination or expiration date and shall be enforceable by the Parties as provided herein in the event of a failure to perform or to comply by either Party.

21. NOTICES. All deliveries, notices, requests, demands or other communications related to this Agreement that either Party may be required or may desire to give to the other shall be made and received in accordance with the terms of the Contract.

ATTACHMENT A

NONDISCLOSURE AGREEMENT

FAST ENTERPRISES, LLC, a New York Limited Liability Company, ("FAST") is providing _____ (the "_____") access to FAST products, tools, inventions, innovations, design concepts, program code, knowledge capital and professional services.

The following articles govern the procedures by which the undersigned ("I", "me", "my") will handle FAST confidential information. Specifically:

1. FAST declares that the following are confidential, but only to the extent that such may or shall not be disclosed by the State of Indiana (the "State") pursuant to the Access to Public Records Act (Indiana Code 5-14-3, as amended) ("Confidential Material"):

    a) Any data, products, inventions, innovations, program source code, program object code, program executables, data designs, data definitions, programming aids, tools, utilities, configurations, drawings, formulae, algorithms, ideas, designs, concepts, know-how, discoveries, techniques, training material, documents, manuals, methodologies, specifications, models, and other knowledge capital, electronic or otherwise, owned by FAST whether copyrightable or patentable or not;

    b) Information relating to the technology, customers, business plans, promotional and marketing activities, pricing policies, finances and other business affairs of FAST;

    c) Any documents or material which are marked "Confidential";

    d) Information which may be treated as confidential.

2. FAST will disclose such Confidential Material to individuals as required for:

    a) The implementation, maintenance and support of FAST software for the use of the State, acting on behalf of the Indiana Department of Revenue (the "Agency");

    b) Use of FAST software by the Agency.

3. I agree to receive any such Confidential Material in confidence and to use such Confidential Material solely for the purpose defined in Section 2 above. I further agree to take either:

    a) Such measures as I would take in protecting the confidentiality of the State's confidential information or

    b) Such measures as a reasonable person would take in protecting the confidentiality of the State's confidential information, whichever represents the higher standard, in protecting the confidentiality of the Confidential Material.

4. I agree that any Confidential Material that I receive can only be used for purposes outlined in Section 2 above. Other uses can be made only after obtaining the written permission of FAST.

5. I agree not to remove, from Agency's property, any Confidential Material without first obtaining the written permission of FAST.

6. I agree that I will not disclose any Confidential Material, directly or indirectly, to any party other than the Agency without first obtaining the written permission of FAST.

7. I agree that all Confidential Material provided under the terms of this Agreement shall remain the property of FAST and shall be returned to FAST upon its request, including any and all copies I might produce.

8. Nothing herein shall be construed as giving me any license or right in connection with the Confidential Material disclosed to me.

9. My obligation to maintain information in confidence shall not extend to such portions of the information that, at the time of disclosure to me, are general knowledge in the public domain.

10. I understand that my obligation to protect the confidentiality of the Confidential Material extends beyond my involvement with the Agency and beyond my involvement with FAST. Furthermore, my obligation to protect the confidentiality of the Confidential Material is not subject to changes in my employment status.

11. I understand that access to the Confidential Material is provided on a need-to-know basis. If, for any reason, such need no longer exists, I agree that I will return all Confidential Material to FAST or the Agency, including any and all copies I may have produced.

12. I understand that Confidential Material is provided to me as-is and FAST makes no warranties with respect to Confidential Material.

13. If any term of this Agreement should be declared void or unenforceable, such declaration will have no effect on the remaining terms herein.

I HAVE READ THIS AGREEMENT CAREFULLY AND I UNDERSTAND AND ACCEPT THE OBLIGATIONS WHICH IT IMPOSES UPON ME WITHOUT RESERVATION. NO PROMISES OR REPRESENTATIONS HAVE BEEN MADE TO ME TO INDUCE ME TO SIGN THIS AGREEMENT. I SIGN THIS AGREEMENT VOLUNTARILY AND FREELY.

_____

Print name

_____

Signature

_____

Date

ATTACHMENT B

GenTax® MAINTENANCE AND SUPPORT SPECIFICATIONS

I. Maintenance Specifications

Maintenance applies to GenTax® software components. Maintenance does not apply to site-specific modules, configurations, network, databases, training or items that are covered under "Support Services" (described below). Maintenance includes the following elements:

1. Service Packs

Service packs are a packaged set of repaired defects, enhancements to existing Software and occasionally new Software components. Each service pack is provided with Documentation that identifies affected software components and classifies the service pack item as either:

- **Low impact** – Software component is backward compatible
- **Medium impact** – Software component is backward compatible; configuration or Documentation changes are required
- **High impact** – Software component requires either new database structures, data fixes, or recompilation of site-specific components; existing business processes may be impacted

Service packs are scheduled to be released on a quarterly basis but may be released more or less frequently as required. Service packs released during the term of this Agreement will be made available to the Agency. Implementation of service packs may be provided by FAST under Support Services.

2. Access to new and revised Documentation

New and revised Documentation including help files and configuration documents will be delivered to the Agency with the appropriate service packs and new versions.

3. Phone support

Phone support during the Ongoing Maintenance and Support Period is available from 8:00 AM – 5:00 EST Eastern Standard Time at the following number 1 (877) 275-3278 (1 (877) ASK-FAST). If Support Services are procured, on-site FAST support staff will serve as the initial contact point for all GenTax® questions and issues. Extended support hours can be provided by FAST under Support Services).

4. Upgrades

From time to time, FAST releases updated versions of GenTax®. These upgrades are driven by new industry standards, client recommendations, and new functionality derived by FAST developers. The latest closed version of GenTax® released during the term of this Agreement will be made available to the Agency. Implementation of upgrades may be provided by FAST under the Support Services.

5. Defect repair to GenTax® Core

Defects are submitted to the FAST Solution Center using the Solution Request Form. Solution Request Forms will be completed by the on-site FAST support staff, if any, and categorized by FAST as either:

- **Priority A** - the Software is not performing in accordance with FAST specifications and production or mission critical business operations are being impacted. No workaround is available.
- **Priority B** - the Software is not performing in accordance with FAST specifications but most business operations can be performed. A known workaround is available. The Agency is able to implement the workaround without severe interruption of the production process.
- **Priority C** - the Agency requires information or assistance on GenTax® capabilities, installation, and configuration or would like to request an enhancement. This includes cosmetic and Documentation issues that have little or no impact on production processes and productivity.

6. Core Response Expectations

The following response expectation table specifies the level of response that will be given to the Agency at each step of the process based on the priority. The table specifies the maximum anticipated amount of time to complete each step.

- **Step 1** – represents the acknowledgement of the defect and the beginning of the information gathering and trouble-shooting process.
- **Step 2** – represents the time frame in which a FAST Solution Center will actively address the issue and pursue a resolution thereof.

Priority	Step 1	Step 2
A	Next business day	Work will be started immediately upon receipt and will continue until resolved. Dedicated resources will be assigned to resolving the defect. Solution will usually be provided as a hot-fix with specific instructions. Solution will be incorporated into the next service pack and the hot-fix will no longer be required.
B	One week	Work will be started within two weeks and performed during normal business hours. Solution will be incorporated into the next service pack released after the solution has been completed.
C	Two weeks	Work will be started and performed subject to resource availability. Enhancement requests may or may not be adopted. If an enhancement request is not adopted the Agency will be informed. Low impact enhancement requests may be incorporated into the next service pack released after the solution has been completed. All other implemented enhancement requests will be incorporated into the next version of GenTax® released after the solution has been completed.

7. Escalation

During the term of this Agreement, the Agency will work with on-site FAST support staff, to the extent such personnel are available, to manage and resolve defects. The Agency, at its discretion, may escalate an issue to the Account Executive.

Note: If the FAST Solution Center cannot duplicate a defect in-house, then FAST Solution Center staff will need access to appropriate Agency environments.

II. Support Services

Support Services ensure that the Agency has immediate access to product experts. Support Services are provided by full time, on-site FAST representatives. Depending on the acquired Level of Maintenance and Support Services pursuant to the Contract, Support Services may include analysis and installation of Software updates. The number of FAST representatives working on-site will vary depending upon the number and complexity of Software updates that are required to keep the Agency current.

Depending on the acquired Level of Maintenance and Support Services pursuant to the Contract, Support Services may include:

- Defect evaluation and repair (defects not covered by Maintenance) including:
  - Site Code
  - Site Configuration
- GenTax® performance tuning
- Analysis and installation of GenTax® hot fixes, as required
- Analysis and installation of GenTax® service packs, as required
- Upgrade to the next closed version of GenTax®

Depending on the acquired Level of Maintenance and Support Services pursuant to the Contract, FAST Support Services may also include, but are not limited to, on call production support, prioritization and facilitation of solution requests, implementation of modifications and enhancements, coordinating with FAST Solution Centers, configuration assistance, application development, user and developer training, best practices recommendations, and consulting, all depending on the acquired Level of Maintenance and Support Services pursuant to the Contract.

ATTACHMENT C
MAINTENANCE AND SUPPORT PACKAGES

I. *GenTax® Maintenance*

The Agency can purchase a subscription to GenTax® Maintenance which, as described in detail in Attachment B, Section I, includes:

a. Access to service packs
b. Access to new versions of GenTax®
c. Access to new and revised Documentation
d. Phone support
e. Defect repair - We will fix GenTax® bugs at no cost to the Agency

II. *Combined Maintenance and Support Options*

Fast offers multiple levels of combined Maintenance and Support options. They are:

Level 1 - Annual product maintenance only as described above. No onsite services.
Level 2 - In addition to what is included in Level 1, this level provides onsite FAST personnel to ensure that defects in site code, extensions, and configurations (defects not covered by Maintenance) are resolved. In effect, this level provides a continuing warranty.
Level 3 - In addition to what is included in Levels 1 and 2, this level provides onsite FAST personnel to ensure that service packs, hot fixes and upgrades are installed.

Level 2 and Level 3 Maintenance and Support Services are subject to the Service Levels defined in Exhibit C to the Contract.

Level 3 Maintenance and Support Services ensures that the Agency will always run the latest version of our products. This is highly unusual in the industry. We know of no competitor in this market space that is prepared to make this kind of commitment.

III. *Time and Materials Support*

Some agencies also choose to retain additional FAST support staff on a time and materials basis to assist with tasks such as:

a. Prioritization and management of solution requests
b. On-call production support
c. Coordinating with the FAST Development Center
d. Configuration assistance
e. Application development
f. Best practices recommendations
g. Implementation of minor legislative/business changes (e.g., tax rates, interest rates, reports, letters, return line items, check-offs) to existing programs
h. Performance tuning
i. Database maintenance, analysis and review
j. Supplemental user, developer, or operator training
k. Other consulting and services requested by the Agency

FAST
ENTERPRISES

December 06, 2017

Lottie Hooyer
Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468
Indianapolis, Indiana 46204

Dear Ms. Hooyer,

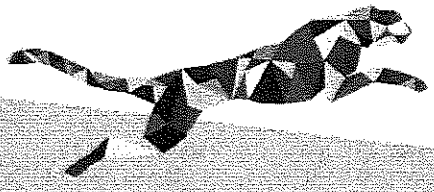
Fast Enterprises, LLC (FAST) is pleased to present our Best and Final Revised Proposal for RFP 17-082, Revenue Modernization Integrated Tax Systems and Services (RMITSS), issued by the State of Indiana.

FAST's Best and Final Revised Proposal is a complete submission and addresses items from clarification questions, additional requests previously submitted, the on-site demonstrations, and presentations. We have indicated all changes to our original submission with yellow highlighting.

Thank you for your consideration and the opportunity to update our initial offer. We look forward to working with the State of Indiana to successfully implement a modernized system through on-time and on-budget delivery of our integrated tax system, GenTax®.

Sincerely,

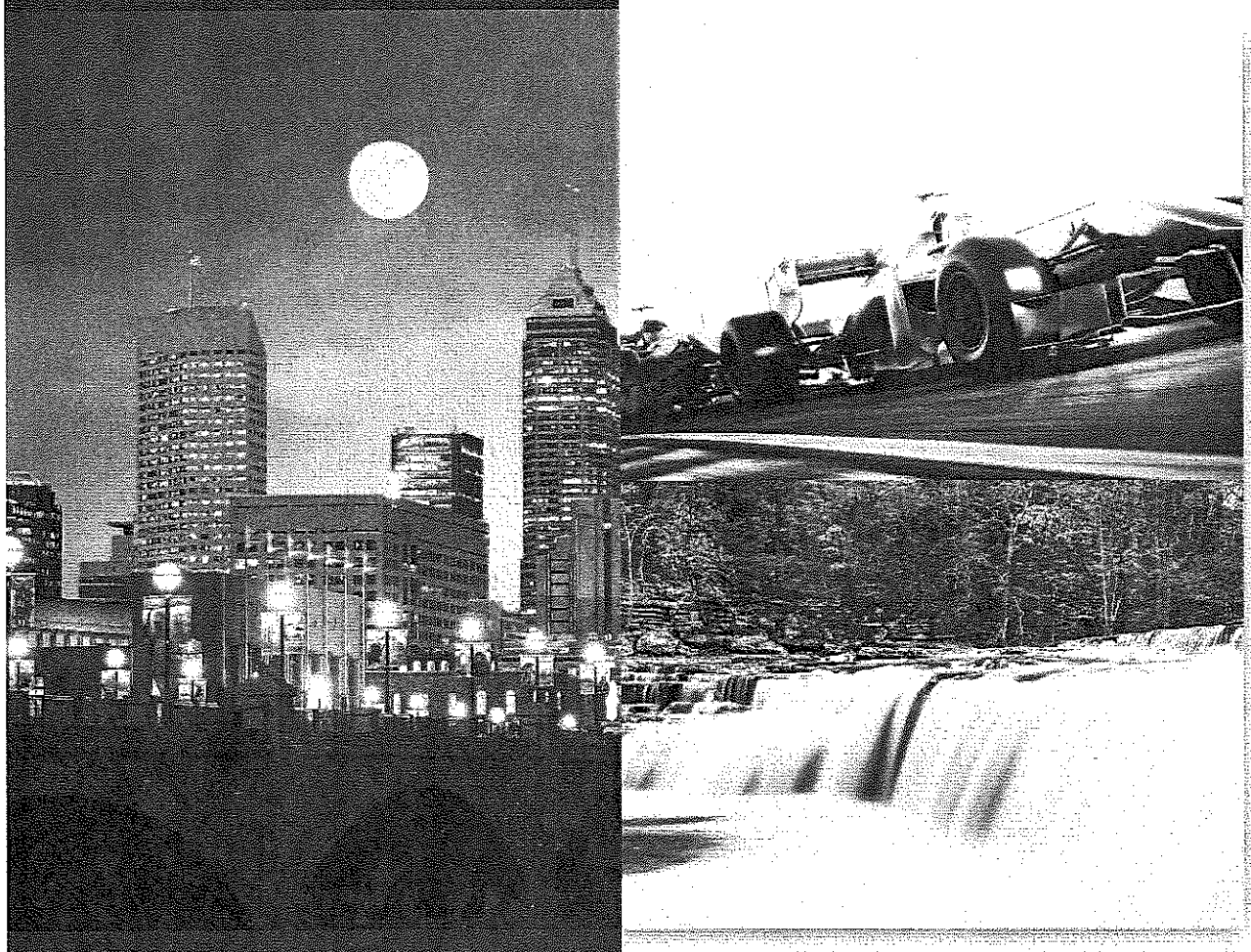
James Harrison
Partner - Fast Enterprises, LLC



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Centennial, CO 80112
Phone: 877.275.3278 | Fax: 208.433.9863
JHarrison@FastEnterprises.com
www.FastEnterprises.com

State of Indiana

Department of Administration
Department of Revenue



Submitted by:
James Harrison of Fast Enterprises, LLC
7229 S. Alton Way
Centennial, CO 80112
Toll Free: 877-275-3278
Fax: 303-773-4099
JHarrison@FastEnterprises.com

Response to RFP 17-082:
Revenue Modernization Integrated
Tax Systems and Services

Best and Final Revised Proposal

FAST ENTERPRISES

FAST
ENTERPRISES

December 06, 2017

Lottie Hooyer
Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468
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Dear Ms. Hooyer,

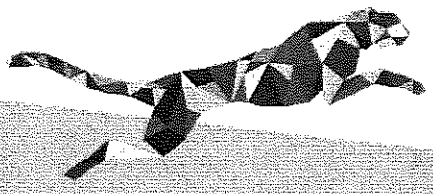
In accordance with Section 2.2.1, Fast Enterprises, LLC (FAST) explicitly acknowledges our understanding of the general information presented in Section 1. FAST agrees with the requirements and conditions listed in Section 1.

Except where Contractor has proposed exceptions to the State's terms and conditions for the RFP, the Respondent is willing to provide the requested products and/or services subject to the terms and conditions set forth in the RFP including, but not limited to, the State's mandatory contract clauses. FAST looks forward to discussing these proposed exceptions if invited to participate in contract negotiations.

Our proposed solution is based on GenTax®, our commercial off-the-shelf (COTS) tax administration solution that helps agencies improve service to taxpayers and other stakeholders, maximize revenues, and improve the efficiency of internal operations. GenTax consists of an integrated suite of modules that address the program administration needs of revenue departments. GenTax meets the needs of a modern tax agency by providing important capabilities in architecture, technology, functionality, and usability:

Architecture:

- A solution based on an open architecture and industry-standard technologies
- Highly scalable – GenTax supports large, complex taxes such as corporate and individual income tax as well as small, specialized taxes
- Comprehensive integration maximizes the ability to access consistent information in real time and seamlessly across multiple account types and business processes



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- Configurability to facilitate efficient support of business processes and rules
- Flexibility to interface with a wide range of other software applications

Technology:

- Robust software that has been proven and refined through more than fifteen years of production processing and use by tens of thousands of agency staff
- Ability to stay abreast of technological change and consistently improve system capability
- Support for Service Oriented Architecture (SOA) through web services and external interfaces based on industry standards
- A complete audit trail for data retrieval and update
- Strong security that has been tested by an independent third-party security firm

Functionality:

- True integration – GenTax supports multiple taxes and functions, including registration, return and payment processing, billing, collections, refunds, audits, revenue accounting, and more
- A rich set of functions that reduces the need for many of the third-party applications associated with most legacy systems and framework solutions
- Ability to generate accurate, systematic tax bills
- Highly automated, flexible correspondence tools that facilitate a wide range of communication between the agency and its customers
- Easy-to-use workflow, imaging, and document management functions
- Collections functionality that automates garnishments, levies, payment plans, and other key elements of a collection process
- Audit management tools to facilitate taxpayer audits
- A Data Warehouse and associated fraud-detection functionality, with significant capability to conduct cross-matches and other operations that enhance program integrity

Usability:

- State of the art, web-based functionality for the public and for agency staff
- A user-friendly interface that does not require technical expertise or knowledge in specialized applications
- Continual product upgrades – new versions of GenTax enable agencies to keep up with changes in technology, and to benefit from functionality that is constantly improving.

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GenTax is currently in version 10. Almost every GenTax client has implemented at least one version upgrade.

In accordance with Section 2.2.2, FAST is willing to provide a modernized integrated tax system and services subject to the terms and conditions set forth in the RFP.

James G. Harrison, member of Fast Enterprises, LLC, is authorized to commit FAST to our representations and can certify that the information offered in our proposal meets all general conditions. His contact details can be found in the footer of this letter.

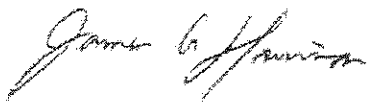
In accordance with Section 2.2.5, please see table below for a listing of all documents for which we are marking as confidential.

Document	Exception	Description
B.3.a.16-17	I.C. 5-14-3-4(a)(4)	Screenshots of proprietary GenTax user interface. Meets definition of trade secret in I.C. 24-2-3-2
B.3.d.27-28	I.C. 5-14-3-4(a)(4)	Screenshots of proprietary GenTax user interface. Meets definition of trade secret in I.C. 24-2-3-2
B.3.j.4-5	I.C. 5-14-3-4(a)(4)	Details related to the functionality of FAST's proprietary Snapshots tool. Meets definition of trade secret in I.C. 24-2-3-2
B.3.k.2-7	I.C. 5-14-3-4(a)(4)	Details related to the functionality of FAST's proprietary project management and development tools. Meets definition of trade secret in I.C. 24-2-3-2
D.2.2-6	I.C. 5-14-3-4(a)(4)	Detailed project schedule showing how FAST plans and executes successful projects. Meets definition of trade secret in I.C. 24-2-3-2
G.2	I.C. 5-14-3-4(a)(4)	Detailed explanation of the full capabilities and functionality of

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		GenTax. Meets definition of trade secret in I.C. 24-2-3-2
G.3	I.C. 5-14-3-4(a)(4)	Sample Plans showing FAST's unique approaches to implementing projects for other clients, and screenshots of FAST's proprietary user interface. Meets definition of trade secret in I.C. 24-2-3-2
A.1.b.a, b	I.C. 5-14-3-4(a)(5)	FAST is a privately-held company that protects the privacy and confidentiality of its financial statements

Sincerely,



James Harrison
Partner - Fast Enterprises, LLC

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JHarrison@FastEnterprises.com
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EXECUTIVE SUMMARY

Please note that updates to the original submission are identified in yellow highlight.

Fast Enterprises, LLC (FAST) is pleased to present this response to the State of Indiana's Request for Proposal (RFP) 17-082, Revenue Modernization Integrated Tax Systems and Services (RMITSS). We propose implementation of our GenTax® software, the first commercial off-the-shelf (COTS) software for tax and revenue administration, to meet the State's functional, technical, and project-related requirements articulated in the RFP.

GenTax is the most widely used COTS software designed specifically for tax administration. Out of the box, GenTax provides complete functionality for all aspects of tax and revenue administration.

FAST is a leader in tax modernization solutions—over half of U.S. state tax and revenue agencies are in production with, or are implementing, GenTax. GenTax first entered production for the Ministry of Finance of the Province of British Columbia, Canada in 1999 and is now in production for over 40 tax and revenue agencies comprising more than 26 U.S. states and territories, seven local U.S. jurisdictions, three Canadian provinces, and seven national goverments.

With an extensive list of projects and clients, FAST has the expertise and experience to successfully deliver a modernized integrated tax system for the Indiana Department of Revenue (DOR). Our experience in implementing GenTax for the administration of tax programs similar to those managed by DOR is unparalleled.

FAST has a distinct understanding of the challenges that agencies face during implementation of a modernized tax system. To overcome these challenges, we rely on our experienced project personnel, our expertise and best practices gained from multiple integrated tax projects, our flexible software architecture, and our proven FAST Implementation Methodology to engage our client agencies and their personnel in successful project delivery.

GenTax is in production with full tax processing for hundreds of tax programs, including programs similar to those administered by DOR:

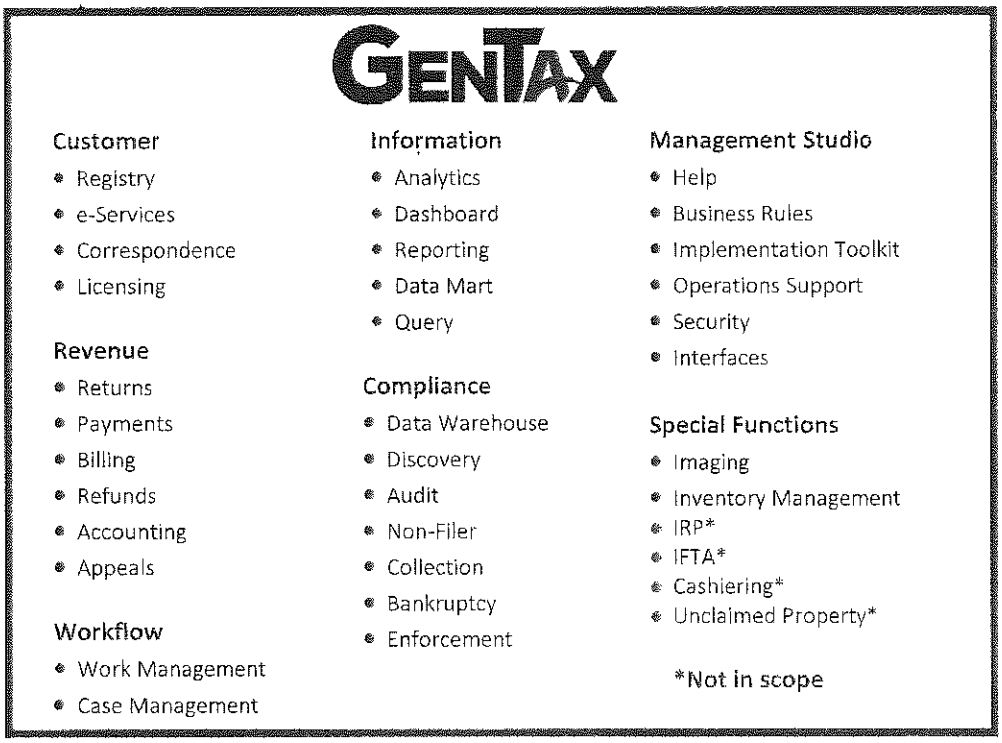
- *Individual income tax at 21 agencies*
- *Corporate tax at 23 agencies*
- *Sales and/or Use at 21 agencies*
- *Alcohol tax at 15 agencies*
- *Gaming tax at 13 agencies*
- *Severance tax at 11 agencies*
- *Tourism tax at 13 agencies*

GenTax – The Production-Proven COTS Solution

Our approach is based on implementing GenTax, our COTS software developed specifically for the administration of tax, revenue, and license programs. We are the software developer, system integrator, consulting-services provider, and product-support vendor for every GenTax implementation project. Our software is browser-based and platform-independent and supports service-oriented architecture. GenTax operates on industry standard hardware, operating systems, and relational database management systems. It is based on a core system architecture that is configured to provide agencies with the options, settings, and functions necessary for effective and efficient administration of their public programs. Our software helps agencies enhance customer service, reduce costs, improve the efficiency of internal operations, and maximize return on investment.

We believe DOR will realize the greatest benefit by selecting a true, integrated COTS tax solution that is successfully in production for multiple tax and revenue agencies. GenTax provides agencies with a comprehensive solution for tax and revenue administration, including revenue accounting, data analytics, document management, collection, audit, correspondence, customer relationship management, business rules management, workflow and case management, reporting, e-Services, and more. As shown below, GenTax consists of seven **modules** and **subsystems** that are configured—not programmed—to meet the specific business and technical objectives of tax and revenue agencies. Extensions to the core solution can also be implemented to meet unique program requirements.

GenTax Consists of Seven Fully Integrated Modules and Subsystems



GenTax consists of seven integrated modules and constituent subsystems that are configured—not programmed—to meet the specific business and technical objectives of revenue agencies. Please note that the IRP, IFTA, Cashiering, and Unclaimed Property subsystems are not in scope.

GenTax provides all the functionality for core business functions and support processes, as well as built-in tools used to manage software implementation and support. Alternative vendor offerings based on multiple, peripherally integrated, third-party applications can unnecessarily increase system complexity, maintenance and support burden, interface development, upgrade and training requirements, and overall system cost. Aside from a handful of ancillary support applications for special purposes, there are few additional applications necessary for implementing, operating and maintaining GenTax.

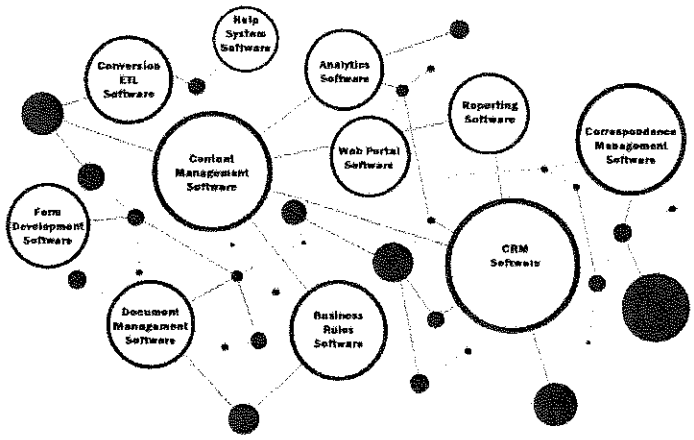
The primary third-party applications used for implementing and maintaining GenTax include Windows Server software for infrastructure management, Microsoft Visual Studio Professional software for the development of site-specific code, and VMWare's virtualization hypervisor for server virtualization (Microsoft Hyper-V is also supported).

Although not required for implementing and maintaining GenTax, many of our projects also use Adobe Captivate for the creation of training materials and interactive simulations and Red Gate Software's ANTS Profiler Professional for system-performance monitoring.

COTS GenTax Architecture versus Peripherally Interfaced ("Best of Breed") System Architectures

GenTax is a single, unified COTS software solution that provides inherent functionality for all core administration functions.

Many alternative systems consist of a collection of third-party applications that have been peripherally interfaced to meet multiple core administration functions.



A Mature and Proven Platform for Achieving Your Goals

We understand that the government and citizens of Indiana have a stake in the success of this project, and that achieving project success is predicated on meeting the functional, technical, and managment requirements and goals outlined in the RMITSS RFP. By selecting FAST to implement GenTax, DOR will enter into a partnership that has proven successful in helping multiple government agencies to overcome comparable challenges and accomplish similar goals. Specifically, GenTax will provide DOR with the ability to support the following agency strategic objectives and goals.

Improve Tax Payer Services

- *Flexible (any time and touchpoint)* – Web services are fully integrated with our GenTax solution through our application's public-facing e-Services subsystem. This subsystem, which is currently used for managing millions of online customer accounts, enhances customer service through an intelligent user interface, an integrated help system, and an intuitive design that promotes ease of use by customers and their agents. Customers have secure 24x7 access to relevant account information and the system minimizes errors by alerting customers to inconsistent or erroneous

entries. For ease of use and reference, online forms can have the same layout and design as paper forms.

As an example of the benefits that can be achieved, implementation of GenTax and an associated web portal functionality for Jamaica's tax agency significantly increased the country's electronic filing rates. The agency realized a 54% increase in corporate income tax filings, a 40% increase in personal income tax filings, a 48% increase in special consumption tax filings, and a 25% increase in general consumption tax filings. In addition, the agency reported that it surpassed revenue collection targets in its first six quarters following implementation of GenTax (the first time this had happened in more than a decade).

- *Consistent (quality and on time)* – Customers can view and search account summaries, transaction lists, documentation, correspondence, and more. Account profile information, such as addresses and payment methods, can be reviewed and modified, and customers can view the status of accounts, such as tax status, outstanding fees, and posted payments. Activities that require immediate attention are shown separately for quick identification and access. PDF versions of account-related documents and correspondence are stored in customers' accounts and can be printed and saved locally by a customer. Read receipt options allows customers to quickly identify newly available correspondence. The length of time that documents and correspondence are retained in customers' online accounts is configurable based on agency preferences and policies.

  Configurable correspondence types allow customers to submit electronic inquiries and requests and to receive an electronic confirmation number that functions as a submission receipt and reference for retrieving previous correspondence. Correspondence and other customer requests can be configured for real-time or batch processing. In processing a customer request, GenTax may generate action items, workflow, or correspondence based on agency criteria and the type of customer request.

  Authorized agency personnel can also access e-Services screens and accounts simultaneously with the customer, allowing them to provide real-time customer service, guidance, or explanation of account details during telephone support or through e-mail response. The GenTax Snapshots function allows authorized agency users to access and remotely view customers' live online account sessions. This allows agency representatives to provide immediate instruction and advice to customers as they input data and make adjustments to their online accounts. Rather than requiring customers to describe what they see on screen, agency users view an exact rendering of customers' account screens, including real-time data

entry and error messages. This live, online account support provides a level of customer service that surpasses voice-only services and more closely resembles desk-side support for customers.

- *Empowering (fast, functional, and easy)* – Our proposed solution will enable DOR's customers to conduct online self-services with speed and clarity. GenTax and associated online customer accounts are accessible by any mobile device (including laptops, tablets, and smartphones) using a web browser and the software supports access by remote, stationary, customer-service devices such as kiosks and self-service terminals at district offices.

  The web-based customer self-service features in GenTax provide account holders with an online access point for reviewing and updating permanent records, offer customers convenient means for conducting transactions, and present the agency with numerous options for contacting and communicating with customers through electronic media. These online account features support the increased operational efficiency of agency personnel by minimizing or eliminating labor-intensive data capture that is instead completed by customers through their online accounts.

  GenTax also allows agency personnel to focus more time on assisting customers and less time on routine tasks that are instead automated by our solution. GenTax also supports agencies' configuration of their electronic services to meet distinct business requirements and service delivery goals. This includes options for electronically corresponding with customers, offering multiple online payment options, filing tax returns, applying for licenses, and providing customer support through technology-based channels.

Close Internal Control Gaps

- *Tax Code Awareness (time for training)* – GenTax screens are highly interactive and intuitive, meaning users know what to do when they see the screen and can focus on the task at hand, rather than being consumed with memorizing outdated alphanumeric key commands to execute system functions. Built-in help features and dynamic tip text can be configured in GenTax to provide users with integrated online guides, instructions, and resources that reinforce training and support agency policies and tax rules. These options can decrease learning time and increase awareness of agencies' tax policies so new users can quickly adapt to the new application.

- *Process Driven Accuracy (automated vs. manual)* – GenTax automation will reduce or eliminate the time and effort that agency personnel devote to conducting manual processes, maintaining

paper and hardcopy filing systems, generating routine correspondence, reconciling data, and other activities in legacy systems. GenTax allows agency personnel to provide the public with accurate and real-time information to address specific customer issues. Web-based self-service features also allow customers and their authorized agents to access to their accounts at any time, to file returns and make payments, to view and download past correspondence, and to answer many account-related questions without the need to call or visit an agency office.

Our focus is to deliver increased organizational capacity to our agency clients. Agency staff will experience improved efficiencies and productivity through use of GenTax. Their confidence in efficiently and accurately answering customer inquiries and requests will improve due to a much higher level of access to accurate and integrated account data. In addition, GenTax helps to improve employee morale by freeing many employees to focus less on mundane manual tasks and more on important, results-driven tasks, such as research and analysis, fraud identification, and the pursuit of non-compliant individuals and businesses. In addition, IT staff will benefit through elimination of aging and disparate technologies. GenTax operates on industry standard hardware, operating systems, and relational database management systems that are familiar to most IT personnel.

- *Integrated Solutions (eliminate duplicative work)* – GenTax increases operational productivity through true integration across virtually the entire spectrum of an agency's tax and revenue business. Additional examples of the benefits derived from GenTax include:
    - A single GenTax logon eliminating the need to log into multiple systems to retrive information
    - increases in revenue brought on by our solution's Compliance module
    - reduced exposure to internal and external fraud
    - improvements in customer service and employee confidence and morale
    - real-time access to statistics for performance and operations analytics
    - enhanced responsiveness to legislative changes and stakeholder requests
    - reduced need and use of paper documentation
    - new system automations and electronic self-service features
    - redeployment of personnel to higher-value activities through the elimination of redundant user tasks found in legacy systems
    - overall improvements to agency operations
    - simplified workflow and elimination of many manual processes associated with legacy systems

Minimize Risks to Operations

- *Efficient to Maintain (modern technology)* – GenTax is designed to maximize agency return on investment through an accessible, scalable, flexible, and maintainable framework. It is accessible on any computer, tablet, or smartphone using a modern web browser, and the scalable architecture is designed to accommodate long-term agency growth requirements. Our client sites have thousands of interfaces in production through our solution's support for service-oriented architecture and extensible site-specific components. GenTax also includes integrated tools to establish, test, implement, and maintain business rules. User tools provide agency personnel with the ability to change and manage security settings, letter content, tax rates, interest rates, penalty amounts, and more. All our projects include knowledge transfer activities to help ensure that agency business and IT staff are able to maintain rules on an ongoing basis.

- *Easy to Enhance (configurable and integrated)* – GenTax is based on a core system architecture that is configured to provide agencies with the options, settings, and functions necessary for effective and efficient administration of their public programs. The Business Rules Engine (BRE) processes business rules that determine how GenTax appears and behaves for a specific agency. The BRE is used for processing business rules that pertain to virtually all aspects of GenTax, including the user interface and access to almost all system functions. Changes to an agency's implementation of GenTax are generally accomplished by adding or adjusting business rules. The Business Rules Engine provides the option for separate "condition" and "rule" evaluations, with the rule evaluations being dependent upon the condition being met. Therefore, any number of conditions may be configured/evaluated for a calculation rule. When the condition evaluates to true, the rule(s) specific to that condition will be evaluated as well. Configuration of the conditions are optional. Therefore, rules configured without conditions, will be automatically evaluated within the business rules engine.

  GenTax is a single, unified COTS software solution that provides inherent functionality for all core administration functions. The integrated core functions allow customer, revenue, correspondence, reporting, analytics, workflow, compliance and tools to provide a seamless experience to internal users and customers. For example, warehouse data is integrated with GenTax customer functionality, allowing authorized users to view customer information directly on a customer screen in GenTax. Additional examples include the Imaging subsystem that provides integrated functions for managing image files that are input in GenTax through an agency's third-party scanning and imaging systems. Images can be indexed by customer, account, period, return, payment, collection case, audit, registration, and appeals.

As a fully integrated software solution, GenTax contains tools used to establish, test, implement, and maintain a wide range of functional features within the proposed solution. Tools to manage system operation, and monitor performance-related data that is helpful for troubleshooting and reporting, are are also included in GenTax.

- *Secure (integrated systems)* – GenTax is compliant with federal, state, and jurisdiction-specific legal and technical policies, regulations, laws, and requirements for each of our existing clients. Our solution will comply with applicable regulations required by the State, DOR, and the federal government. GenTax complies with numerous security and compliance standards, including U.S. National Institute of Standards and Technology (NIST) Special Publication 800-53 r4 and U.S. Internal Revenue Service Publication 1075, as applicable to web-based COTS software.

Improve Collections & Revenue Protection

- *Modern Compliance Support (voluntary & data driven)* – Each agency in production with GenTax has improved compliance and collections through use of our software. The Illinois Department of Revenue directly attributes the increased collection of $350 million to the agency's use of GenTax for the three-year period from 2008-2011. Idaho State Tax Commission estimates that it has increased collections by more than $215 million over 10 years through its use of GenTax. Montana Department of Revenue's account-receivable collection revenues increased $17 million, or 41%, in the two years following the agency's first production use of GenTax. New Mexico Taxation and Revenue Department also increased delinquent tax collections through its use of GenTax by collecting an additional $50 million in the first 17 months of production.

  As a means of improving collections, we implement proven discovery programs and analyze and enhance agencies' existing discovery and compliance initiatives. The GenTax Data Warehouse and Discovery subsystems, in production for dozens of tax and revenue agencies, will support comprehensive analytics, audits, and compliance programs for DOR. Our solution supports collection case scoring, assignment, and treatment strategies; involuntary collection actions, including bank levies, wage levies, and holds on professional and occupational licenses; out-of-the-box audit-selection programs and fraud identification functions; and continuation audits, industry audits, random audits, and more.

  GenTax will also provide DOR with timely and accurate information used to report year-to-date collections, develop revenue projections, identify and track economic indicators, and review historical data. This information can be used to spot potential challenges, risks, and

opportunities and to better inform and educate Indiana's government entities, public officials, and additional stakeholders in areas such as current trends in revenue and tax administration.

- *Taxpayer Equality (fair and enforceable)* – GenTax is compliant with Generally Accepted Accounting Principles (GAAP) and provides numerous checks and balances to ensure the accuracy of financial transactions and reports. It is in production for multiple revenue agencies that use the solution to manage millions of active customer accounts. The system will provide DOR with the ability to accurately and consistently access and report on data, trends, and projections across all product types and functions; to display data in multiple formats; and to share reports through a variety of mediums and formats.

- *Efficient Policy Support (fast and efficient)* – GenTax has been modeled on, and is designed to incorporate, revenue agency best practices. While the software can be configured to accommodate agency-specific processes and policies, we also recommend best-practice procedures during the project's design and configuration phases. This enables business process reengineering to be reviewed in the context of the new system. GenTax also supports jurisdiction-specific configuration of customer registration, collection, case management, returns processing, correspondence, security, payment transactions, audit, bankruptcy, liens, garnishments, workflow management, and more.

  The GenTax Dashboard subsystem allows users to view information at a glance, see historical trends in data, and highlight areas of concern to perform analysis for additional process improvements. Users can configure areas to be analyzed and statistical information is displayed in summary form. Each item can then be analyzed further by choosing to view the history, target, detail, or relevant data cube. With a data cube, users can analyze and share data through an interactive and visual presentation of information. The Dashboard supports a variety of graphical displays, including pie charts, line and stacked-line charts, and bar charts. This provides users with a highly interactive and intuitive tool to view and analyze data, and will provide DOR management with key statistics on items such as total accounts receivable, work item backlogs, and other key performance indicators.

  GenTax also allows users to create, run, refine, and store predictive models. It provides a user friendly interface for compiling and organizing large sets of current and historical data for use in creating models. This integrated functionality provides trained statisticians with advanced modelling options, yet it is designed to allow users who do not have a background in statistics or mathematics to identify and predict trends, risks, and opportunities. Once built, models can be

deployed throughout GenTax to provide practical modeling results. Managers can incorporate result data into organizational planning and executive decision-making activities, communications campaigns, fraud initiatives, and more.

Models can be integrated within the GenTax Data Warehouse, Discovery, Collection, Non-Filer, Returns, Audit, and other subsystems to improve the effectiveness of business processes through a number of activities, including:

- Incorporating predictive models into new or existing audit-selection programs tailored for specific tax types, industry classifications, estimated recoverability, and other program criteria.
- Identifying fraudulent refunds by leveraging and improving existing fraud rules, return data, wage data, and other information.
- Evaluating effectiveness of return suspension rules to reduce workloads and error rates.
- Analyzing customer services, workflow, correspondence, and other business processes to develop and prepare customer-education campaigns.

Improve Internal Efficiency

- *Process Modernization (continuous improvement)* – Our experience on multiple integrated tax projects has shown that approximately 80% to 90% of an agency's tax administration functions can be implemented in GenTax through configuration. Virtually every aspect of GenTax is configurable—from small items such as tax rate changes, to more complicated activities such as implementation of a new case to support a multi-step business process. Code sets, calculations, lookups, edits, validations, user interface, window flows, and security structures are examples of features that can be implemented and maintained without programming. Changes to simple items such as rate changes for tax and penalty and interest calculations can be accomplished in a matter of minutes, as can changing the appearance of text, labels, and other screen elements in GenTax. Agency personnel at many FAST project sites are involved in configuring GenTax to accommodate policy changes, which can be implemented in a fraction of the time required under our clients' legacy systems. Please see D.1. Attachment G1 – Implementation Approach for additional details on items typically related to custom code.

  Our clients who administer an individual income tax often revise their processing procedures on an annual basis to accommodate changes to deductions and corresponding tax forms. Such changes are not challenging and often involve a moderate to high level of configuration and testing that can be accomplished by one to two individuals in a matter of weeks. The challenges faced by our agency clients in accommodating these changes are typically caused by factors that

are external to GenTax (such as late decisions by politicians that result in delayed form redesign and hold-ups in printing new tax booklets).

- *Data Driven Decisions (data analytics & metrics)* – Agency managers and executives will have access to data and reports that provide accurate information across all product types and internal business units, including real-time performance and operations statistics. GenTax also provides agency leadership with analytics tools for quick access to high-value information that supports strategic planning, data-driven decision making, staff work performance, and executive reports.

  Much of the information contained in traditional reports is available real-time in GenTax through online lists, searches, and data displays that can be viewed, exported, and printed. The GenTax Reporting subsystem will provide DOR with a means for quickly and precisely addressing specific reporting requirements and accessing and compiling information for performance measurement, agency analysis, and planning activities. These integrated reporting capabilities will allow DOR to implement, manage, and execute preprogrammed reports and ad hoc queries, or to configure reports that meet the agency's unique reporting needs. Reports can be implemented according to DOR's formatting standards and can be generated manually or automatically according to predefined schedules.

- *Technology Consideration (streamlined architecture)* – GenTax will allow DOR to work with other agencies to optimize interaction across government. GenTax uses a single, integrated, database server and provides a consistent user interface across all product types and functions. The system is adaptable to meet the specific requirements of (and enforce appropriate security restrictions for) partner agencies, which have access to a consolidated and up-to-date view of customers across all functional aspects of the solution. GenTax users access, update, share, and report on data across multiple business functions in real time. Updates to customer accounts and other types of data are immediately visible to all users and agencies authorized to view the information. This means that authorized partner agencies have access to the same real-time information and system updates as the agency.

Our Proven Methodology

Our response is based on using the FAST Implementation Methodology, which was designed for the implementation of our COTS software. This methodology has been used to implement over 300 production rollouts successfully for our client agencies' projects. The methodology will guide the activities and deliverables necessary to deliver GenTax for DOR. It relies heavily on working in

collaborative partnership with an agency's business and technical professionals and provides an implementation roadmap to guide the project teams to success. The methodology also provides a common framework, examples of work products, and a repository of best practices and lessons learned.

While GenTax has replaced many legacy systems, our software has never been replaced. Every FAST client since our first implementation in 1999 is a client to this day.

The FAST Implementation Methodology is highly iterative. The methodology leverages the configurability in GenTax to implement agency-specific functions and processes that are necessary to serve stakeholders efficiently and effectively. The base configuration of GenTax core functions is installed within the first weeks after project initiation. Through configuration, these core functions are tailored to meet agencies' specific requirements, providing full GenTax functionality upon production rollout. This approach provides agency project staff, business users, and IT personnel with the ability to work with GenTax within weeks of project initiation and throughout the implementation project, which greatly enhances training and knowledge transfer. It also minimizes development time and allows project personnel to focus on tailoring business processes to provide the most usable and efficient system for customers and agency staff.

Our Record of Project Success

GenTax is in production for more than 40 government agencies around the world. Since our company's inception, we have always completed our integrated tax software projects on time and on budget. This performance stands in stark contrast to the record of delays, cost overruns, and outright failures that have characterized many IT modernization projects. The experience, best practices, and product enhancements gained from our prior software projects will be incorporated in your project to deliver DOR's modernized tax solution within our proposed implementation schedule.

As the preeminent provider of COTS integrated tax software, our record of success is unmatched in the industry. GenTax is used for the administration of individual income tax, corporate income tax, sales tax, and withholding tax programs in more states than any other solution.

GenTax Implementations by State Agency and Major Tax Type

	Alabama	Alaska	Arkansas	Colorado	District of Columbia	Georgia	Hawaii	Idaho	Illinois	Louisiana	Massachusetts	Minnesota	Mississippi	Montana	New Mexico	North Dakota	Oklahoma	Oregon	Puerto Rico	South Carolina	Tennessee	Utah	Vermont	Washington	West Virginia	Wisconsin
Individual Income	✓	N	✓	✓	✓	✓	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	F	✓	I	✓	✓	N	✓	✓
Corporate Income	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	F	✓	F	✓	✓	N	✓	✓
Sales	✓	N	✓	✓	F	✓	N	✓	✓	✓	✓	✓	✓	N	✓	✓	✓	N	✓	✓	✓	✓	✓	✓	✓	✓
Withholding	✓	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	F	✓	N	✓	✓	N	✓	✓

F = Future Implementation, I = In Progress, N = Not Applicable

Following are some of the critical factors that have led to successful delivery of all our integrated tax projects.

- Our sophisticated, robust, and highly configurable software, which is in production for government agencies that serve jurisdictions with a combined population of close to 300 million.
- Our proven implementation methodology, which engages our clients in the implementation process so that they actively define the business rules and processes that best meet their objectives.
- Our iterative approach to testing and data conversion, which has been used to complete hundreds of project rollouts and to convert millions of records from a wide variety of legacy applications and technology platforms.
- Our highly experienced and qualified project professionals, who move to our clients' communities to work side-by-side with agency personnel during our software implementation projects.

Our experience has shown that approximately 80% to 90% of an agency's tax administration functions can be configured in GenTax, with no need for custom programming.

The implementation of enterprise-level IT systems is a dynamic process that is best served by flexibility and adaptability. We understand that some requirements will inevitably change during the course of a project. We address changes to in-scope requirements through a collaborative working relationship with our agency partners. Our focus is on configuring GenTax to provide our clients with a state-of-the-art solution, not on

haggling about scope, price, requirements, and schedule. Our objective on this project, as on all our projects, is to complete the project on time and within the proposed price. We know what it takes to deliver a modern integrated tax system and this knowledge is reflected in in our schedule, our fixed-price cost, and our willingness to accommodate changes to requirements as the project unfolds.

Converting from Legacy Systems

We have successfully converted over 175 million accounts from legacy systems on our implementation projects for more than 50 client agencies. More specifically, FAST has successfully converted from legacy mainframe systems similar to those in use by Indiana DOR in the following states:

- Massachusetts Department of Revenue
- Departamento de Hacienda de Puerto Rico
- Tennessee Department of Revenue
- Georgia Department of Revenue
- California Employment Development Department
- Arizona Department of Revenue (tobacco taxes only)
- Washington D.C.
- City of New York, New York
- City of Kansas City, Missouri
- South Carolina Department of Revenue

The following table highlights some of the legacy systems from which FAST has successfully converted data for our state client agencies.

Legacy System Conversions – State Agency Implementation Projects
AMS Advantage Revenue mainframe system
Mississippi Department of Revenue (DOR) • Vermont DOR* • Wisconsin DOR
Andersen Consulting mainframe system (Tax Administration System – TAS)
California Employment Development Department • Georgia DOR
Massachusetts DOR* • South Carolina DOR*
CGI CACS-G Collection System
Minnesota DOR • Utah State Tax Commission
Other vendor-implemented mainframe systems (including IBM) or custom-built systems
Arkansas Department of Finance & Administration • Colorado DOR
Idaho State Tax Commission • Illinois DOR • Louisiana DOR
Michigan Unemployment Insurance Agency • Minnesota DOR
Montana DOR • Montana Department of Labor & Industry
New Mexico Tax & Revenue Department
North Dakota Office of State Tax Commissioner • Oregon DOR*
Tennessee Department of Safety & Homeland Security • Utah State Tax Commission
Washington Employment Security Department • West Virginia DOR
Illinois Department of Employment Security*
Oracle-based systems
Oklahoma Tax Commission • Vermont DOR*
SAIC mainframe system
Alabama DOR
Sybase PowerBuilder applications
Alaska DOR

**Indicates a state agency that is currently involved in an ongoing FAST software implementation project.*

Project Schedule

FAST has created a preliminary schedule for the project, which is divided into the key project milestones by tax types. We are proposing a 47-month implementation of GenTax through four rollouts. We believe this approach, as outlined in the following tables, decreases risk, leverages DOR's current priorities, and provides DOR with a consistent and manageable workload.

Each rollout will include the full spectrum of relevant in-scope GenTax functionality for full tax administration processing. This approach minimizes data-synchronization risks, is less disruptive to external business partners and internal operations, and ensures consistent customer service across the organization. It is important to note that the GenTax installation will be completed within the first weeks of project initiation, allowing project personnel to begin working with GenTax immediately.

Proposed Project Schedule Indiana Revenue Modernization Integrated Tax Systems and Services

Key Project Milestone	Start Date	Completion Date	Duration
Project Start	January 8, 2018		
GenTax Installation	January 8, 2018	February 2, 2018	1 month
Project Rollout 1 Corporate	January 8, 2018	December 10, 2018	11 months
Project Rollout 2 Sales, Withholding	December 10, 2018	December 2, 2019	12 months
Project Rollout 3 Income, Fiduciary	December 2, 2019	December 7, 2020	12 months
Project Rollout 4 Special Tax Types	December 7, 2020	December 6, 2021	12 months
Maintenance & Support	December 6, 2021	December 5, 2031	10 years

Our proposed project schedule by tax-type groupings is included in the following table. Please note that the proposed tax-type groupings can be adjusted to accommodate DOR needs and preferences.

Proposed Tax Types by Rollouts

Rollout 1	
• Aeronautics Excise, Business	• Corporate Income
• Aeronautics Excise, Individual	• Employment Agency
• Aeronautics Registration	• Financial Institutions
Rollout 2	
• Consumer Use	• PPD Sales On Gas. Repeal '14
• Controlled Substance	• Sales
• County Admissions	• Tire Fee
• County Innkeeper	• Utility Receipt Tax
• Firework Public Safety Fee	• Utility Services Use Tax
• Food & Beverage	• Wireless Prepaid Cards
• Indianapolis Motor Speedway	• Withholding
• Out of State Use	
Rollout 3	
• Fiduciary	• Racino Fees
• Gaming Excise Tax	• Racino Wagering

• Individual Income	• Riverboat Admissions
• Inheritance Repealed '13	• Riverboat Wagering
• Pari-Mutuel Admissions	• Supplemental Wagering Tax (eff '18)
• Pari-Mutuel Wagering	• Type II Gaming Tax
Rollout 4	
• Alcohol Tax	• Other Tobacco Products
• Alternative Fuel User	• Oversize/overweight MH
• Aviation Fuel Tax	• Petroleum Severance
• Cigarette	• Rail; Commuter or Electric
• Diesel Inventory Tax (eff'17)	• Special Fuel
• Gasoline Use Tax	• Terminal Operator
• Motor Fuel	• Transporter
• Motor Vehicle Rental Excise	

FAST's Project Team

Our proposed project team is comprised of personnel experienced in implementing our software. We are confident that our team will provide the DOR with the experience and commitment necessary to deliver the solution on time and within the proposed budget.

Our proposed project manager, Myles Larson, has served as the FAST project manager for South Carolina Department of Revenue's GenTax implementation project. In this role, he has led the implementation of GenTax for the administration of 50 tax types, including sales tax, corporate income tax, withholding tax, and individual income tax. As project manager he has also overseen the conversion of millions of records from South Carolina's legacy mainframe system (TAS), which GenTax has replaced.

Collectively, our proposed key personnel have 50 years of experience in implementing our software for government agencies. We are confident that they will provide the experience and expertise necessary to partner with DOR to deliver project success. Detailed resumes for these key personnel are contained in Attachment F3 Project Experience.

As with all our projects, we will structure the RMITSS project based on a cooperative implementation approach. As such, FAST personnel assigned full-time to the project will live in the Indianapolis area during their time on the project. We consider this commitment to move to our clients' sites to be one of the key success factors of our projects. Co-location provides an exceptional opportunity to create an open book culture of teamwork and cooperation within the project team. This arrangement also facilitates over-the-shoulder reviews and provides an opportunity to openly discuss issues and resolve problems as they arise. A collaborative attitude facilitates early mutual agreement and open discussions during the course of the project.

FAST project personnel will live the Indianapolis area during their time on the project. We consider this commitment to move to our clients' sites to be one of the key success factors of our projects.

A Solution for the Future

We understand the importance of providing the DOR with a modern and effective software solution. The rate of change in IT, and corresponding expectations from stakeholders, requires agencies to employ strategies that ensure their IT systems keep pace with new technologies. By partnering with FAST, DOR can ensure continued improvement and enhancement to its investment. New business functions and support for evolving technologies are continually added to GenTax, and each agency using the software benefits from our product evolution. The value of this evolution is proven by our clients who have continued to use FAST software without replacement—almost all have upgraded to newer versions and most are using the latest versions of our software. FAST provides regular service packs and periodic upgrades for GenTax. This eliminates the need for coordination across multiple software packages from a variety of vendors. Our experienced professionals and robust and production-proven solution will provide DOR personnel with the tools necessary to serve the agency's constituents at present and in the future.

About Fast Enterprises

FAST is an innovative software and professional services firm that specializes in technology solutions for government. FAST was founded in 1997 on the belief that there was a more efficient and effective way to deliver complex IT solutions to government agencies. Working with state, provincial, local, and national governments, we have successfully implemented our software to administer a wide variety of government programs, including integrated tax and revenue, driver licensing and control, vehicle titling and registration, and unemployment insurance tax and benefits. Throughout the company's history, FAST has served as the software developer/provider, system integrator, implementer, and support vendor for our software implementation projects.

FAST is a limited liability corporation. The company employs over 1,200 professionals who are dedicated to meeting the requirements of our government clients. Our product development and support center is located at our Centennial (Denver), Colorado headquarters.

A. Business Proposal Summary

FAST's Business Proposal includes:

- A.1 Attachment E Business Proposal,
- A.1.a Business Proposal Attachment,
- A.1.b Audited Financials,
- A.2 Attachment A MBE WBE Subcontractor Commitment Form,
- A.2.a Attachment A1 IVBE Participation Plan, and
- A.2.b Subcontractor Commitment Letters.

The attachments are completed following the instructions in this section and within the attachments.

Business Proposal
RFP 17 - 082, Attachment E - Business Proposal Template
Instructions for this Workbook

Instructions

Tab Name	Instructions
Business Information	Please fill in the cells shaded blue and indicate if any attachments are inc each item. Some items require a yes/no answer and an explanation if th Description or Attachment Reference - if more than 300 words, include a
Contract Revisions	If specific language is not acceptable as worded, please add a row to the worksheet including the current language, proposed language and full ex revision in the blue shaded cells provided. Description or Attachment Reference - if "Explanation / Reason for Propc Language" requires more than 300 words, include attachment

Rows can be added to the Contract Revisions spreadsheet to support more revision items.

Business Proposal Template - Business Information

Respondent Name:	Fast Enterprises, LLC
	Ple: m
	Desc. ion

Please note that updates to the original submission are identified in yellow highlight.

2.3.1.1 GENERAL (OPTIONAL)	Enter your response below. Please indicate if attachments a
The Respondent may use this optional section of the business proposal to introduce or summarize any information the Respondent deems relevant or important to the State's successful acquisition of the products and/or services requested in this RFP.	FAST has no additional information to add at this time.

2.3.1.2 RESPONDENT'S COMPANY STRUCTURE	Enter your response below. Please indicate if attachments a
The legal form of the Respondent's business organization, the state in which formed (accompanied by a certificate of authority), the types of business ventures in which the organization is involved, and a chart of the organization are to be included in this section. If the organization includes more than one product division, the division responsible for the development and marketing of the requested products and/or services in the United States must be described in more detail than other components of the organization.	Fast Enterprises, LLC (FAST) was formed as a partnership in 19 company under the laws of the State of New York in February services firm that specializes in technology solutions for gover involve software for agencies that administer tax and revenue and control, and unemployment insurance programs. Fast LP, Fast Enterprises, LLC and Fast Data Services, LLC, are responsi our software products. Please see A.1.a Business Proposal Attachment for a copy of F Certificate of Authority and organizational chart.

2.3.1.3 COMPANY FINANCIAL INFORMATION	Enter your response below. Please indicate if attachments a

This section must include the Respondent's audited or reviewed financial statement, including an income statement and balance sheet, for each of the two most recently completed fiscal years. The financial statements must demonstrate the Respondent's financial stability. If the financial statements being provided by the Respondent are those of a parent or holding company, additional financial information should be provided for the entity/organization directly responding to this RFP. **See Attachment J (Summary of Minimum Requirements) for details on how the State will assess financial stability.**	A copy of our combined audited financial statements for 201 FAST is a privately-held company in a highly competitive indus confidential information that is not disclosed to the public. W honor the confidential nature of these documents. We reque information to only individuals who have a direct need to revi evaluating FAST's response to RFP 17-082. FAST is a financially solvent company that has continued to e personnel every year since its inception nearly 20 years ago. F audits, which are conducted by a third-party accounting firm. • FAST's financial audits are conducted in accordance with au United States of America, and FAST has adequate procedures • FAST has not experienced any adverse banking relationship segregated by banks as security for their credit guarantees to have never been accessed by banks, customers, or any party • FAST's insurance agency has stated that coverages are adeq business model and contractual operations. • FAST has not experienced a surety bond "call" or other matt guarantees were called upon, nor has FAST been denied a ner • FAST has not experienced a claim or any other matter requi • FAST has never defaulted on indebtedness and has no term consists of deferred revenue, trade payables, and compensat • FAST consistently complies with regulatory authority goverr benefits. • FAST's owners and management exhibit ethical behavior in requirements; adequate procedures are in place to ensure re

2.3.1.4 INTEGRITY OF COMPANY STRUCTURE AND FINANCIAL REPORTING	Enter your response below. Please indicate if attachments a
This section must include a statement indicating that the CEO and/or CFO has taken personal responsibility for the thoroughness and correctness of any and all financial information supplied with this proposal. The particular areas of interest to the State in considering corporate responsibility include the following items: separation of audit functions from corporate boards and board members, if any, the manner in which the firm assures board integrity, and the separation of audit functions and consulting services. The State of Indiana will consider the information offered in this section to determine the responsibility of the Respondent per IC 5-22-16-1(d). The Sarbanes Oxley Act of 2002, H.R. 3763, is NOT directly applicable to this procurement; however, its goals and objectives may be used as a guide in the determination of corporate responsibility for financial reports	FAST's CFO, Dan DeKeyrel, has taken personal responsibility f any and all financial information supplied in our proposal. As confirmation of our separation of audit functions from corpor board integrity is not applicable. FAST confirms the separatio consulting services.

2.3.1.5 CONTRACT TERMS/CLAUSES

The contract resulting from this RFP will contain both mandatory and non-mandatory clauses. Mandatory clauses are non-negotiable while non-mandatory clauses ar
contains a sample contract that will be similar to the one resulting from this RFP. Please indicate your acceptance of the following mandatory/non-mandatory clauses
language is not acceptable as worded, please add a row to the Contract Revisions worksheet in this workbook including the current language, proposed language and
revision in the spaces provided. To reiterate it's the State's strong desire to not deviate from the contract provided in the attachment and as such the State reserves t
requested changes. **Failure to include a clear, specific, unequivocal agreement to these clauses may result in disqualification of the proposal from further evaluation**

Mandatory Clauses	Acceptance? (Yes / No)	If

Authority to Bind Contractor	Yes	
Duties of Contractor, Rate of Pay, and Term of Contract	Yes	
Compliance with Laws	Yes	
Drug-free Workplace Provision and Certification	Yes	
Employment Eligibility Verification	Yes	
Funding Cancellation	Yes	
Governing Laws	Yes	
Indemnification	No	Please see A.1.a Business P Exceptions documentation
Information Technology	No	Please see A.1.a Business P Exceptions documentation
Non-discrimination Clause	Yes	
Payments	Yes	
Penalties/Interest/Attorney's Fees	Yes	
Termination for Convenience	Yes	
Non-collusion and Acceptance	Yes	

	Enter your response below. Please indicate if attachments a
Additional Contract Considerations ***Please note:*** *The State will only review or negotiate changes to contract clauses clearly identified in the transmittal letter. If there are no contract clauses identified Respondent is considered to have accepted the clauses as they are currently written.*	Please see A.1.a Business Proposal Attachment for FAST's Cor

2.3.1.6 REFERENCES

The Respondent must include a list of at least three (3) clients for whom the Respondent has provided products and/or services that are the same or similar to those p RFP. Any state government for whom the Respondent has provided these products and services should be included; also to be included should be clients with locatior arranged.

Reference One	**Enter your response below.**
Legal Name of Company or Governmental Entity	Illinois Department of Revenue - i-STAR (Illinois Solution for T
Industry of Company	Revenue Agency
Mailing Address	101 W. Jefferson Street, Springfield, IL 62702
Telephone Number	217-524-7725
Contact Name	Kendra Banning
Title	Business Lead
Telephone/Fax Number	217-524-7725
E-mail Address	kendra.banning@illinois.gov
Time period in which services were provided	Implementation: November 2006 to June 2011
Please describe the service provided to this reference	Over a period of four years and eight months in five rollouts, 1 90 account types in GenTax Version 6 to administer Individua Business Income, Withholding, Sales & Use, Alcohol, Environn taxes. The implementation project was completed on time an Version 7 during the initial implementation project and to Ver GenTax was upgraded to Version 9 and to Version 10 – the cu

Reference Two	**Enter your response below.**
Legal Name of Company or Governmental Entity	South Carolina Department of Revenue - CITS (Comprehensiv
Industry of Company	Revenue Agency
Mailing Address	300A Outlet Pointe Boulevard, Columbia, SC 292100
Telephone Number	803-896-1445

Contact Name	Mario Alverez
Title	Program Manager
Telephone/Fax Number	803-896-1445
E-mail Address	mario.alverez@dor.sc.us
Time period in which services were provided	Implementation: August 2014 to August 2018
Please describe the service provided to this reference	Over a period of four years in four rollouts, the CITS project is rollouts have delivered Business Income, Environment, Prope production. Rollout Three is implementing Individual Income this year. Rollout Four will deliver Environment, Fuel, Gaming, and Utility taxes as well as several fees by August 2018. The ir GenTax Version 9 and upgraded to Version 10 as part of its se on budget.

Reference Three	**Enter your response below.**
Legal Name of Company or Governmental Entity	Georgia Department of Revenue - GA-ITS (Georgia Integrated
Industry of Company	Revenue Agency
Mailing Address	1800 Century Boulevard NE, Atlanta, GA 30345
Telephone Number	404-417-6634
Contact Name	Darcy Pyle
Title	Project Manager
Telephone/Fax Number	404-417-6634
E-mail Address	darcy.pyle@dor.ga.gov
Time period in which services were provided	Implementation: August 2008 to September 2012
Please describe the service provided to this reference	Over a period of four years and two months in five rollouts, th 33 account types in GenTax Version 5 to administer Individual Business Income, Withholding, Sales & Use, Alcohol, and Gam was completed on time and on budget. GenTax was upgradec

Please identify all references for the past five (5) years for whom your company has provided the same or similar services as those requested in this RFP, but the contr convenience.

Reference One	**Enter your response below.**
Legal Name of Company or Governmental Entity	FAST has never had a contract terminated for cause or for cor this section.
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	
Provide reason(s) for loss or termination	

Reference Two	**Enter your response below.**
Legal Name of Company or Governmental Entity	FAST has never had a contract terminated for cause or for cor this section.
Industry of Company	
Mailing Address	

Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	
Provide reason(s) for loss or termination	

Reference Three	Enter your response below.
Legal Name of Company or Governmental Entity	FAST has never had a contract terminated for cause or for cor this section.
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	
Provide reason(s) for loss or termination	

Corporate Litigation	Enter your response below. Please indicate if attachments a
Does your company have any pending litigation regarding contract disputes?	Yes. FAST is seeking payment from a prime contractor on an i

2.3.1.7 REGISTRATION TO DO BUSINESS	Registered? (Yes / No)	If No, Explanation
Respondents providing the products and/or services required by this RFP must be registered and in good standing with the Indiana Secretary of State. The requirement is applicable to all limited liability partnerships, limited partnerships, corporations, S-corporations, nonprofit corporations, and limited liability companies. Please indicate the status of registration.	No	If selected, FAST will regist

	Registered? (Yes/No)	If No, Explanation
Respondents must be registered with the Indiana Department of Administration (IDOA) in the Bidder registration database as a bidder to receive an award. This can be accomplished for no fee on-line at http://www.in.gov/idoa/2464.htm. Please indicate the status of registration.	Yes	

2.3.1.8 AUTHORIZING DOCUMENT	Enter your response below. Please indicate if attachments a
Respondent personnel signing the Transmittal Letter of the proposal must be legally authorized by the organization to commit the organization contractually. This section shall contain proof of such authority. A copy of corporate bylaws or a corporate resolution adopted by the board of directors indicating this authority will fulfill this requirement.	Martin Rankin is the Managing Member of FAST and has auth behalf in accordance with FAST's Operating Agreement. Pleas Attachment for our authorizing document.

2.3.1.9 SUBCONTRACTORS

The Respondent is responsible for the performance of any obligations that may result from this RFP, and shall not be relieved by the non-performance of any subconti identify all subcontractors and describe the contractual relationship between the Respondent and each subcontractor. Either a copy of the executed subcontract or a signature of the firms involved must accompany each proposal.

Any subcontracts entered into by the Respondent must be in compliance with all State statutes, and will be subject to the provisions thereof. For each portion of the p provided by a subcontractor, the technical proposal must include the identification of the functions to be provided by the subcontractor and the subcontractor's relat **of subcontractors in the areas of Application Development and Web Design and Marketing is not permitted under this contract.**

The combined qualifications and experience of the Respondent and any or all subcontractors will be considered in the State's evaluation. The Respondent must furnis amount of the subcontract, the qualifications of the subcontractor for guaranteeing performance, and any other data that may be required by the State. All subcontra made available upon request for inspection and examination by appropriate State officials, and such relationships must meet with the approval of the State.

The Respondent must furnish the following information for their use of subcontractors:

	Enter your response below. Please indicate if attachments a	
	Quinn David & Associates, LLC	**Guidesoft, Inc. dba Knowle Services**
A) Each subcontractor's name, address, and state of incorporation that are proposed to be used in providing the required products and services	436 N 49th St, Milwaukee WI 53208	5875 Castle Creek Pkwy, St 400, Indianapolis IN 46250
B) Each subcontractor's area(s) of responsibility under the proposal	Software implementation and programming services	Contract staffing
C) The anticipated dollar amount for each subcontract	$361,937.50	$361,937.50
D) Each subcontractor's form of organization	LLC	Corporation
E) An indication from each subcontractor of a willingness to carry out their responsibilities (this assurance in no way relieves the Respondent of any responsibilities in responding to this RFP or in completing the commitments documented in this proposal)	See Section A.2.b Commitment Letters	See Section A.2.b Commitn Letters
F) The qualifications of each subcontractor for guaranteeing performance	See Section A.2.b Commitment Letters	See Section A.2.b Commitn Letters
G) Which, if any, subcontractors qualify as a Minority of Women Owned Business under IC 4-13-16.5-1. See Section 1.21 and Attachment A for Minority and Women Business information	MBE	WBE
H) Identification of the functions to be provided by the subcontractor and the subcontractor's related qualifications and experience in the technical proposal for each portion of the proposed products or services to be provided by the subcontractor	Software implementation and programming services. For additional details, see Section A.2 Subcontractor Commitments.	Contract staffing. For addit details, see Section A.2 Subcontractor Commitmer
I) Any other data that may be required by the State	Quinn David & Associates, LLC's letter of agreement is covered in Section A.2 Subcontractor Commitments.	Knowledge Services' letter agreement is covered in Se A.2 Subcontractor Commit

2.3.1.10 EVIDENCE OF FINANCIAL RESPONSIBILITY

This section will indicate the ability to provide the mandatory evidence of financial responsibility. See Section 1.26 for details.	
Notwithstanding any other provisions relating to the beginning of the term, any contract will not become effective until the evidence of financial responsibility is delivered in the correct form and amount to the address indicated in Section 1.26.	FAST is willing to provide evidence of financial responsibility. I anything related to financial responsibility. As such, we are ur responsibility but are happy to provide evidence upon reques

2.3.1.11 GENERAL INFORMATION

Business Information	**Enter your response below.**
Legal Name of Company	Fast Enterprises, LLC

Federal Identification Number (FIN)	30-0951152
Contact Name	James G. Harrison
Contact Title	Member
Contact E-mail Address	JHarrison@FastEnterprises.com
Company Mailing Address	7229 South Alton Way
Company City, State, Zip	Centennial, CO 80112
Company Telephone Number	208-433-9244
Company Fax Number	208-433-9863
Company Website Address	www.FastEnterprises.com
Number of Employees (company)	1,152
Years of Experience	20
Number of U.S. Offices	Three corporate offices (Centennial, CO; Boise, ID; Victoria, BC
Year Indiana Office Established (if applicable)	N/A
Parent Company (if applicable)	Fast LP
Revenues ($MM, prior year)	Please see Section A.1.b Financial Statements for revenue infc
Revenues ($MM, two-years prior)	Please see Section A.1.b Financial Statements for revenue infc
% Of Revenue from Indiana customers	0%
Please provide a copy of your last two external audit or review reports with auditor opinions	Please see Section A.1.b Financial Statements for auditor opir

	Yes / No	If No, Explanation
Does your company have a formal disaster recovery plan? If no, please provide an explanation of any alternative solution your company has to offer. If yes, please note and include as an attachment.	Yes	FAST hosts multiple client s recovery data centers. Due technical information of ou contained in our formal dis respectfully declines to prc plan. However, please see disaster recovery plan doc strategies used to develop

	Enter your response below. Please indicate if attachments a
What is your company's technology and process for securing any State information that is maintained by your company?	FAST's security posture is based on NIST 800-53 and IRS Publi enhanced security policies imposed by our clients for internal such as the fraud detection and data exchange progra 'S application data at our offices. Application data and a .s approved facility.

2.3.1.12 EXPERIENCE SERVING STATE GOVERNMENTS

Enter your response below. Please indicate if attachments a

Please provide a brief description of your company's experience in serving state governments and/or quasi-governmental accounts. Disclose each state or jurisdiction in which Respondent does business or holds contracts to provide goods or services and the nature of each such business or contract.	Fast Enterprises, LLC (FAST) has implemented GenTax in the U governments. In addition, we have implemented GenTax for t foreign national governments, bringing our total to 47 tax and state/provincial, and local government levels. Please refer to Section G.2 FAST Client List, which provides the sites: • A chronological summary of the government agencies at the levels in which GenTax has been or is being installed, showing o Name and population of the jurisdiction. o Month and year in which the initial implementation projec o Month and year in which the first rollout of the solution er o Date on which the implementation project was completed completed. o Our current engagement in the jurisdiction. • Client site detail: o Name of the agency and the implementation project. o Name, title, telephone number, e-mail address, and mailin contact person. o A high-level Gantt chart of the implementation project, sho insurance, motor vehicle, and other programs and the timefra will be delivered to production. Please note that our FAST Client List also includes our five Fas FastUI, our unemployment insurance tax and benefits solutio licensing and control and motor vehicle registration and titlin functionality with GenTax. Specifically, the Customer, Workflo

2.3.13 EXPERIENCE SERVING SIMILAR CLIENTS	Enter your response below. Please indicate if attachments a
Please describe your company's experience in serving clients of a similar size to the State that also had a similar scope. Please provide specific clients and detailed examples.	Please refer to Section G.2 FAST Client List for a description of we have provided detailed client profiles for all GenTax projec in Section A.1.a Business Proposal Attachment.

2.3.14 INDIANA PREFERENCES	Enter your response below. Please indicate if attachments a
Pursuant to IC 5-22-15-7, Respondent may claim only one (1) preference. For the purposes of this RFP, this limitation to claiming one (1) preference applies to Respondent's ability to claim eligibility for Buy Indiana points. **Respondent must clearly indicate which preference(s) they intend to claim. Additionally, the Respondent's Buy Indiana status must be finalized when the RFP response is submitted to the State.** Buy Indiana Refer to Section 2.7 for additional information.	FAST does not claim an Indiana preference.

Business Proposal Template - Contract Revisions

Respondent Name: Fast Enterprises, LLC

Please Complete Blue Shaded Regions

Description or Attachment Reference -

	Current Contract Language (Include contract location/section)	Proposed New Contract Language Replacing Current Contract Language	Explanation / Reason for Proposed New Contact Language
1	Section 6. Assignment of Antitrust Claims. As part of the consideration for the award of this Contract, the Contractor assigns to the State all right, title and interest in and to any claims the Contractor now has, or may acquire, under state or federal antitrust laws relating to products or services which are the subject of this Contract.	Section 6. Assignment of Antitrust Claims. As part of the consideration for the award of this Contract, the Contractor assigns to the State all right, title and interest in an dto any claims the Contracntor now has, or may acquire, under state or federal antitrust laws relating to products or services which are the subject of this Contract and owned by the State under this Contract.	FAST will only assign rights to claims that relate to what the State will own under this Contract. FAST will not assign rights to claims that relate to its GenTax Software and Documentation that will be licensed to the State.
2	Section 11. Condition of Payment. ... The State shall not be required to pay for work found to be unsatisfactory, inconsistent with this Contract or performed in violation of any federal, state or local statute, ordinance, rule or regulation.	Section 11. Condition of Payment. ... The State shall not be required to pay for work found to be unsatisfactory, inconsistent with this Contract or performed in violation of any federal, state or local statute, ordinance, rule or regulation. For the avoidance of doubt, this Section does not require Contractor to interpret how any law, ordinance, statute or regulation is implemented into the System.	FAST will comply with laws as it relates to providing services. FAST will not be responsible for interpreting how any law, ordinance, statute or regulation should be implemented as part of the System.
3	Section 12. Confidentiality of State Information. ...If any Social Security number(s) is/are disclosed by Contractor, Contractor agrees to pay the cost of the notice of disclosure of the breach in addition to any other claims and expenses for which it is liable under the terms of this Contract.	Section 12. Confidentiality of State Information. If any Social Security number(s) is/are wrongfully disclosed by Contractor, Contractor agrees to reimburse the State for pay the cost of the notice of disclosure of the breach, if such notice is required by law, in addition to any other claims and expenses for which it is liable under the terms of this Contract. Notwithstanding the foregoing, Contractor's liability to the State under this Section shall not exceed the amount covered by Contractor's insurance required under this Contract.	FAST will accept responsibility for notification costs if such notification is required under State law and only to the extent the unauthorized disclosure was caused by FAST. Due to the risk involved with this type of provision and FAST's need to be responsible to all of its clients, FAST requests that its liability to the State be limited to the amount covered by the insurance required by the State.
4	Section 13. Continuity of Services. C.... The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor. D. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs ...	Section 13. Continuity of Services. C.... ~~The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.~~ D. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs at the Contractor's hourly rates....	FAST will provide mutually agreed upon "phase in phase out" services at FAST's hourly rates. Any third party contractors will be expected to sign appropriate non-disclosure agreements. Further, FAST is not willing to assist any third party contractors or the Agency in hiring FAST personnel assigned to the project.
5	Section 28. A. Key Persons. If both parties have designated that certain individual(s) are essential to the services offered, the parties agree that should such individual(s) leave their employment during the term of this Contract for whatever reason, the State shall have the right to terminate this Contract upon thirty (30) days' prior written notice.	Section 28. A. Key Persons. If both parties have designated that certain individual(s) are essential to the services offered, the parties agree that should such individual(s) leave their employment during the term of the Implementation project this Contract for whatever reason, the State shall have the right to terminate this Contract for convenience upon thirty (30) days' prior written notice.	Contract termination is not a reasonable option in the event a key person leaves their employment. FAST anticipates keeping key persons onsite until the end of the implementation project as long as it is within FAST's control. Further, FAST anticipates having an opportunity to replace key persons with approval from the Agency.
6	34. Order of Precedence; Incorporation by Reference. Any inconsistency or ambiguity in this Contract shall be resolved by giving precedence in the following order: (1) this Contract, (2) attachments prepared by the State, (3) RFP#_____, (4) Contractor's response to RFP#_____, and (5) attachments prepared by the Contractor. All attachments, and all documents referred to in this paragraph, are hereby incorporated fully by reference.	34. Order of Precedence; Incorporation by Reference. Any inconsistency or ambiguity in this Contract shall be resolved by giving precedence in the following order: (1) this Contract, (2) attachments to this Contract including a mutually agreed upon Statement of Work ~~prepared by the State~~, (3) RFP#_____, and (4) Contractor's response to RFP#_____ ~~, and (5) attachments prepared by the Contractor~~. All attachments, and all documents referred to in this paragraph, are hereby incorporated fully by reference.	FAST is requesting modifications to the Order of Precedence. FAST would expect that any attachments that are mutually agreed upon would be included in No. 2. FAST anticipates that any discrepancies between the RFP and FAST's Response be resolved in the Statement of Work.
7	39. Public Record. The Contractor acknowledges that the State will not treat this Contract as containing confidential information, and will post this information on its website as required by Executive Order 05-07. Use by the public of the inforamtion contained in this Contract shall not be considered an act of the State.	39. Public Record. The Contractor acknowledges that the State will not treat this Contract as containing confidential information, and will post this information on its website as required by Executive Order 05-07. Use by the public of the inforamtion contained in this Contract shall not be considered an act of the State. Notwithstanding the foregoing, if the Contractor's Response to RFP#_____ is included as part of the contract, information identified in Contractor's response as Confidential shall not be disclosed without Contractor consent.	FAST anticipates that any Confidential information marked as part of its RFP response would continue to be kept confidential.
8	Section 43. Taxes. The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract.	Section 43. Taxes. The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract. However, if in the future the law changes and the State becomes required to pay taxes, the State and Contractor will amend this Contract.	FAST understands that the State is tax exempt. FAST is proposing this additional language to address the concern that the State might be subject to different taxes in the future.
9	Section 50. Exit Assistance Services. Contractor shall provide Exit Assistance Services so as to enable an orderly and efficient transfer to any new Contractor or the State in a manner which will minimize disruption to the State on termination or discontinuance of any or all of the Services. The Exit Assistance Services include those services or requirements described in this Section, as well as other portions of this Contract including the RFP and RFP Response.	Section 50. Exit Assistance Services. Contractor shall provide Exit Assistance Services so as to enable an orderly and efficient transfer to any new Contractor or the State in a manner which will minimize disruption to the State on termination or discontinuance of any or all of the Services. The Exit Assistance Services include those services or requirements described in this Section or mutually agreed upon in an Exit Plan as well as ~~other portions of this Contract including the RFP and RFP Response.~~	FAST anticipates mutually agreeing upon what would be included as part of Exit Services at the time those services are required. FAST believes the exit services required may be different at that stage in the project then what was included in either the RFP or in FAST's Response.
10	Section 54. Solution License. Contractor hereby grants to the State a royalty-free, non-exclusive license to use Contractor Intellectual Property Rights to use the Solution, Services and all Deliverables during the term of the Contract and the Exist Assistance Period.	Section 54. Solution License. Contractor hereby grants to the State a royalty-free, non-exclusive license to use Contractor Intellectual Property Rights to use the Solution, Services and all Deliverables during the term of the Contract and the Exist Assistance Period. The license is subject to the terms of Contractor's License Agreement attached to this Contract as an Exhibit	FAST requests that the State review and sign its GenTax License Agreement. FAST is open to reviewing and discussing any additional license terms or any modifications the State would like to propose to its standard License Agreement.
11	Section 55. Communications and Announcements: Contractor shall not make any press release, public announcement, advertisement, promotional material or other form of publicity whatsoever concerning or referring to the State or the existence of subject matter of the Contract without the prior written approval of the State.	Section 55. Communications and Announcements: Contractor shall not make any press release, public announcement, advertisement, promotional material or other form of publicity whatsoever concerning or referring to the State or the existence of subject matter of the Contract without the prior written approval of the State. Notwithstanding the foregoing, Contractor can disclose publically available information without the State's approval.	FAST anticipates being able to use publically available information without State approval.

Please note that updates to the original submission are identified in yellow highlight.

Per our response to 2.3.1.2 Respondent's Company Structure, please see below for Fast Enterprises, LLC Certificate of Authority.

State of New York
Department of State } **ss:**

I hereby certify, that FAST ENTERPRISES, L.L.C. a NEW YORK Limited Liability Company filed a Certificate of Conversion pursuant to the Limited LIability Company Law on 02/10/1998, and that the Limited Liability Company is existing so far as shown by the records of the Department.

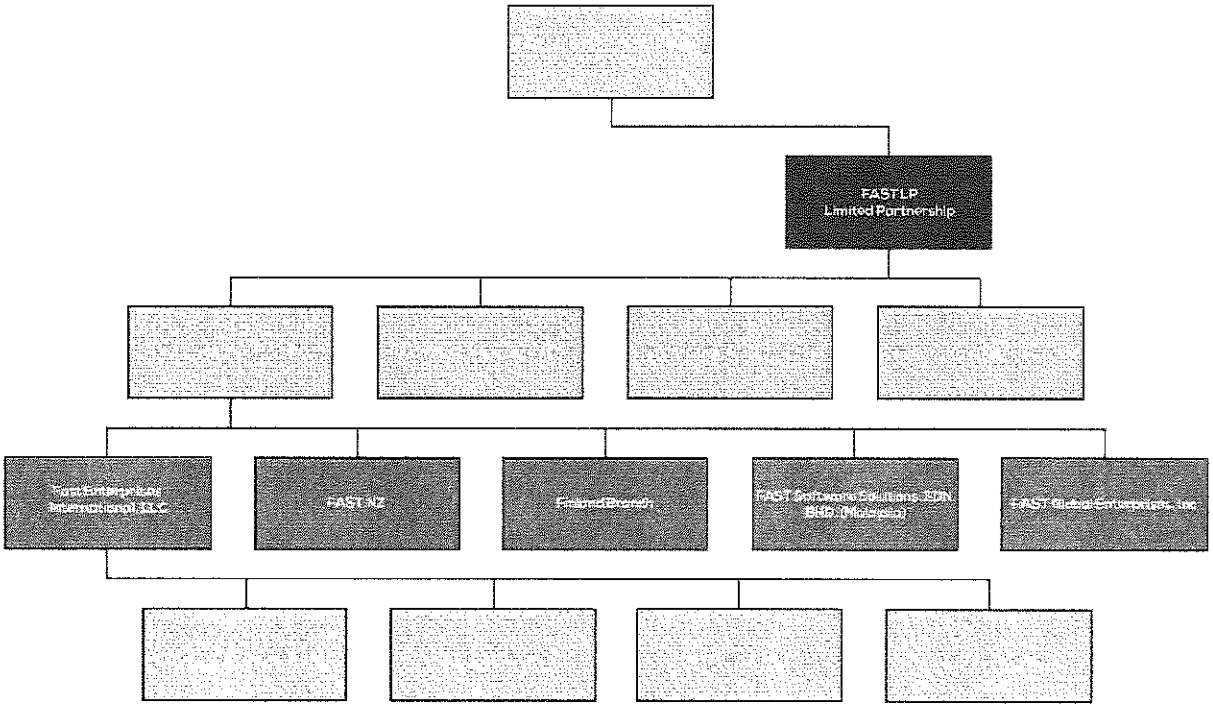
***

WITNESS my hand and the official seal of the Department of State at the City of Albany, this 29th day of November two thousand and seventeen.

Brendan W. Fitzgerald
Executive Deputy Secretary of State

201711300205 170

Per our response to 2.3.1.2 Respondent's Company Structure, please see below for FAST's organizational chart.



Per our response to 2.3.1.5, please see below for our Contract Exceptions documentation. FAST looks forward to discussing these if selected for Contract negotiations.

Contract Sections	FAST Requested Changes
24. Indemnification. The Contractor agrees to indemnify, defend and hold harmless the State, its agents, officials, and employees from all third party claims and suits including court costs, attorney's fees, and other expenses caused by any act or omission of the Contractor and/or its subcontractors, if any, in the performance of this Contract. The State shall not provide such indemnification to the Contractor.	The current indemnification provision is very broad and could result in FAST being responsible to indemnify the State for its own actions or those of third parties. FAST's practice is to indemnify the State from damages arising out of third party claims related to bodily injury, property damage, and death to the extent such damages are caused by FAST and not by other parties. **24. Indemnification.** The Contractor agrees to indemnify, defend and hold harmless the State, its agents, officials, and employees from all third party claims and suits including court costs, attorney's fees, and other expenses related to bodily injury, property damage or death to the extent caused by ~~any act or omission of~~ the Contractor and/or its subcontractors, if any, in the performance of this Contract. The State shall not provide such indemnification to the Contractor and the Contractor shall not be required to indemnify, defend and hold harmless the State to the extent such ~~any~~ damages are caused by the State or an unrelated third party.
26. Information Technology Enterprise Architecture Requirements. If the Contractor provides any information technology related products or services to the State, the Contractor shall comply with all IOT standards, policies and guidelines, which are online at http://iot.in.gov/architecture/. The Contractor specifically agrees that all hardware, software and services provided to or purchased by the State shall be compatible with the principles and goals contained in the electronic and information technology accessibility standards adopted under Section 508 of the Federal Rehabilitation Act of 1973 (29 U.S.C. 794d) and IC §4-13.1-3. Any deviation from these architecture requirements must be approved in writing by IOT in advance. The State may terminate	FAST would like to discuss this section as it seem inconsistent with the current scope of services included in the RFP and FAST's response. Further, in the event any of the policies are applicable, FAST anticipates that both parties will need to work together to ensure that these requirements are met. **Section 26. Information Technology Enterprise Architecture Requirements.** If the Contractor provides any information technology related products or services to the State, the Contractor shall comply with all applicable and mutually agreed upon IOT standards, policies and guidelines, which are online at http://iot.in.gov/architecture/. ~~The Contractor specifically agrees that~~Both parties will ensure that the hardware, software and services provided to or

this Contract for default if the Contractor fails to cure a breach of this provision within a reasonable time.	purchased by the State shall be compatible with the principles and goals contained in the electronic and information technology accessibility standards adopted under Section 508 of the Federal Rehabilitation Act of 1973 (29 U.S.C. 794d) and IC §4-13.1-3. Any deviation from these architecture requirements must be approved in writing by IOT in advance. The State may terminate this Contract for default if the Contractor fails to cure a breach of this provision within a reasonable time.
27. Insurance... 4. Fiduciary Liability is required if the Contractor is responsible for the management and oversight of various employee benefit plans and programs such as pensions, profit-sharing and savings, among others. These contractors face potential claims for mismanagement brought by plan members. Limits should be no less than $700,000 per cause of action and $5,000,000 per occurrence. 5. Valuable Papers coverage, available under an Inland Marine policy, is required when any plans, drawings, media, data, records, reports, billings and other documents are produced or used under this agreement. Insurance must have limits sufficient to pay for the re-creation and reconstruction of such records....	FAST does not believe the insurance described below is applicable and requests that it be deleted. Further, in order to address notification requirements as discussed in our response to Contract Section 12, FAST is willing to include a Cyber Liability policy requirement. FAST is happy to discuss this in more detail if invited to contract negotiations. **27. Insurance...** ... ~~4. Fiduciary Liability is required if the Contractor is responsible for the management and oversight of various employee benefit plans and programs such as pensions, profit-sharing and savings, among others. These contractors face potential claims for mismanagement brought by plan members. Limits should be no less than $700,000 per cause of action and $5,000,000 per occurrence.~~ ~~5. Valuable Papers coverage, available under an Inland Marine policy, is required when any plans, drawings, media, data, records, reports, billings and other documents are produced or used under this agreement. Insurance must have limits sufficient to pay for the re-creation and reconstruction of such records.~~ FAST also proposes including a requirement for Cyber Liability insurance identified below: **Cyber Liability Insurance.** Contractor shall maintain insurance to cover claims which may arise from failure of Contractor's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data including but not limited to

	confidential or private information, transmission of a computer virus, or denial of service. Contractor is required to carry the following limits: $5,000,000 – per claim or event $5,000,000 – annual aggregate
35. Ownership of Documents and Materials. A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials (the "Materials") not developed or licensed by the Contractor prior to execution of this Contract, but specifically developed under this Contract shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.	FAST will license GenTax, its associated documentation, data, and embedded tools and utilities including all enhancements and modifications to the State and will maintain ownership of anything created or provided to the State during the course of this project that is intended for use by multiple clients. The State will own anything created for the State's sole use. This is consistent with the ownership rights of our other clients and is necessary in order to protect all of our clients interests in FAST's proprietary software and documentation. **35. Ownership of Documents and Materials.** A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials (the "Materials") ~~not~~ developed or created ~~licensed~~ by the Contractor ~~prior to execution of this Contract,~~ for the sole use of the State ~~but specifically developed under this Contract~~ shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.
45. **Termination for Default.** A. With the provision of thirty (30) days' notice to the Contractor, the State may terminate this Contract in whole or in part if the Contractor fails to:	FAST requests that the remedy of excess costs be limited to the amount previously paid for the services or deliverables being replaced. Instead of goods that are easily replaceable with ascertainable costs, the cost and type of services that are being provided by

1. Correct or cure any breach of this Contract; the time to correct or cure the breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the parties; 2. Deliver the supplies or perform the services within the time specified in this Contract or any extension; 3. Make progress so as to endanger performance of this Contract; or 4. Perform any of the other provisions of this Contract. B. If the State terminates this Contract in whole or in part, it may acquire, under the terms and in the manner the State considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the State for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.	different vendors in this marketplace are not comparable. Due to those differences, this remedy poses too great a risk to FAST without a limit. 45. **Termination for Default.** A. With the provision of thirty (30) days' notice to the Contractor, the State may terminate this Contract in whole or in part if the Contractor fails to: 1. Correct or cure any material breach of this Contract; the time to correct or cure the material breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the parties; 2. Deliver the supplies or perform the services within the time specified in this Contract or any extension; 3. Make progress so as to endanger performance of this Contract; or 4. Perform any of the other material provisions of this Contract. B. If the State terminates this Contract in whole or in part, it may acquire, under the terms and in the manner the State considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the State for any excess costs for those supplies or services up to the amount previously paid to Contractor for the supplies or services being replaced. However, the Contractor shall continue the work not terminated.
51. Ongoing Services. Ongoing Services are subject to the Service Levels and include Solution Maintenance Services, Solution Support Services, and Solution Upgrade Services, each as defined below. The Ongoing Services include those services or requirements described in this Section as well as other portions of this Contract including the RFP and RFP Response...	FAST offers standard maintenance and support options that are explained in greater detail in our response to the RFP. FAST is happy to discuss these options and how they compare to what was included in the Contract if invited to contract negotiations. **51. Ongoing Services.** Depending on the type of Ongoing Services that are purchased, they may be ~~are~~ subject to the Service Levels. The available options for Ongoing Services are defined in Contractor's RFP Response and will be mutually agreed upon by the parties. ~~and include Solution Maintenance Services, Solution Support Services, and Solution Upgrade Services, each as defined below. The Ongoing Services~~

	~~include those services or requirements described in this Section as well as other portions of this Contract including the RFP and RFP Response.~~ FAST requests the rest of this Section be deleted.
52. Security Requirements: The State has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the State's data confidential, available, and with high integrity. The Department of Revenue systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The State uses the highest intolerance for risk in its assessment of the system and thus will insist that all security controls appropriate for a moderate-impact system be implemented. The State requires that the Contractor be compliant with such a security scheme for its system and operations because the State will be transmitting its data to the Contractor. The State will not accept any Contractor solution that does not meet the State's security requirements as specified in the NIST and IRS documents and the DOR's system requirements as itemized in the RFP Attachments. The State will evaluate all system security models based on the State's reading of FISMA, NIST SP800-53 (Rev 4), IRS Publication 1075 (issued September 2016) and security best practices. Contractor agrees to abide by the State's interpretations of these requirements. The Contractor further agrees that new or different requirements specified in later versions of these standards can be incorporated into this contract at the State's request. The State requires each system to provide its own data security for handling input and output by providing native encryption functions that utilize a FIPS 140-2 validated encryption algorithm. The State utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Specific Technology Implementation Guides (STIGs) as an objective way to	Because FAST is only providing the software and all State data will remain onsite, FAST does not believe several of these requirements are applicable. FAST would like to discuss this section in more detail if invited to contract negotiations. **52. Security Requirements:** The State has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the State's data confidential, available, and with high integrity. The Department of Revenue systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The State uses the highest intolerance for risk in its assessment of the system and thus will insist that all security controls appropriate for a moderate-impact system be implemented. The State requires that the Contractor be compliant with such a security scheme for its system and operations if ~~because~~ the State will be transmitting its data to the Contractor. The State will not accept any Contractor solution that does not meet the State's security requirements as specified in the NIST and IRS documents and the DOR's system requirements as itemized in the RFP Attachments. The State will evaluate all system security models based on the State's reading of FISMA, NIST SP800-53 (Rev 4), and IRS Publication 1075 (issued September 2016), ~~and security best practices. Contractor agrees to abide by the State's interpretations of these requirements.~~ The Contractor further agrees that new or different requirements specified in later versions of these standards can be incorporated into this contract at the State's request and the State's expense. The State requires each system to provide its own data security for handling input and output by providing

evaluate compliance with our security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. The implemented system must operate correctly with all requisite STIGs applied to the infrastructure and application components before customization and configuration can begin. The final release candidate for each iteration of the system must maintain its adherence to the STIGs before it can be certified for production. The State will withhold payment due without late charges or penalties at these milestones until the system is certified. The IRS requires that Pub 1075 Exhibit 7 be incorporated into the final contract in its complete form and unchanged by the State and Contractor. Contractor agrees to the inclusion of these terms.	native encryption functions that utilize a FIPS 140-2 validated encryption algorithm. ~~The State utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Specific Technology Implementation Guides (STIGs) as an objective way to evaluate compliance with our security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. The implemented system must operate correctly with all requisite STIGs applied to the infrastructure and application components before customization and configuration can begin. The final release candidate for each iteration of the system must maintain its adherence to the STIGs before it can be certified for production. The State will withhold payment due without late charges or penalties at these milestones until the system is certified.~~ The IRS requires that Pub 1075 Exhibit 7 be incorporated into the final contract in its complete form and unchanged by the State and Contractor. Contractor agrees to the inclusion of these terms.
53. Solution Escrow. Upon the State's request, Contractor shall at its cost and expense deposit, maintain and update Source Code Materials to the Contractor software designated by the State with a third party escrow agent selected by the State to be held, released to the State, and licensed to the State in accordance with an escrow agreement. Contractor will update the Source Code Materials escrowed with the third party escrow agent to correspond with each subsequent major and minor release of the applicable Contractor Software.	FAST maintains a multi user escrow agreement with Lincoln Parry Softescrow, Inc. This decreases costs to the State and is much more efficient for FAST. We will provide a copy of this escrow agreement upon the State's request. **53. Solution Escrow.** Upon the State's request, Contractor shall add the State as a beneficiary of its existing multi user escrow agreement. ~~at its cost and expense deposit, maintain and update Source Code Materials to the Contractor software designated by the State with a third party escrow agent selected by the State to be held, released to the State, and licensed to the State in accordance with an escrow agreement. Contractor will update the Source Code Materials escrowed with the third party escrow agent to correspond with each subsequent major and minor release of the applicable Contractor Software.~~

56. Implementation Services. Contractor shall provide the State with the Implementation Services in connection with the implementation of the Solution. The scope and contractor responsibilities for the Implementation Services will encompass, at a minimum, the following services required in the RFP and RFP Proposal: ...	In order to successfully implement GenTax, Fast requests that the State utilize FAST's proprietary and proven implementation methodology including its deliverables, milestones, and testing and training methods. Use of FAST's methodology is critical to ensuring that the system is implemented on time and on budget. **56. Implementation Services.** Contractor shall provide the State with the Implementation Services in connection with the implementation of the Solution. The ~~scope and contractor responsibilities for the~~ Implementation Services will be provided in accordance with Contractor's methodology and are described in detail in Contractor's response to the RFP. ~~encompass, at a minimum, the following services required in the RFP and RFP Proposal: ...~~ FAST requests Sections 56.1 through 56.11 be deleted because the majority of them are addressed by FAST's implementation methodology and will be addressed in a mutually agreed upon Statement of Work. FAST also expects the roles of IV&V, Organizational Change Management and other third party contractors to be discussed and limited. FAST's experience has shown that their involvement significantly increases the scope of work, causes project delays, and imposes significant delivery risk to the project with very little value provided to the State. FAST proposes the following language related to third party involvement: It is the intention of the parties to this Contract that the Project use the proven Contractor Implementation Methodology and is delivered on time and budget at the lowest possible cost to the State. The parties understand that the services provided by third party vendors may be required in the execution of the project. Based on that understanding, the parties agree to the following: 1. Project Approach. The project will follow the Contractor Implementation Methodology. This

	methodology covers all aspects of the project including the activities that will be performed, project team roles, deliverables, milestones, tools, the items that will require approval and the timing for such approval, governance, meetings, reporting, monitoring and tracking. 2. Project Personnel. Unless agreed to by the parties, all personnel involved with the project will be either: a. Employees of the State; or b. Employees of Fast Enterprises, LLC or its approved subcontractors; or c. Programming and IT supplied under a staff augmentation agreement whose primary role is providing technical services including conversion, programming, database administration, hardware management, network administration or disaster recovery planning and will be supervised by staff of the parties and have executed a nondisclosure agreement; or d. Individuals performing an independent verification and validation ("IV&V") role, provided that: (i) the total time dedicated to any State related work of all such invidiuals combined will be no more than one full time employee or the equivalent of 37.5 hours per week; (ii) they execute a Contractor nondisclosure agreement; (iii) they perform only IV&V functions including verifying that the project plan is being followed or that the project is proceeding according to schedule; (iv) they engage in the following activities necessary to perform IV&V: review project material, conduct interviews, and observe (but not participate in or direct) project work such as meetings, testing, or training; (v) they make no attempt to influence, affect or change the Contractor Implementation Methodology that the project is following beyond identification of project risks and

	concerns within their reports to project leadership. 3. State Project Director. The State will designate a Project Director. The Project Director shall: a. be an individual who works for the Department of Revenue from the business side; b. be a full-time State employee; c. move their office to the project space for the project duration; d. expend at least 90% of their working hours every week directly on project work; e. expend such effort from their office in the project space and not from any other office; f. be the State's senior-most manager for purposes of directing all State employees involved with the Project; and g. have the authority to make a final decision on behalf of the State for all matters related to the Project including business requirements, prioritization of work, approval of deliverables, personnel assignment, invoice approval and project activities. 4. IV&V Services. In the event the State elects to retain IV&V vendors as described within this Section, the following shall apply: a. the State will address or provide any reports or deliverables that are required by the State and are not produced as part of the Contractor Implementation Methodology; and b. neither of the parties shall expend any effort to train any individual performing IV&V services in State agency functions, GenTax or the Contractor Implementation Methodology. 5. Approval of Project Materials. For any project material requiring approval, only an employee of the State may approve such material. 6. Additional Personnel. Unless mutually agreed to by the parties all individuals involved in the project are identified in Sections 2(a), (b), (c) or (d) above. As used throughout this Section, "involved with the project" means participating in any project activity in any capacity and for any period of time.

57. Service Levels.	FAST requests this Section be replaced with its standard Service Levels but is open to discussing this in more detail if invited to contract negotiations. Further, FAST requests that all service credits be deleted. Successful project implementation requires a joint effort by both parties and FAST believes service credits take the focus away from the need to work together to implement the system. Instead, in our experience, they create a contentious atmosphere on project sites. In the event that there are problems with support services, the focus should be on correcting the problems instead of determining who caused them. FAST requests that the Service Level Agreement in the Contract be deleted. For an additional cost, FAST would be willing to commit to service levels and credits as follows: 1. System Outage a. The System will be available 99% of the time excluding planned outages. The State will be entitled to 1% of the monthly services fee for each hour of failure. b. Outage means the entire system is unavailable. c. Service credits will only apply if the Outage is caused solely by FAST. 2. E-Services Outage a. E-Services will be available 99.9% of the time excluding planned outages. The State will be entitled to 2% of monthly services fee for each hour of failure. b. Outage means that E-Services are unavailable. c. Service credits will only apply if the Outage is caused solely by FAST. 3. Performance a. 95% of all transactions will be completed within 2 seconds excluding certain large transations like reports, file uploading, document images, interfaces etc.The State will be entitled to 1% of

	the monthly cost of services for each hour of failure. b. Transaction time will be measured on application servers only (network and user time excluded). c. FAST software/hardware recommendations must be followed. Failure to meet the performance requirement must be solely caused by FAST. 4. Service levels and credits only apply to production environments. After the implementation project, service levels and credits are only applicable if the State purchases Level 2 or Level 3 support services. 5. Service Credits will be calculated on a monthly basis. The maximum monthly service credit is limited to 20% of the monthly cost of services.
Other Provisions.	FAST requests that this Contract include the Contractor's license agreement below, a limitation on liability provision, and confidentiality obligations sufficient to protect the Contractor's confidential information. Specifically, with respect to the limitation on liability provision, FAST cannot accept unlimited liability in any Contract or it will put all of its clients at risk. In order to address this risk, FAST requests that Contractor's liability for any claims that arise during the initial implementation period be limited to the Contract price during that period. Further, FAST requests that the Contractor's liability for any claims that arise during a maintenance and support year be limited to the annual value of the Contract during the year the claim arose. FAST proposes the following language related to Limitations on Liability: **Limitations of Liability.** The parties agree that neither Contractor nor State shall be liable to each other, regardless of the form of action, for consequential,

	incidental, indirect, or special damages. For any cause of action that arises between the Contract effective date and placing the last rollout into production, Contractor's total liability shall not exceed the value of the Contract during that time period. During any post implementation maintenance and support period, the Contractor's liability is limited to the annual value of the Contract during the Contract year the cause of action arose. Contractor's liability for any damages related to an unauthorized release or breach of not public data shall not exceed the amount covered by Contractor's cyber liability insurance up to the amount of the policy required by this Contract. **Contractor proposes the following language related to Contractor Confidential Information:** **Contractor Confidential Information.** 1. State shall hold Contractor confidential information in confidence, using the highest standard of care applicable, and will not use such confidential information except to fulfill its obligations under this Contract and applicable state and federal law. Contractor acknowledges and agrees any disclosures of its proprietary information that Contractor makes under this Contract that are not otherwise protected by applicable law are subject to the Indiana public records act. 2. Contractor confidential information includes: a. any data, products, inventions, innovations, program source code, program object code, program executables, data designs, data definitions, programming aids, tools, utilities, configurations, drawings, formulae, algorithms, ideas, designs, concepts, know-how, discoveries, techniques, training material, documents, manuals, methodologies, specifications, models, and other knowledge capital, electronic or otherwise, owned by

	FAST whether copyrightable or patentable or not; b. information relating to the technology, customers, business plans, promotional and marketing activities, pricing policies, finances and other business affairs of FAST; c. any documents or material which are marked "Confidential"; d. information which, under the circumstances, ought to be treated as confidential; and e. information exposed or accessed in the course of providing information technology (IT) services (reviewing, evaluating, implementing, supporting, maintaining, enhancing, etc. the system). 3. Contractor confidential information does not include: (i) information exposed to end users of the system through everyday use administering the State's tax programs; (ii) information that becomes part of the public domain through lawful means; (ii) information subsequently and rightfully received from third parties who have the necessary rights to transfer the information without any obligation of confidentiality; (iii) information known to the State prior to the effective date of this Contract without obligation of confidentiality; (iv) information independently developed by State and documented in writing without use of, or reference to, any Contractor proprietary information; or (v) information required to be disclosed by compulsory judicial or administrative process or by law or regulation; provided that if State is required to disclose Contractor confidential information under clause (v), State will first give Contractor notice and provide such information as may reasonably be necessary to enable Contractor to take action to protect its interests. 4. The State will not reverse engineer, decomile or disassemble any software disclosed to it and must not remove any notice of copyright or trademark or

	other notices of ownership from any originals or copies of Confidential Information. 5. Any non-government employees that may be exposed to or require access to Contractor confidential information must sign a non-disclosure agreement provided by Contractor prior to receiving access to the Contractor confidential information.

GenTax® Software Licensing Agreement

This Software Licensing Agreement ("Agreement") is made by and between Fast Enterprises, LLC, a New York limited liability company ("FAST" or "Licensor") and _____ ("Licensee"), _____. FAST has its principal place of business at 7229 S. Alton Way, Centennial Colorado, 80112. Licensee has its principle place of business at _____.

1. DEFINITIONS. As used in this Agreement, the following terms shall have the meanings ascribed to them:

1.1. "Software" means the GenTax®[1] Integrated Tax Processing Software that is the subject of this Agreement. Software includes tools and utilities that may be provided by FAST as part of the GenTax® package, as well as any fixes, enhancements, additions, and other modifications to the Software that may be provided.

1.2. "Documentation" means all documentation associated with the Software, including technical data, computer listings and printouts, in human-readable form that:

1.2.1. Documents the design or details of the Software;

1.2.2. Explains the capabilities of the Software; or

1.2.3. Provides operating instructions for using the Software to obtain desired results from a computer.

1.3 "Use" means storing, loading, installing, executing or displaying the Software on a computer, processor, or controller, or making a copy of the Software for archival or backup purposes only.

2. SOFTWARE LICENSE.

2.1. FAST grants the Licensee, in consideration for the license fee paid, a non-transferable, perpetual and non-exclusive right to use the Software, in object code form, and the Documentation furnished under this Agreement (the "License").

2.2. This grant shall allow the Licensee to use the Software to support the administration of and fulfill the business requirements and objectives of the_____ system, as described in the _____. The extension of this License to additional tax types and functionality could be subject to additional License fees.

2.3. The Licensee may install the Software on any workstation or server within the Licensee's business operation.

[1] GenTax® is a registered trademark of Fast Enterprises, LLC.

2.4. All Software and Documentation furnished to the Licensee under this Agreement shall be used by the Licensee only for the purposes authorized under this Agreement.

2.5. The Licensee agrees to use its best efforts to see that its employees and users of the Software and Documentation comply with the terms and conditions set out in this Agreement.

2.6. The Licensee shall not take any steps, such as reverse assembly or reverse compilation, to derive a source code equivalent of the Software.

2.7. The License extends to new versions of the Software, provided the Licensee has purchased and is current on its optional subscription to annual maintenance and/or support services and the Licensee's subscription to annual maintenance and/or support services includes access to new versions of the Software.

2.8. FAST may, at no additional charge, modify the Software to improve operation and reliability or to meet legal requirements.

2.9. Relocation of Software is the Licensee's responsibility and may result in additional support charges and modified service response times under any Support or Maintenance Agreement that FAST has entered into or will enter into with the Licensee.

2.10. The Licensee is responsible for the security of its proprietary and confidential information and for maintaining a procedure external to the Software to reconstruct lost or altered files, data or programs.

2.11. The Licensee must notify FAST if the Software is being used in an environment that poses a potential health hazard to FAST's employees or subcontractors.

2.12. The License granted hereunder is not assignable or transferable.

2.13. This Agreement does not grant a license to the Licensee to resell or otherwise redistribute the Software and Documentation.

2.14. Except as provided in this Agreement, use of the Software, Documentation, or License thereto shall be permitted only with FAST's prior written consent, which consent shall not be unreasonably withheld. Any such use shall be subject to FAST's standard fee in effect at the time of the use.

3. REPRODUCTION OF SOFTWARE/DOCUMENTATION.

3.1 The Licensee may not copy or reprint the Software in whole or in substantial part except as described in this Agreement.

3.2 The Licensee may not reproduce or copy the Documentation provided by FAST under this Agreement, in whole or in part, except as necessary for use as authorized under this Agreement. Any copy of the Documentation must contain the same copyright notice and proprietary markings that are on the original Documentation.

4. INTELLECTUAL PROPERTY/OWNERSHIP OF SOFTWARE. The Licensee acknowledges that the Software and Documentation, and all improvements and modifications made to them by any party, are and remain the sole property of FAST. This Agreement neither expresses nor implies that any interest in the Software and Documentation is assigned or transferred to the Licensee, except to the extent of the License granted by this Agreement.

5. FORM OF SOFTWARE. The Licensee agrees that the Software supplied under this Agreement shall be delivered to the Licensee in object code form only. FAST will maintain the Software source code with an escrow agent and list the Licensee as an authorized recipient of the source code in the event that FAST has not made suitable alternate arrangements for the continued maintenance of the Software and:

   5.1. A receiver is appointed for FAST or for its property and assets;

   5.2. Proceedings under bankruptcy or insolvency laws are commenced by or against FAST; or

   5.3. FAST ceases doing business or discontinues offering maintenance for the Software.

6. CONFIDENTIALITY.

   6.1. Licensee acknowledges that all of the Software and Documentation provided to the Licensee pursuant to this License, in any form whatsoever, are FAST's "Confidential Information."

   6.2 Licensee hereby agrees: 1) to hold all Confidential Information in confidence; 2) to use FAST Confidential Information only for the purpose for which it is disclosed; 3) to reproduce the Confidential Information only to the extent allowed under this License; and 4) not to disclose the Confidential Information to any third party without FAST's prior written consent.

   6.3 Licensee agrees to take reasonable security precautions, at least as great as the precautions it takes to protect its own confidential information, in order to protect the confidentiality of FAST's Confidential Information.

   6.4 Licensee may disclose Confidential Information only to the Licensee's employees on a need-to-know basis. The Licensee will have executed or will execute appropriate written agreements with its employees sufficient to enable it to comply with all the provisions of this Agreement.

   6.5 Licensee will segregate all FAST Confidential Materials from the confidential materials of others to prevent commingling.

   6.6 At no time, under any circumstance, will any of FAST's Confidential Materials be removed from Licensee property without the prior written consent of FAST.

   6.7 Licensee will notify FAST immediately upon discovery of any unauthorized use or disclosure of FAST's Confidential Information or any other breach of this Agreement by the Licensee, and

will cooperate with FAST in every reasonable way to help FAST regain possession of the Confidential Information and prevent its further unauthorized use.

6.8 If the Licensee becomes legally obligated to disclose FAST's Confidential Information by any governmental entity with jurisdiction over it, the Licensee will give FAST written notice sufficient to allow FAST to seek a protective order or other appropriate remedy. If disclosure cannot be avoided, Licensee will disclose only such information as is legally required and will use its reasonable best efforts to obtain confidential treatment for any of FAST's Confidential Information that is so discloses.

6.9 A Non-Disclosure Agreement in the form attached hereto as Attachment A, and incorporated herein by reference, shall be signed by the Licensee's agents, contractors, contractors' employees, and any other third parties (non-Licensee employees) who may be exposed to or gain access to FAST Confidential Information.

7. WARRANTIES. FAST warrants the tapes, diskettes or other media provided under this Agreement to be new, or like new and free of defects in materials and workmanship under normal use for ninety (90) days from the delivery date unless otherwise agreed to in writing by the parties. FAST will replace without charge any FAST supplied tapes, diskettes or other media not in good working order if returned to FAST during the warranty period.

8. WARRANTY EXCLUSIONS.

8.1. EXCEPT AS STATED IN SECTION 7, FAST, ITS PARENT, SUBSIDIARIES AND THEIR AFFILIATES, SUBCONTRACTORS AND SUPPLIERS MAKE NO WARRANTIES, EXPRESS OR IMPLIED.

8.2. The warranty provided in Section 7 does not cover repair for damages, malfunctions or service failures caused by:

8.2.1. Unauthorized actions of non-FAST personnel;

8.2.2. Failure to follow FAST's installation, configuration, operation or maintenance instructions;

8.2.3. Attachment to the Software of non-FAST software or failure of software not maintained by FAST, unless such installation or use is approved in writing by FAST.

9. LIMITATION OF LIABILITY.

9.1. For purposes of this Section 9, "FAST" shall be deemed to include FAST and its employees, agents, representatives, subcontractors, and suppliers, and "damages" shall be deemed to refer collectively to all injury, damage, loss, liability, expense or cost incurred.

9.2. FAST shall not be liable for indirect, special, collateral, incidental, or consequential damages, or for lost profits, savings or revenues of any kind, whether or not FAST has been advised of the possibility of such damages.

9.3. In no event will FAST be liable for damages in connection with or arising out of the Licensee's negligent or willful misconduct with regard to Licensee's use of the Software or Documentation under this Agreement.

10. INDEMINIFICATION/SAVE HARMLESS. The Licensee shall indemnify and hold harmless FAST from any and all liability, claims, damages, costs, expenses, and actions, including reasonable attorneys' fees (collectively, "claims"), related to or arising out of this Agreement where such claims are caused by or arise from the negligent or wrongful acts or omissions of the Licensee, its employees, agents, or subcontractors under this Agreement. The Licensee shall have no indemnification obligation under this Section for claims arising out of the negligence or misconduct of FAST.

11. TERMINATION. Either party may terminate this Agreement when the other has been provided written notice of default or non-compliance and has failed to cure the default or non-compliance within a reasonable time, not to exceed thirty (30) calendar days, after receipt of such notice.

12. ASSIGNMENT. This Agreement cannot be transferred or assigned without the mutual written consent of FAST and the Licensee.

13. USE OF THE JURISDICTION NAME. The Licensee agrees that FAST may, prior to, in the course of performance of this Agreement (or any order), or thereafter use the Licensee's name in advertising and promotional media as a customer or client of FAST.

14. WAIVER. None of the provisions of this Agreement will be deemed to have been waived by any act or acquiescence by any party, but only by an instrument in writing signed by an authorized representative of the waiving party. No waiver of any provision of this Agreement will constitute a waiver of any other provision or of the same provision on another occasion. Failure to enforce any provision of this Agreement will not constitute waiver of such provision or any other provisions of this Agreement.

15. ENTIRE AGREEMENT. This Agreement represents the entire agreement between the parties regarding its subject matter, superseding any prior oral or written agreements or understandings relating thereto.

16. SEVERABILITY. Should any one or more of the provisions of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, it shall be considered severed from this Agreement and shall not serve to invalidate the remaining provisions of this Agreement.

17. BINDING NATURE; NO THIRD PARTY BENEFICIARY. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties, and their respective successors and assigns, and is made solely and specifically for their benefit. No other person shall have any rights, interest or claims

hereunder or be entitled to any benefits under or on account of this Agreement as a third-party beneficiary or otherwise.

18. PRECEDENCE. If any term of this Agreement is in contradiction with another agreement on a different subject matter between the parties, the terms of this Agreement shall prevail unless the other agreement explicitly states otherwise.

19. AMENDMENT. This Agreement may only be enlarged, altered, voided or modified by a written amendment signed by FAST and the Licensee.

20. HEADINGS. Descriptive headings and Section/Paragraph numbering in this Agreement are for convenience only and shall not affect the construction or meaning of contractual language.

21. SURVIVAL OF CERTAIN AGREEMENT TERMS. Notwithstanding anything herein to the contrary, the parties understand and agree that all terms and conditions of this Agreement and the attachment hereto which may require continued performance, compliance, or effect beyond the termination or expiration date of the Agreement shall survive such termination or expiration date and shall be enforceable by the parties as provided herein in the event of a failure to perform or to comply by either party.

22. FORCE MAJEURE. Neither party shall be liable or deemed to be in default for any Force Majeure delay in performance occasioned by unforeseeable causes beyond the control and without the fault or negligence of the parties, including, but not restricted to, acts of God or the public enemy, government actions, public disturbances, labor disturbances, fires, floods, epidemics, quarantines, restrictions, freight embargoes or unusually severe weather.

23. NOTICES. All deliveries, notices, requests, demands or other communications related to this Agreement that either party may be required or may desire to give to the other will be deemed received by the recipient when delivered personally; or by registered or certified mail, return receipt requested; or by overnight carrier; or upon telephone confirmation to sender of receipt of a facsimile communication which is followed by a mailed hard copy from sender. Communications should be addressed as follows:

FAST:
Megan E. Mooney
Fast Enterprises, LLC
800 E. Park Blvd. Ste. 720
Boise, ID 83712
Tel: (303) 773-4828
Fax: (303) 773-4829

MMooney@FastEnterprises.com

LICENSEE:
Name:
Title:
Address:
Telephone:
Fax:
Email:

24. GOVERNING LAW. This Agreement shall be construed and governed in accordance with the laws of the State of Colorado without giving effect to Colorado's choice of law provisions. The Licensee and FAST: (i) submit to the jurisdiction of the state and federal courts located in Colorado as the case may be; (ii) waive any and all objections to jurisdiction and venue; and (iii) will not raise forum non conveniens as an objection to the location of any litigation.

ACCEPTED AND AGREED TO:

_____

Print name and Title

_____

Signature

Date:

ACCEPTED AND AGREED TO:
FAST ENTERPRISES, LLC

Per:

_____

Print name

_____

Signature

Date:

ATTACHMENT A

NONDISCLOSURE AGREEMENT

FAST ENTERPRISES, LLC, a New York limited liability company, ("FAST") is providing _____ (the "Licensee") access to FAST products, tools, inventions, innovations, design concepts, program code, knowledge capital and professional services.

The following articles govern the procedures by which the undersigned ("I", "me", "my") will handle FAST confidential information. Specifically:

1. FAST declares that the following are confidential ("Confidential Material"):
   a) Any data, products, inventions, innovations, program source code, program object code, program executables, data designs, data definitions, programming aids, tools, utilities, configurations, drawings, formulae, algorithms, ideas, designs, concepts, know-how, discoveries, techniques, training material, documents, manuals, methodologies, specifications, models, and other knowledge capital, electronic or otherwise, owned by FAST whether copyrightable or patentable or not;
   b) Information relating to the technology, customers, business plans, promotional and marketing activities, pricing policies, finances and other business affairs of FAST;
   c) Any documents or material which are marked "Confidential";
   d) Information which, under the circumstances, ought to be treated as confidential.
2. FAST will disclose such Confidential Material to individuals as required for:
   a) The implementation of FAST software for the Licensee's use; and/or
   b) Use of FAST software by the Licensee.
3. I agree to receive any such Confidential Material in confidence and to use such Confidential Material solely for the purpose defined in Section 2 above. I further agree to take either:
   a) Such measures as I would take in protecting the confidentiality of my own confidential information, or
   b) Such measures as a reasonable person would take in protecting the confidentiality of his or her own confidential information,

   whichever represents the higher standard, in protecting the confidentiality of the Confidential Material.
4. I agree that any Confidential Material that I receive can only be used for purposes outlined in Section 2 above. Other uses can be made only after obtaining the written permission of FAST.

5. I agree not to remove, from Licensee's property, any Confidential Material without first obtaining the written permission of FAST.
6. I agree that I will not disclose any Confidential Material, directly or indirectly, to any party other than the Licensee without first obtaining the written permission of FAST.
7. I agree that all Confidential Material provided under the terms of this Agreement shall remain the property of FAST and shall be returned to FAST upon its request, including any and all copies I might produce.
8. Nothing herein shall be construed as giving me any license or right in connection with the Confidential Material disclosed to me.
9. My obligation to maintain information in confidence shall not extend to such portions of the information that, at the time of disclosure to me, are general knowledge in the public domain.
10. I understand that my obligation to protect the confidentiality of the Confidential Material extends beyond my involvement with the Licensee and beyond my involvement with FAST. Furthermore, my obligation to protect the confidentiality of the Confidential Material is not subject to changes in my employment status.
11. I understand that access to the Confidential Material is provided on a need-to-know basis. If, for any reason, such need no longer exists, I agree that I will return all Confidential Material to FAST, including any and all copies I may have produced.
12. I understand that Confidential Material is provided to me as-is and FAST makes no warranties with respect to Confidential Material.
13. This Agreement shall be construed and governed in accordance with the laws of the State of Colorado without giving effect to Colorado's choice of law provisions.
14. If any term of this Agreement should be declared void or unenforceable, such declaration will have no effect on the remaining terms herein.

I HAVE READ THIS AGREEMENT CAREFULLY AND I UNDERSTAND AND ACCEPT THE OBLIGATIONS WHICH IT IMPOSES UPON ME WITHOUT RESERVATION. NO PROMISES OR REPRESENTATIONS HAVE BEEN MADE TO ME TO INDUCE ME TO SIGN THIS AGREEMENT. I SIGN THIS AGREEMENT VOLUNTARILY AND FREELY.

Per our response to 2.3.11 General Information, please see below for FAST's Disaster Recovery Plan.

Disaster Recovery Plan (DRP) for GenTax Hosted Solution

(Note: This disaster recovery plan and strategy is meant to be used as a working document when a service level agreement and recovery time/point objectives have been defined and finalized during project execution. However, the provided document should provide enough information for the Agency to understand our overall disaster recovery approach and strategy.)

Plan and related Business Processes

Business Process	Feature	Relevant Technical Components
TBD upon project execution		• TBD

December 6, 2017

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1. Purpose and Objective

Fast Enterprises (FAST) developed this disaster recovery plan (DRP) to be used in the event of a significant disruption to the features listed in the table above. The goal of this plan is to outline the key recovery steps to be performed during and after a disruption to return to normal operations as soon as possible.

Scope

The scope of this DRP document addresses technical recovery only in the event of a significant disruption at our primary data center providing online services for the Agency. The intent of the DRP is to be used in conjunction with a business continuity plan (BCP). A DRP is a subset of the overall recovery process contained in a BCP. Plans for the recovery of people, infrastructure, and internal and external dependencies not directly relevant to the technical recovery outlined herein should be included in the Business Continuity Plan and/or the Agency Incident Response and Incident Management plans.

This disaster recovery plan provides:

- Guidelines for **determining plan activation**;
- Technical **response flow** and recovery strategy;
- Guidelines for **recovery procedures**;
- References to key **Business Resumption Plans** and technical dependencies;
- **Rollback procedures** that will be implemented to return to standard operating state;
- **Checklists** outlining considerations for escalation, incident management, and plan activation.

The specific objectives of this disaster recovery plan are to:

- Immediately mobilize a core group of leaders to assess the technical ramifications of a situation;
- Set technical priorities for the recovery team during the recovery period;
- Minimize the impact of the disruption to the impacted features and business groups;
- Stage the restoration of operations to full processing capabilities;
- Enable rollback operations once the disruption has been resolved if determined appropriate by the recovery team.

Within the recovery procedures there are significant dependencies between and supporting technical groups within and outside FAST. This plan is designed to identify the steps that are expected to take to coordinate with other groups / vendors to enable their own recovery. This plan is not intended to outline all the steps or recovery procedures that other departments need to take in the event of a disruption, or in the recovery from a disruption.

2. Dependencies

This section outlines the dependencies made during the development of this disaster recovery plan. If and when needed the DR TEAM will coordinate with their partner groups as needed to enable recovery.

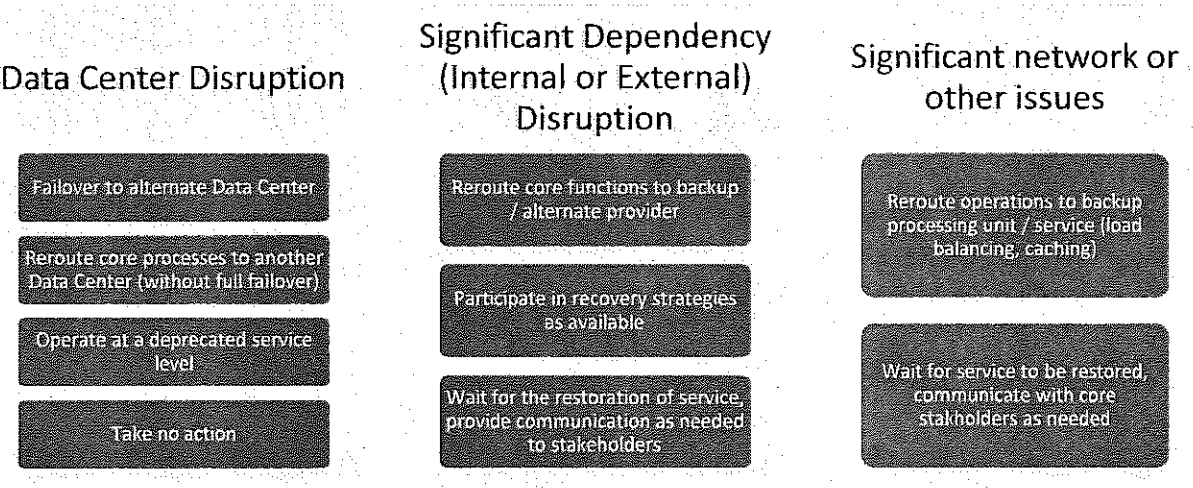
Dependency	Assumptions
User Interface / Rendering	• Users (end users, power users, administrators) are unable to access the system through any part of the instance (e.g. client or server side, web interface or downloaded application). • Infrastructure and back-end services are still assumed to be active/running.
Business Intelligence / Reporting	• The collection, logging, filtering, and delivery of reported information to end users is not functioning (with or without the user interface layer also being impacted). • Standard backup processes (e.g. tape backups) are not impacted, but the active / passive or mirrored processes are not functioning. • Specific types of disruptions could include components that process, match and transforms information from the other layers. This includes business transaction processing, report processing and data parsing.
Network Layers	• Connectivity to network resources is compromised and/or significant latency issues in the network exist that result in lowered performance in other layers. • Assumption is that terminal connections, serially attached devices and inputs are still functional.
Storage Layer	• Loss of SAN, local area storage, or other storage component.
Database Layer	• Data within the data stores is compromised and is either inaccessible, corrupt, or unavailable
Hardware/Host Layer	• Physical components are unavailable or affected by a given event
Virtualizations (VM's)	• Virtual components are unavailable • Hardware and hosting services are accessible
Administration	• Support functions are disabled such as management services, backup services, and log transfer functions. • Other services are presumed functional
Internal/External	• Interfaces and intersystem communications corrupt or

Dependencies	compromised

In addition assumptions within the Business Continuity Plan for this work stream still apply.

3. Disaster Recovery Strategies

The overall DR strategy of GenTax is summarized in the table below and documented in more detail in the supporting sections. These scenarios and strategies are consistent across the technical layers (user interface, database, etc.)



4. Disaster Recovery Procedures

A disaster recovery event can be broken out into three phases, the response, the resumption, and the restoration. These phases are also managed in parallel with any corresponding business continuity recovery procedures summarized in the business continuity plan.

Response Phase: The immediate actions following a significant event.

- On-call personnel paged
- Decision made around recovery strategies to be taken
- Full recovery team identified

Resumption Phase: Activities necessary to resume services after team has been notified

- Recovery procedures implemented
- Coordination with other departments executed as needed

Restoration Phase: Tasks taken to restore service to previous levels.

- Rollback procedures implemented
- Operations restored

Response Phase

The following are the activities, parties and items necessary for a DR response in this phase. Please note these procedures are the same regardless of the triggering event (e.g. whether caused by a Data Center disruption or other scenario).

Response Phase Recovery Procedures – All DR Event Scenarios

Step	Owner	Duration	Components
Identify issue, page on call / Designated Responsible Individual (DR TEAM)	DR TEAM	x minutes	• Issue communicated / escalated • Priority set
Identify the team members needed for recovery	DR TEAM	x minutes	Selection of core team members required for restoration phase from among the following groups: • Operations •
Establish a conference line for a bridge call to coordinate next steps	DR TEAM or Ops	x minutes	Primary bridge line: NUMBER Secondary bridge line: NUMBER Alternate / backup communication tools: email, communicator
Communicate the specific recovery roles and	DR TEAM	x minutes	• Documentation / tracking of timelines and next decisions

determine which recovery strategy will be pursued.			• Creation of disaster recovery event command center / "war room" as needed

This information is also summarized by feature in Appendix A: Disaster Recovery Contacts - Admin Contact List.

Resumption Phase

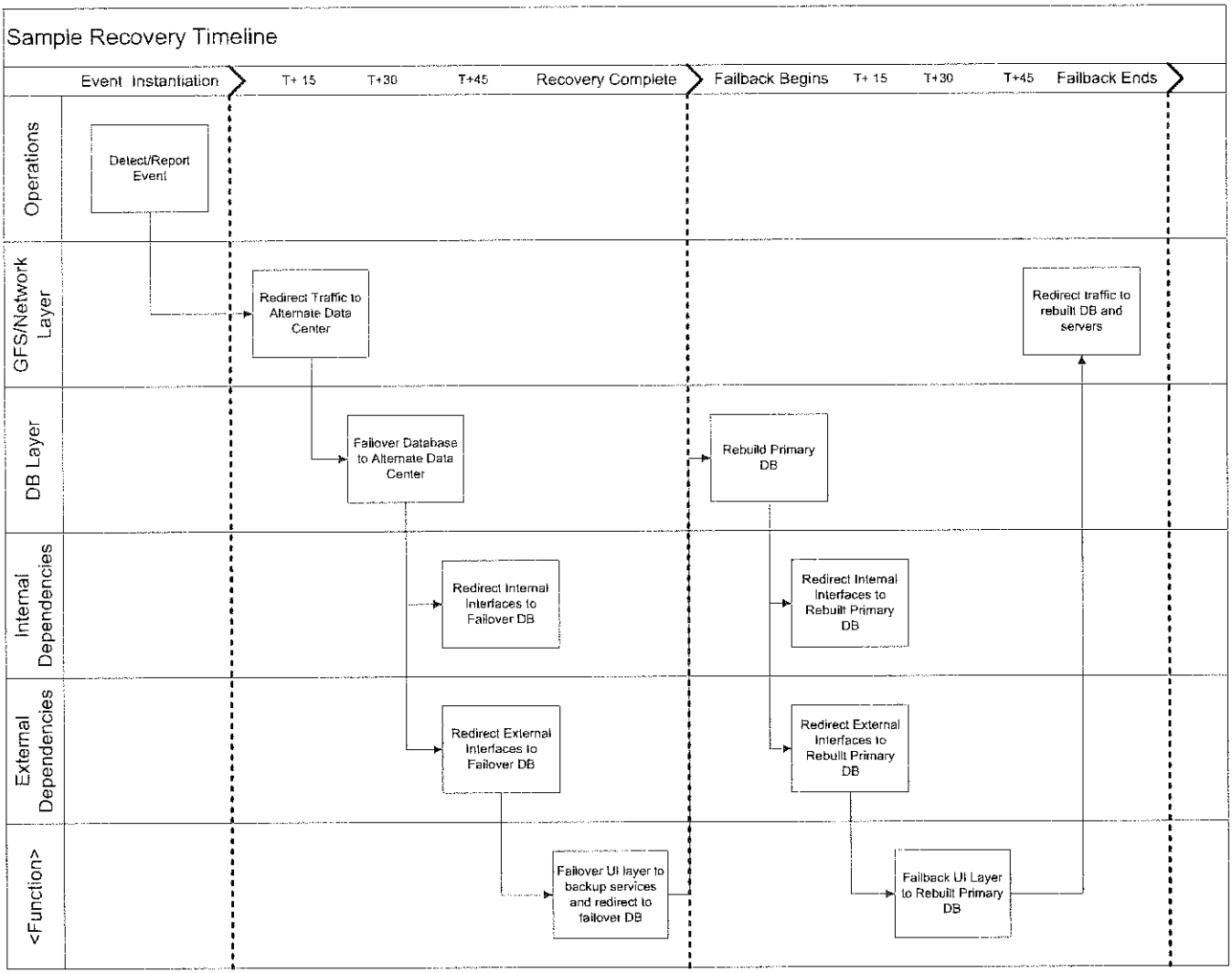
During the resumption phase, the steps taken to enable recovery will vary based on the type of issue. The procedures for each recovery scenario are summarized below.

Data Center Recovery

Full Data Center Failover

Step	Owner	Duration	Components
Initiate Failover	DR TEAM	TBD	• Restoration procedures identified • Risks assessed for each procedure • Coordination points between groups defined • Issue communication process and triage efforts established
Complete Failover	DR TEAM	TBD	• Recovery steps executed, including handoffs between key dependencies
Test Recovery	DR TEAM	TBD	• Tests assigned and performed • Results summarized and communicated to group
Failover deemed successful	DR TEAM	TBD	•

Below is a sample timeline for recovery actions associated with the failover the technical components between different data centers to provide geo-redundant operations. Coordination of recovery actions is crucial. A timeline is necessary in order to manage recovery between different groups and layers.



Reroute critical processes to alternate Data Center

Step	Owner	Duration	Components
TBD during project execution			•
			•

Operate at deprecated service level – prioritize critical feeds

Step	Owner	Duration	Components
TBD during project execution			•

Step	Owner	Duration	Components
			•

Take no action – monitor for Data Center recovery

This recovery procedure would only be the chosen alternative in the event no other options were available to (e.g. the cause and recovery of the Data Center is fully in the control of another department or vendor).

Step	Owner	Duration	Components
Track communication and status with the core recovery team.	DR TEAM	As needed	•
Send out frequent updates to core stakeholders with the status.	DR TEAM	As needed	

Internal or External Dependency Recovery

Reroute operations to backup provider

Step	Owner	Duration	Components
TBD during project execution			•
			•

Execute available recovery procedures

Step	Owner	Duration	Components
Inform other teams about technical dependencies	DR TEAM	As needed	
	DR TEAM	As needed	•

Take no action – monitor status

This recovery procedure would only be the chosen alternative in the event no other options were available to (e.g. the cause and recovery of the disruption is fully in the control of another department or vendor).

Step	Owner	Duration	Components
Track communication and status with the core recovery team.	DR TEAM	As needed	• Provide feedback about GenTax service availability
Send out frequent updates to core stakeholders with the status.	DR TEAM	As needed	

Significant Network or Other Issue Recovery (Defined by quality of service guidelines)

Reroute operations to backup provider

Step	Owner	Duration	Components
			•
			•

Execute available recovery procedures

Step	Owner	Duration	Components
Inform other teams about technical dependencies	DR TEAM	As needed	• Hardware (CPU, Memory, Hard disk, Network requirements) •
teams	DR TEAM	As needed	
	DR TEAM	As needed	•

Take no action – monitor status

This recovery procedure would only be the chosen alternative in the event no other options were available to (e.g. the cause and recovery of the internal or external dependency is fully in the control of another department or vendor).

Step	Owner	Duration	Components
Track communication and status with the core recovery team.	DR TEAM	As needed	• Provide feedback about GenTax service availability
Send out frequent updates to core stakeholders with the status.	DR TEAM	As needed	

Restoration Phase

During the restoration phase, the steps taken to enable recovery will vary based on the type of issue. The procedures for each recovery scenario are summarized below.

Data Center Recovery

Full Data Center Restoration

Step	Owner	Duration	Components
Determine whether failback to original Data Center will be pursued	DR TEAM	TBD	• Restoration procedures determined
Original data center restored	DR TEAM	TBD	• Server Farm level recovery
Complete Failback	DR Team	TBD	• Failback steps executed, including handoffs between key dependencies
Test Failback	DR Team	TBD	• Tests assigned and performed

Step	Owner	Duration	Components
			• Results summarized and communicated to group • Issues (if any) communicated to group
Determine whether failback was successful	DR TEAM	TBD	• Declaration of successful failback and communication to stakeholder group. • Disaster recovery procedures closed. • Results summarized, post mortem performed, and DRP updated (as needed).

The following section contains steps for the restoration procedures.

Full Server Farm Recovery

This section describes the process for recovering from a farm-level failure, for a: three-tier server farm consisting of a *database server*, an *application server*, and *web/load balance server* providing web content.

The following describes the recovery process:

SQL Server:

- VMware Site Recovery Manager – verify VM version and connectivity

Application Server:

- VMware Site Recovery Manager – verify VM version and connectivity

Front-End Web/Load Balance Server:

- VMware Site Recovery Manager – verify VM version and connectivity

(Details TBD on project execution)

The DR site contains a full standby environment configured with daily replication events for both Storage Area Network (SAN) and VM Site Recovery Manager. The overall objective is to perform a full recovery and data center failover as quickly as possible.

Add additional restore steps – TBD on project execution

Internal or External Dependency Recovery

Execute available recovery procedures

Step	Owner	Duration	Components
TBD during project execution	DR TEAM	As needed	•
	DR TEAM	As needed	

Take no action – monitor status

This recovery procedure would only be the chosen alternative in the event no other options were available to (e.g. the cause and recovery of the disruption is fully in the control of another department or vendor).

Step	Owner	Duration	Components
Track communication and status with the core recovery team.	DR TEAM	As needed	• Provide feedback about GenTax service availability
Send out frequent updates to core stakeholders with the status.	DR TEAM	As needed	

Significant Network or Other Issue Recovery (Defined by quality of service guidelines)

Execute available recovery procedures

Step	Owner	Duration	Components
TBD during project execution	DR TEAM	As needed	•

Take no action – monitor status

This recovery procedure would only be the chosen alternative in the event no other options were available to (e.g. the cause and recovery of the internal or external dependency is fully in the control of another department or vendor).

Step	Owner	Duration	Components
Track communication and status with the core recovery team.	DR TEAM	As needed	•
Send out frequent updates to core stakeholders with the status.	DR TEAM	As needed	

Appendix A: Disaster Recovery Contacts - Admin Contact List

The critical team members who would be involved in recovery procedures for feature sets are summarized below.

Feature Name	Contact Lists

TBD during project execution	

For the key internal and external dependencies identified, the following are the primary contacts.

Dependency Name	Contact Information
TBD during project execution	

In addition the key BCP individuals are:

Appendix B: Document Maintenance Responsibilities and Revision History

This section identifies the individuals and their roles and responsibilities for maintaining this Disaster Recovery Plan.

Primary Disaster Recovery Plan document owner is:

Primary Designee:

Alternate Designee: [NAME]

Name of Person Updating Document	Date	Update Description	Version #	Approved By

Appendix C: Server Farm Details

Farm Configuration (status as of date)

Table

Appendix D: Glossary/Terms

Standard Operating State: Production state where services are functioning at standard state levels. In contrast to recovery state operating levels, this can support business functions at minimum but deprecated levels.

Presentation Layer: Layer which users interact with. This typically encompasses systems that support the UI, manage rendering, and captures user interactions. User responses are parsed and system requests are passed for processing and data retrieval to the appropriate layer.

Processing Layer: System layer which processes and synthesizes user input, data output, and transactional operations within an application stack. Typically this layer processes data from the other layers. Typically these services are folded into the presentation and database layer, however for intensive applications; this is usually broken out into its own layer.

Database Layer: The database layer is where data typically resides in an application stack. Data is stored in Microsoft SQL Server.

Network Layer: The network layer is responsible for directing and managing traffic between physical hosts. It is typically an infrastructure layer and is usually outside the purview of most business units. This layer usually supports load balancing, geo-redundancy, and clustering.

Storage Layer: This is typically an infrastructure layer and provides data storage and access. In most environments this is usually regarded as SAN

Hardware/Host Layer: This layer refers to the physical machines that all other layers are reliant upon. VMware is the operating system that operates on each host to provide a clustered virtual environment to host multiple virtual servers running Microsoft Windows Server 2012.

Virtualization Layer: Virtual machines (VM's) are used to partition/encapsulate a machine's resources to behave as separate distinct hosts. The virtualization layer refers to these virtual machines.

Administrative Layer: The administrative layer encompasses the supporting technology components which provide access, administration, backups, and monitoring of the other layers.

Per our response to 2.3.13 Experience Serving Similar Clients, please see below for client profiles for all GenTax projects that have started in the last five years.

In the past five years, FAST has started or completed tax modernization projects for the following tax and revenue agencies:

- Alabama Department of Revenue
- Alaska Department of Revenue
- Arizona Department of Revenue
- Arkansas Department of Finance and Administration
- Arlington County, Virginia
- Province of British Columbia, Canada – Ministry of Finance
- California Board of Equalization
- City and County of Denver, Colorado
- Colorado Department of Revenue
- District of Columbia
- Finnish Tax Administration
- Georgia Department of Revenue
- Hawaii Department of Revenue
- Illinois Department of Revenue
- Tax Administration Jamaica
- City of Kansas City, Missouri
- City of Lakewood, Colorado
- Louisiana Department of Revenue
- City and County of Louisville, Kentucky
- Royal Malaysian Customs Department
- Province of Manitoba, Canada – Ministry of Finance
- Massachusetts Department of Revenue
- Mississippi Department of Revenue
- Montana Department of Revenue
- New Mexico Tax and Revenue Department
- City of New York, New York
- New Zealand Ministry of Finance, Inland Revenue
- North Dakota Department of State Tax Commissioner
- Oklahoma Tax Commission
- Province of Ontario, Canada, Ministry of Finance

- Oregon Department of Revenue
- Republic of Poland – Ministry of Finance
- Commonwealth of Puerto Rico
- South Carolina Department of Revenue
- Tennessee Department of Revenue
- Republic of Trinidad & Tobago – Ministry of Finance, Inland Revenue Division
- Utah State Tax Commission
- Vermont Department of Revenue
- Washington Department of Licensing
- Washington Department of Revenue
- West Virginia Department of Revenue
- Wisconsin Department of Revenue

Typically, these projects deliver:

- One or more tax, revenue, and licensing programs
- A functional subsystem such as Collections, Data Warehouse, or e-Services
- A GenTax version upgrade

The following table shows the start and completion dates and the scope of the modernization for each project (or "rollout").

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
Alabama Department of Revenue			
	2011-12-01	2012-04-27	Alabama Uniform Severance Tax Coal Severance Tax Forest Products Severance Tax Iron Ore Severance Tax Local Solid Minerals Tax Motor Vehicle Dealer Regulatory License TVA in Lieu of Taxes Payments
	2013-04-15	2013-11-12	V09 Upgrade
	2014-08-22	2014-10-03	IFTA Privilege License
	2016-03-01	2016-10-28	Agriculture and Industry Fee

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2016-05-02	2016-10-28	V10 Upgrade
Alaska Department of Revenue			
	2013-04-15	2014-04-28	Alcohol Beverages Tax and Licensing Additional Tax types and Licenses on e-Services Commercial Passenger Vessel Excise Tax Corporate Income Tax Large Passenger Vessel Gambling Tax Mining License Tax and Licensing Motor Fuel Tax and Licensing Tire Fee Tobacco Tax and Licensing Vehicle Rental Tax
	2014-02-04	2015-01-09	Oil and Gas Economic Reporting and Forecasting
	2014-02-04	2015-01-19	All R02 Tax type and Licenses are available through e-Services Oil and Gas Conservation Surcharge Oil and Gas Production Tax
	2014-02-04	2015-10-30	Oil and Gas Property Tax
	2015-01-20	2016-02-22	All R03 Tax type and Licenses are available through e-Services Dive Fishery Management Assessment Electric Cooperative Tax Fisheries Business Tax Fisheries Licenses Fishery Resource Landing Tax Gaming Tax and Licensing Marijuana Tax Regional Seafood Development Tax Regulatory Cost Changes Salmon Enhancement Tax Salmon Price Reports Seafood Marketing Assessment Telephone Cooperative Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2016-01-01	2016-05-31	Charitable Organization and Paid Solicitor Registrations
Arizona Department of Revenue			
	2015-01-05	2015-06-29	Tobacco Tax
Arkansas Department of Finance and Administration			
	2014-02-10	2014-12-08	V09 Upgrade
	2016-03-28	2016-08-08	V10 Upgrade
Arlington County, Virginia			
	2012-07-01	2012-12-31	Court Collections

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
Province of British Columbia, Canada – Ministry of Finance			
	2011-11-01	2013-04-01	Provincial Sales Tax
	2013-01-01	2014-01-06	V09 Upgrade
	2014-01-13	2014-12-08	Insurance Premium Tax Logging Tax
	2014-05-01	2015-05-04	Other agency debt collections (Non-tax operations).
	2015-01-01	2015-12-07	Mine Inspection Fee Mineral Land Tax Mineral Tax V10 upgrade
	2016-01-04	2016-12-05	Liquified Natural Gas Income Tax
	2016-01-04	2017-02-06	Home Owner Grant Home Owner Grant Administration Police Tax Rural Property Tax School Tax
California Board of Equalization			
	2016-10-03	2017-03-06	Quick Win (Collections)
City and County of Denver, Colorado			
	2013-01-07	2013-05-31	V09 Upgrade
	2015-10-06	2016-01-05	V10 Upgrade
	2016-02-29	2016-06-10	Emergency 911 Charge
Colorado Department of Revenue			
	2011-10-01	2012-06-15	Alcohol Tax Cigarette Tax Food Service License Gaming Tax Off-Highway Pari-mutuel Racing Fees Public Utility Comm Tobacco Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
			Vending Machine Stickers
	2014-05-01	2014-11-21	V09 Upgrade
	2015-09-01	2015-12-31	V10 Upgrade
District of Columbia			
	2014-10-01	2015-10-26	Estate Tax Fiduciary Tax Individual Income Tax
	2015-11-09	2016-10-24	Corporate Income Unincorporated Franchise Withholding Taxes
	2016-01-11	2016-04-30	V10 Upgrade
Finnish Tax Administration			
	2014-05-05	2016-01-04	Gift and Inheritance Tax
	2015-04-06	2017-01-02	Employer Contribution Lottery Tax Pharmacy Tax Tax at Source Tax on Insurance Premiums Value-Added Tax
	2015-10-12	2017-01-02	Employer Contribution VAT
Georgia Department of Revenue			
	2011-12-01	2012-09-30	Alcohol Tax Amusements Tax Motor Fuel Tax Tobacco Tax
	2014-02-01	2014-10-30	V09 Upgrade
Hawaii Department of Revenue			
	2015-08-15	2015-12-28	MeF
	2015-09-01	2016-08-15	Goods and Services Tax
Illinois Department of Revenue			

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2013-04-01	2014-06-16	V09 Upgrade
	2013-09-02	2014-06-16	EZ Dec replacement
	2014-07-21	2015-07-13	Fuel Tax Gaming Tax
	2016-07-11	2017-01-17	V10 Upgrade
Tax Administration Jamaica			
	2014-05-19	2015-02-09	Audit/Compliance Collections e-Services General Consumption Tax and Special Consumption Tax Guest Accommodation Room Tax Registration Special Consumption Tax Telephone Call Tax
	2015-02-09	2015-12-07	Business Income Tax Individual Income Tax Pay As You Earn
	2015-12-07	2016-09-05	Betting Gaming & Lottery Tax Contractor's Levy Environmental Protection Levy Trade and Business License Withholding of Taxes on Specified Services Withholding Tax - Miscellaneous Withholding Tax on Dividends Withholding Tax on Interest
City of Kansas City, Missouri			
	2013-07-22	2014-05-05	Adm Citations Board up Demolitions Neighborhood Improvements Owner Compliance Real Estate Re-inspection Sewer

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
			Sidewalks Special Business Districts Watermains
City of Lakewood, Colorado			
	2012-10-01	2013-05-05	Accommodation Business & Occupation Cable Franchise Gas & Electric Franchise Lakewood Business Pro Public Education and Government (PEG) Franchise Sales Special Event
Louisiana Department of Revenue			
	2014-01-01	2014-11-03	V09 Upgrade
Louisville, Kentucky Metro Revenue Department			
	2017-07-01	2018-07-01	Occupational License Fee on Wages Occupational License Fee on Net Profits Insurance Premium Transient Room Truck License
Royal Malaysian Customs Department			
	2012-08-01	2013-09-15	Goods and Services Tax
Province of Manitoba, Canada – Ministry of Finance			
	2014-07-07	2015-07-06	V09 Upgrade
Massachusetts Department of Revenue			
	2014-01-21	2014-11-09	Alco Bev Excise Ferry Fee IFTA Carrier IFTA Decal IFTA Jurisdiction Motor Vehicle Excise
	2014-12-01	2015-12-07	Aviation Gasoline

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
			Boats/Rec Vehicles Cigarette License Cigarette Smokeless Cigarette Tax Cigars License Cigars Tax Club Alcohol Corp Combined Excise Financial Institution Excise Gambling Withholding Gasoline Fuel License Gasoline Fuel Refund Gasoline Fuel Tax Jet Fuel License Jet Fuel Tax Life Insurance Excise Lottery Annuity Withholding Meals Ocean Marine Insurance Excise Other Fees and Penalties Parking Facilities Surcharge Performer Withholding PPO Insurance Excise PTE Withholding Public Utility Excise Rooms Sales Sales Services Satellite Sales Site Seeing Tours Surcharge Special Fuels Refund Special Fuels Tax Special Fuels Tax License Unrelated Business Income Tax Urban Redevelopment Use Vehicular Rental Surcharge Withholding Withholding Pension

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2016-01-25	2016-12-05	Estate Fiduciary Individual Income Inheritance Tax Partnership Personal Use Tax
Mississippi Department of Revenue			
	2011-11-01	2012-10-01	Discovery Fiduciary (Estate & Trust) Income Tax Homestead Exemption Reimbursement Individual Income Tax Withholding Tax Withholding Tax - Employee Leasing Withholding Tax - Gaming
	2012-11-05	2013-10-07	Casual Auto Sales Tax City Utility Tax Contractors tax Insurance Premium Tax Motor Cycle / ATV Trauma Care Fee Motor Vehicle Rental Tax Occupancy Tax Prepaid Wireless E911 Sales Tax Special City & County Taxes Tire Disposal Use tax
	2013-11-04	2014-10-06	911 Emergency Tax Compressed Gas Decals Compressed Gas Tax Environmental Protection Fee Gas Severance Tax Gasoline Tax Hazardous / Non-Hazardous Waste Fee IFTA International Registration Plan Locomotive Fuel Tax Lubricating Oil Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
			Municipal Gas Utility Tax N/A- Added for Lien Registry Natural Gas User's Tax Oil Severance Tax Public Utilities Regulatory Tax Railroad Regulatory Tax Seawall Tax Special Fuel Tax Statewide Privilege License Terminal Operator / Carrier Report Timber Severance Tax
	2014-11-10	2015-05-13	Nuclear in-Lieu Rail Car in-Lieu TVA in-Lieu
	2016-02-01	2016-07-09	V10 Upgrade
Montana Department of Revenue			
	2012-08-03	2012-12-01	Rail Car Tax
	2013-04-16	2013-12-09	Excise and License Tax
	2014-04-30	2014-09-12	File Processing Account
	2014-06-02	2014-10-14	Industrial Property Reporting Personal Property Reporting Form
	2016-03-28	2017-01-31	V10 Upgrade
New Mexico Tax and Revenue Department			
	2012-04-18	2014-06-30	V09 Upgrade
	2012-11-26	2013-07-08	IFTA
	2016-04-25	2016-10-10	V10 Upgrade
City of New York, New York			
	2015-01-20	2016-01-19	Banking Corporation Tax General Corporation Tax Non-resident Employees of the City of New York - Form 1127 Unincorporated Business Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2016-01-19	2017-01-17	Commercial Rent Tax E-911 Tax Hotel Room Occupancy Tax Retail Beer, Wine, and Liquor License Tax Utility Tax
New Zealand Ministry of Finance, Inland Revenue			
	2015-08-03	2017-02-06	Goods and Services Tax
North Dakota Department of State Tax Commissioner			
	2014-02-27	2014-11-17	V09 Upgrade
	2015-10-01	2015-12-03	V10 Upgrade
Oklahoma Tax Commission			
	2011-11-14	2012-11-13	Rural Electric Co-op Vehicle Rental Tax Vendor and Consumer Use
	2012-11-14	2013-12-16	Business Income Tax Individual Income Tax
	2013-12-16	2014-12-15	Workers' Compensation
	2014-01-06	2014-10-13	V09 Upgrade
	2014-12-16	2015-12-14	Charitable Fuel Tax Horse Track Pari-Mutuel Pick Six Special Fuel Dealer Wire Transmitter
	2015-08-17	2016-07-01	General Ledger
	2016-01-04	2016-06-03	V10 Upgrade
Province of Ontario, Canada, Ministry of Finance			
	2012-04-23	2012-12-17	IAH dunning Raw Leaf
	2013-05-20	2014-04-28	V09 Upgrade

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
	2015-02-01	2015-07-21	Refund Set Off
	2015-09-08	2016-06-30	Enhanced IFTA Audit
Oregon Department of Revenue			
	2013-10-15	2014-11-12	Cigarette & Tobacco Taxes Corporate Income Tax
	2014-11-13	2015-12-01	Emergency Communications Tax Fiduciary Estate & Trust Partnership Pass Through Entity Personal Income Tax Property Tax Deferral Self-employment Taxes
	2015-12-02	2016-11-15	Amusement Device Tax Hazardous Substance Possession Fee Other Agency Accounts Payroll Tax Petroleum Load Fee State Lodging Withholding Workers Comp Assessment
Republic of Poland – Ministry of Finance			
	2013-02-01	2013-12-07	Fixed Amount Tax Civil Law Transaction Inheritance Tax
	2013-02-01	2015-12-28	e-Services
Commonwealth of Puerto Rico			
	2016-01-04	2016-06-01	Value-Added Tax
	2016-06-01	2016-10-31	Sales Tax
South Carolina Department of Revenue			
	2014-08-25	2015-08-31	900#s Telephone Services Tax Accommodations Tax Arts/Crafts Tax Aviation Fuel Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
			Capital Projects Tax Casual Excise Tax Catawba Tax Durable Medical Equipment Tax (sunset*) Education Capital Improvement Tax Local Option Sales/Use Tax Max Tax Rental Car Surcharge Retailer's License Tax Sales Tax School District Tax Solid Waste Tax Tourism Development Tax Transportation Tax Use Tax Withholding 2% Non Res Contractor Tax Withholding Tax
	2015-09-01	2016-08-15	Admissions Tax Bank Tax Business Personal Property Tax Corporate Franchise Tax Corporate Income Tax Dry Cleaning Facility Fees Dry Cleaning Surcharge Electric Coop Tax Eleemosynary Tax Fiduciary Tax Partnership Tax PSC Utility Registration Fees Public Utility Tax Savings and Loan Tax Solvent Surcharge Fee Sub-S Withholding Tax Textile Tax
Tennessee Department of Revenue			
	2016-01-04	2017-03-06	Sales & Use Tax Tobacco Tax

Tax Modernization Projects Started or Completed in the Last Five Years

Agency	Started	Completed	Tax Modernization Scope
Republic of Trinidad & Tobago – Ministry of Finance, Inland Revenue Division			
	2014-10-01	2015-07-20	e-Tax V09 Upgrade
Utah State Tax Commission			
	2014-01-06	2014-11-10	V09 Upgrade
	2015-03-02	2015-11-02	Property Tax
	2016-01-01	2016-08-22	V10 Upgrade
Vermont Department of Revenue			
	2014-02-19	2014-12-08	Business Income Tax Corporate Income Tax
	2015-01-21	2015-11-12	Fuel Gross Receipts Meals & Rooms Tax Sales and Use Tax Withholding Tax
	2016-01-13	2016-12-05	Personal Income Tax
Washington Department of Licensing			
	2014-10-01	2015-10-26	Fuel Tax summary
	2014-10-01	2015-10-26	IFTA summary
Washington Department of Revenue			
	2015-07-01	2016-06-06	BLS (Business Licensing)
West Virginia Department of Revenue			
	2013-01-01	2013-11-04	V09 Upgrade
	2016-07-01	2016-12-19	V10 Upgrade
Wisconsin Department of Revenue			
	2013-01-10	2013-06-28	Data Warehouse
	2013-01-10	2013-06-28	Discovery Leads
	2013-10-10	2014-01-13	Fraud Manager

AUDITED FINANCIALS

Fast Enterprises, LLC (FAST) is a privately held company in a highly competitive industry. Our financial statements contain confidential information that is not disclosed to the public. We ask that these statements be treated accordingly.

ATTACHMENT A
MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR COMMITMENT FORM

In accordance with 25 IAC 5-5, the respondent is expected to submit with its proposal a MWBE Subcontractor Commitment Form. The Form must show that there are, participating in the proposed contract, Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) listed in the Minority and Women's Business Enterprises Division (MWBED) directory of certified firms located at http://www.in.gov/idoa/2352.htm.

If participation is met through use of vendors who supply products and/or services directly to the Respondent, the Respondent must provide a description of products and/or services provided that are directly related to this proposal and the cost of direct supplies for this proposal. Respondents must complete the Subcontractor Commitment Form in its entirety.

Failure to meet these goals will affect the evaluation of your Proposal. The Department reserves the right to verify all information included on the MWBE Subcontractor Commitment Form.

Respondents are encouraged to contact and work with MWBED at 317-232-3061 to design a subcontractor commitment to meet established goals as referenced in this solicitation.

Prime Contractors must ensure that the proposed subcontractors meet the following criteria:

- Must be listed on the IDOA Directory of Certified Firms, on or before the proposal due date
- Each firm may only serve as one classification – MBE, WBE, or IVBE (see section 1.22)
- A Prime Contractor who is an MBE or WBE must meet subcontractor goals by using other listed certified firms. Certified Prime Contractors cannot count their own workforce or companies to meet this requirement.
- **Must serve a Commercially Useful Function (CUF). The firm must serve a value-added purpose on the engagement, as confirmed by the State.**
- Must provide goods or service only in the industry area for which it is certified as listed in the directory at http://www.in.gov/idoa/2352.htm
- Must be used to provide the goods or services specific to the contract
- National Diversity Plans are generally not acceptable

MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR LETTER OF COMMITMENT

A signed letter(s), on company letterhead, from the MBE and/or WBE must accompany the MWBE Subcontractor Commitment Form. Each letter shall state and will serve as acknowledgement from the MBE and/or WBE of its subcontract amount as a percentage of the total cost, a description of products and/or services to be provided on this project, and approximate date the subcontractor will perform work on this contract. The State reserves the right to deny evaluation points if the letter(s) is not attached. The State may deny evaluation points if the letter(s) is not attached, not on company letterhead, not signed and/or does not reference and match the subcontract amount, subcontract amount as a percentage of the "TOTAL BID AMOUNT" and the anticipated period that the Subcontractor will perform work for this solicitation.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's M/WBE Program. Questions involving the regulations governing the MWBE Subcontractor Commitment Form should be directed to: Minority and Women's Business Enterprises Division at (317) 232-3061 or http://www.in.gov/idoa/2352.htm.

STATE OF INDIANA MBE/WBE SUBCONTRACTOR COMMITMENT FORM

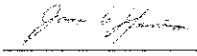
RFP# 17-082 Please note that updates to the original submission are identified in yellow highlight.

DUE DATE: December 6, 2017

TOTAL BID AMOUNT: $115,820,000

☒ **MBE Firm** ☐ **WBE Firm**		
Company Name: Quinn David & Associates, LLC		**Contact Person:** Ken Thompson
Address: 436 N 49th St Milwaukee, WI 53208		**E-mail:** kthompson@quinndavid.com **Telephone Number:** (414) 688-3583 **Fax Number:** (425) 963-6370
Sub-Contract Amount: $361,937.50		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>**
Sub-Contract Percentage of Total Bid: .003125%		Software implementation and programming services.
Provide approximate dates when Sub-Contractor will perform on this project: February 2018 – December 2031		

☐ **MBE Firm** ☒ **WBE Firm**		
Company Name: Guidesoft, Inc. dba Knowledge Services		**Contact Person:** Barbara Brown
Address: 5875 Castle Creek Parkway Suite 400 Indianapolis, IN 46250		**E-mail:** barbb@knowledgeservices.com **Telephone Number:** (317) 806-6107 **Fax Number:** (317) 578-7600
Sub-Contract Amount: $361,937.50		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>**
Sub-Contract Percentage of Total Bid: .003125%		Contract staffing.
Provide approximate dates when Sub-Contractor will perform on this project: February 2018 – December 2031		

Fast Enterprises, LLC	(208) 433-9244
Respondent Firm	Telephone Number
7229 South Alton Way	(208) 433-9863
Address	Fax Number
Centennial, CO 80112	JHarrison@FastEnterprises.com
City/State/Zip Code	Email Address
James G. Harrison	
Representative	Authorizing Signature
12/06/17	James G. Harrison, Authorized Signatory
Date	Printed Name and Title

☐ Please check if additional forms are attached.

Page _____ of _____

FORM MUST BE COMPLETED IN ITS ENTIRETY WITH COMPLETED LETTERS OF COMMITMENT.

ATTACHMENT A1
INDIANA VETERANS' BUSINESS ENTERPRISE RFP SUBCONTRACTOR COMMITMENT FORM

In accordance with Section 1.22 of the RFP, the respondent is expected to submit with its proposal An IVBE Subcontractor Commitment Form. The Form must show that there are, participating in the proposed contract, Indiana Veterans' Business Enterprises (IVBE) listed in the VetBiz Registry, http://www.vetbiz.gov/, that conform to the IVBE rules as laid out at http://www.in.gov/idoa/2862.htm.

If participation is met through use of vendors who supply products and/or services directly to the Respondent, the Respondent must provide a description of products and/or services provided that are directly related to this proposal and the cost of direct supplies for this proposal. Respondents must complete the Subcontractor Commitment Form in its entirety.

Failure to address these goals may affect the evaluation of your Proposal. The Department reserves the right to verify all information included on the IVBE Subcontractor Commitment Form.

Prime Contractors must ensure that the proposed subcontractors meet the following criteria:

- Must be listed on Federal Center for Veterans Business Enterprise VetBiz registry, on or before the proposal due date
- Must qualify as a Buy Indiana Business under designation 1, on or before the proposal due date. See section 2.7 for more information
- Each firm may only serve as one classification – MBE, WBE (see Section 1.21) or IVBE
- A Prime Contractor who is an IVBE must meet subcontractor goals by using other listed certified firms. Certified Prime Contractors cannot count their own workforce or companies to meet this requirement.
- **Must serve a Commercially Useful Function (CUF). The firm must serve a value-added purpose on the engagement, as confirmed by the State.**
- Must provide goods or service only in the industry area for which it is certified as listed in the VetBiz directory http://www.in.gov/idoa/2352.htm
- Must be used to provide the goods or services specific to the contract

INDIANA VETERANS' BUSINESS ENTERPRISES RFP SUBCONTRACTOR LETTER OF COMMITMENT

A signed letter(s), on company letterhead, from the IVBE must accompany the IVBE Subcontractor Commitment Form. Each letter shall state and will serve as acknowledgement from the IVBE of its subcontract amount as a percentage of the total cost, a description of products and/or services to be provided on this project, and approximate date the subcontractor will perform work on this contract. The State reserves the right to deny evaluation points if the letter(s) is not attached. The State may deny evaluation points if the letter(s) is not attached, not on company letterhead, not signed and/or does not reference and match the subcontract amount, subcontract amount as a percentage of the "TOTAL BID AMOUNT" and the anticipated period that the Subcontractor will perform work for this solicitation.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's IVBE Program. Questions involving the regulations governing the IVBE Subcontractor Commitment Form should be directed to: indianaveteranspreference@idoa.in.gov.

STATE OF INDIANA IVBE SUBCONTRACTOR COMMITMENT FORM

RFP#: **17-082** Please note that updates to the original submission are identified in yellow highlight.

DUE DATE: December 6, 2017

TOTAL BID AMOUNT: $115,820,000

Company Name: Professional Management Enterprises (PME)		**Contact Person:** William Retherford, VP of Operations
Address: 9245 N Meridian St, #210 Indianapolis, IN 46260		**E-mail:** william@pme-indy.com
		Telephone Number: (317) 488-7722 / **Fax Number:** (317) 541-1250
Sub-Contract Amount: $2,779,680.00 **Sub-Contract Percentage of Total Bid:** 2.4%		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>** Staff Augmentation and implementation support
Provide approximate dates when Sub-Contractor will perform on this project: February 2018 – December 2031		

Company Name:		**Contact Person:**
Address:		**E-mail:**
		Telephone Number: ( ) / **Fax Number:** ( )
Sub-Contract Amount: **Sub-Contract Percentage of Total Bid:**		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>**
Provide approximate dates when Sub-Contractor will perform on this project:		

Fast Enterprises, LLC	(208) 433-9244
Respondent Firm	Telephone Number
7229 South Alton Way	(208) 433-9863
Address	Fax Number
Centennial, CO 80112	JHarrison@FastEnterprises.com
City/State/Zip Code	Email Address
James G. Harrison	
Representative	Authorizing Signature
12/06/17	James G. Harrison, Authorized Signatory
Date	Printed Name and Title

☐ Please check if additional forms are attached.

Page _____ of _____

FORM MUST BE COMPLETED IN ITS ENTIRETY WITH COMPLETED LETTERS OF COMMITMENT.

SUBCONTRACTOR COMMITMENT LETTERS

FAST will use three subcontractors as part of its effort to engage Indiana-based MBE, WBE, and IVBE companies in this important project for the state. These firms will provide technical staff to work onsite for implementation of GenTax.

FAST is committing 3.025% of the project's total contract value to these firms for their roles in the project. We have been successful in achieving our unblemished record of on-time, on-budget and on-target system modernization projects because of our proven approach to implementing our proprietary software. Significant deviation from this approach would put the project at risk, thus we have less opportunity for outside firm participation.

FAST provides training to subcontractor staff similar to that provided to state project team members at the beginning of the project to orient them to the FAST software and methodology. This allows subcontractor staff to work side-by-side with FAST team members as implementation consultants performing configuration, programming, web service development, and web design, as assigned. The proper balance of experienced and novice implementation consultants is necessary to achieve project success.

FAST and our subcontractors have completed:

- Attachment A MBE/WBE Subcontractor Commitment Form, and
- Attachment A1 IVBE Subcontractor Commitment Form.

These forms can be found behind Tab A.2 Att A MBE WBE Subcontractor and Tab A.2.a Att A1 IVBE Participation Plan of this proposal. Our subcontractors are shown in the table below and descriptions of these firms follow. Letters of commitment to serve as subcontractors on this project are included behind this section. Both MBE and WBE firms are listed on the IDOA Directory of Certified Firms. The IVBE is listed on Federal Center for Veterans Business Enterprise VetBiz registry.

FAST Subcontractors

Firm Name	MBE	WBE	IVBE
Quinn David & Associates, LLC	X		
Guidesoft, Inc. dba Knowledge Services		X	
Professional Management Enterprises (PME)			X

Quinn David & Associates, LLC

Quinn David & Associates collaborates with clients to achieve business success. They supply business and IT consulting services focused on providing clients with innovative leadership and build capabilities. Their consultants bring critical business-initiative-management experience that is grounded in disciplined approaches and industry best practices and standards. Quinn David & Associates is a State of Wisconsin limited liability company and is a State of Wisconsin Minority Business Enterprise (MBE).

Provide qualified resources capable of performing assigned tasks such as:

- Developing plans and documents
- Programming and testing
- Installing and configuring software
- Integrating software components
- Converting legacy system data
- Providing technical support
- Assisting with training
- Interfacing with agency personnel
- Providing post-production support

FAST has extensive prior experience with Quinn David & Associates as a provider of additional qualified staff for our projects. Quinn David has been utilized as a subcontractor on FAST projects for the states of Alabama, Arkansas, Georgia, Illinois, Massachusetts, Mississippi, Montana, Oregon, Washington, and Wisconsin.

Guidesoft, Inc. dba Knowledge Services

Utilizing their experience and knowledge, the Knowledge Services team ensures candidates are thoroughly assessed for the required role. Once all relevant information is compiled, only the most suitable, experienced and qualified candidates are submitted for consideration. They coordinate the behavioral-based interview and selection process with hiring managers, provide detailed references and background information, negotiate compensation and provide valuable feedback after candidates start. Work style, personality profile and aptitude testing can also be completed.

Professional Management Enterprises (PME)

PME is the industry's only Staffing Optimization Solution (SOS), providing both clients and staffing vendors the next generation in contract staffing optimization. With over 80 years of combined executive

management experience within the high growth, contract staffing and technology fields, PME offers the contract staffing industry a truly unique and refreshing approach to contract staffing management and optimization. PME is the industry's only system that focuses on strengthening client and vendor relationships.

Quinn David & Associates

September 6, 2017

This RFP Subcontractor Letter of Commitment serves as confirmation of the intent of Fast Enterprises, LLC (FAST) to utilize Quinn David & Associates, LLC (QDA) on RFP 17-082, Revenue Modernization Integrated Tax Systems and Services, issued by the Indiana Department of Administration on behalf of the Indiana Department of Revenue.

QDA acknowledges that it shall provide personnel for the project in the following services areas:

- 43232407 Requirements analysis and system architecture software
- 80151605 Customs consulting service
- 81111504 Application programming services
- 81111507 ERP or database applications programming services
- 81111601 Programming for Visual Basic
- 81112200 Software maintenance and support

Quinn David & Associates acknowledges that the amount represents .003125% of the total cost in FAST's cost submittal for the term of the contract.

Quinn David & Associates acknowledges that the term of the contract shall run from approximately February 2018 to December 2031. Dependent on final negotiated contract pricing, it is expected that QDA will receive an estimated $ 361,937.50 during the contract term.

We look forward to the opportunity to serve the Indiana Department of Revenue on this project. If you have any questions concerning this RFP Subcontractor Letter of Commitment, please feel free to contact me at the number below.

Sincerely,

Ken Thompson

Ken Thompson
President
Quinn David & Associates, LLC
kthompson@quinndavid.com
(414)286-1821

knowledgeservices

September 6, 2017

Virgil Helton
FAST Enterprises
7229 South Alton Way
Centennial, CO 80112

This letter is confirmation of GuideSoft, Inc. dba Knowledge Services' intent to participate with FAST Enterprises on the State of Indiana Request for Proposal RFP 17-082, the State of Indiana's Department of Revenue (IDOR) solicitation for Revenue Modernization Integrated Tax Systems and Services. Knowledge Services is pleased to have this opportunity to participate with FAST Enterprises on this RFP. This letter is also our commitment to abide by all State procurement regulations which include:

- Drug free workplace provision and certification
- Non-collusion and acceptance
- Non-discrimination clause
- Information Technology
- Authority to bind contractor
- Duties of contractor, rate of pay, and term of contract
- Compliance with laws
- Indemnification
- Governing laws
- Payments

Knowledge Services understands that there is no commitment for work by FAST Enterprises, unless the RFP activity results in a contract/award. Should FAST Enterprises sign a contract with the IDOA, Knowledge Services will participate in the contract by providing contract staffing services.

Knowledge Services will be paid .003125% of the contract amount, for a total of $361,937,50 over the duration of the contract which would begin in February of 2018 and run through 2031.

Knowledge Services is an Indiana formed and a certified Women Business Enterprise with the State of Indiana. Knowledge Services further certifies that Julie Bielawski, as signatory to this letter, is authorized to make such commitments on behalf of Knowledge Services.

Sincerely,

Julie Bielawski
CEO

KnowledgeServices
5875 Castle Creek Parkway, Suite 400
Indianapolis, IN 46250
www.knowledgeservices.com

Toll-Free: 877.256.6948
Local: 317.578.1700
Fax: 317.578.7600

Professional
Management
Enterprises Inc.

9152 Kent Ave, Bldg 401A, Suite 147
Indianapolis, IN 46216

Phone (317) 541-0200
Fax (317) 541-1250

September 6, 2017

Virgil Helton
Fast Enterprises
800 Park Boulevard, Suite 720
Boise, Idaho 83712

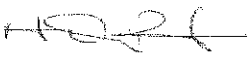
Re: Indiana RFP– VBE Letter of Commitment

Dear Mr Helton:

Thank you for the opportunity to partner with Fast Enterprises on your bid with the State of Indiana, Revenue Modernization Integrated Tax Systems and Services, 17-082. Professional Management Enterprises Inc. (PME) was formed as a Sub Chapter S-Corporation in Indiana in 2006 and Federal Tax ID of 20-4024802 and is certified through VetBiz.gov by the US Veterans Administration. PME is committed to subcontracting with Fast Enterprises and this letter serves as our commitment to being the designated VBE supplier for staff augmentation and implementation services. It is anticipated that we will provide our services for the duration of the fourteen (14) year contract and/or for as long as Fast Enterprises holds the contract with the State. Should Fast Enterprises be awarded the contract, we understand it will begin on February 2018 and run through December of 2031, and we anticipate an annual spend amount of $2,779,680.00, or 2.4% of the total project from Fast Enterprises.

As an Indiana business, PME is pleased to be able to support the economy of our State through participating in the Buy Indiana Program and our Buy Indiana SIC Code(s) is/are 736103; 736104; 736105; 736111; and 735933. We look forward to assisting Fast Enterprises with this contract and we are committed to doing whatever is necessary to ensure its success.

Sincerely,



Danny Portee
CEO/President
Professional Management Enterprises Inc.

FAST's Technical Proposal includes:

- B.1 Attachment F1 - Technical and Service Level Requirements,
- B.2 Attachment F2 - Process Driven Functional Requirements, and
- B.3 Attachment F3 - Project Related Requirements.

The GenTax Solution Description is provided in Tab G. Additional Documents to compliment the descriptions provided for the requirements in Attachment F2 – Process Driven Functional Requirements.

The attachments are completed following the instructions in this section and within the attachments.

Technical Proposal

RFP 17-082 Attachment F1 - Technical and Service Level Requirements Template

Instructions for this Workbook

General Requirements Instructions

The light blue shaded cells indicate information Vendors are expected to provide. The description cells should be limited to 300 words or less

Additional information can be provided beyond what is included in the worksheet descriptions or answers. The additional information must be referenced in the specific worksheet line item description. (e.g. "F1 - General Questions 10.8")

Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be fulfilled by a future state ITS.

Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires to be fulfilled by a future state ITS.

Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coding or code like development. Configuration should be accomplished by functional resources without the need for programming experience.

Customization: The modification or extension of software through coding or code like development to meet the specific needs of DOR. A customization must be fully supported by the Vendor as part of the solution.

Vendor: The primary implementer who will be responsible for their products and services as well as Vendor-Partner products and services.

Vendor-Partner: A partner of the Vendor who will provide products or services, and be managed and contracted by the Vendor.

Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DOR.

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner products and services.

C = Requirement is fully met by currently available Third-Party products and services, or through current Customization.

N = Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solution cannot meet the requirement now, however, the Vendor commits to having the capability to meet the appropriate implementation timeline.

P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products and services.

X = Requirement not met and not included in the proposal.

Brief Technical Proposal Worksheet Descriptions

Hardware Specifications - This worksheet must contain a full list of all hardware equipment and software required to fully implement the proposed solution in accordance with the responses to the Cost Proposal, Business Proposal, Implementation Proposal and this Technical Proposal.

Qualifying Security Requirements - This worksheet contains near mandatory requirements. The failure of a Vendor to meet substantially all of these requirements could result in a Technical Proposal score of 0.

General Architecture - A list of general architecture requirements including, but not limited to configuration, change management, base code changes, system interfaces, interface standards, file encryption, web services, user interfaces, batch processing, printing, scalability, deployment specifications and workflows.

System Security - A list of System Security including, but not limited to STIG adherence, Tech Stack vulnerability Remediation, remediation testing, identity protection, encryption standards, user authentication, risk management, system security plan, go live requirements and payment processing.

Implementation Security - A list of Implementation Security requirements including, but not limited to implementation team personnel, on-site implementation team personnel, off-site implementation team personnel and certification of development area(s)

On-Premise Implementation - A list of On-Premise Implementation requirements including, but not limited to protected zone, DR/COOP, service level assignment, go live requirements, knowledge transfer, testing, system audits and roadmaps.

System Availability - A list of System Availability requirements including, but not limited to uptime.

Solution Capacity - A list of System Capacity requirements including, but not limited to concurrent users, individual income tax accounts, corporate income tax accounts, trust/excise tax accounts, income tax processing load, trust/excise tax processing load, data retention and unlimited software transactions.

Service Level Requirements - A list of Service Level Requirements including, but not limited to general service levels, response time service levels and security service levels.

System Integrity - A list of System Integrity requirements including, but not limited to audit and tracking.

Interface Requirements - A current list of various interfaces including, but not limited to, internal and external interfaces that will be required in the new ITS system.

General Questions - A list of General Questions including, but not limited to conversions, enterprise service bus, scheduling of batch processing, list of 3rd party software licenses, capabilities supporting Adaptive Technologies and experience in converting from Accenture Tax Processing System.

Hardware Specifications

Operating Systems	# Processors	Ram	
Primay site; Production GenTax - active database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production GenTax - passive database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production GenTax - reporting database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production e-Services - activate database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production e-Services - passive database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primay site; Staging GenTax - active database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Staging GenTax - passive database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Conversion GenTax - database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Non-Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Non-Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Non-Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Non-Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Primary site; Storage Area Network (SAN) - The SAN and disk storage configuration must meet or exceed performance requirements of 50,000 IOPS Random Reads (8K pages), and 30,000 IOPS Random writes (8K pages) verified by the DiskSPD IO utility against 4x256GB data files using a single instance of Microsoft SQL Server. The DiskSPD tool must be configured with a 30% random write workload.	NA	NA	
Primary site; Network Load Balancer - F5 BIG-IP 2000 Series Local Traffic Manager w/ Advanced Firewall Manager	NA	NA	
Primary site; Network Load Balancer - F5 BIG-IP 2000 Series Local Traffic Manager w/ Advanced Firewall Manager	NA	NA	
Disaster Recovery site; Production GenTax database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Disaster Recovery site; Production e-Services database server (Windows Server 2016 & SQL Server 2016 Enterprise)	2x Intel® Xeon® E5-2690v4 2.6GHz 35M Cache, 9.6GT/s 14-Core, 135W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	

Operating Systems	# Processors	Ram	
Disaster Recovery site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Disaster Recovery site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Disaster Recovery site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Disaster Recovery site; Production virtual host - VMware vSphere 6.5 w/ Operations Management	2x Intel® Xeon® E5-2699v4 2.30GHz 45M Cache, 9.6GT/s 22-Core, 145W	256GB Memory (16x16GB) 2133 MT/s RDIMMs	
Disaster Recovery site; Storage Area Network (SAN) - The SAN and disk storage configuration must meet or exceed performance requirements of 50,000 IOPS Random Reads (8K pages), and 30,000 IOPS Random writes (8K pages) verified by the DiskSPD IO utility against 4x256GB data files using a single instance of Microsoft SQL Server. The DiskSPD tool must be configured with a 30% random write workload.	NA	NA	
Disaster Recovery site; Network Load Balancer - F5 BIG-IP 2000 Series Local Traffic Manager w/ Advanced Firewall Manager	NA	NA	

Qualifying Security Requirements

#	Category	Requirement	Response Code	
Q.01	DOR's Interpretation Governs	The Vendor shall agree to all terms regarding information security as specified in the Request for Proposal 17-082 Main Document Section 2.4.1 and in Tabs 2, 3, and 4 of this Attachment F1 Technical Proposal - Technical and Service Level Requirements and the following information below:	F	FAST und
		The State has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the State's data confidential, available, and with high integrity. The Department of Revenue systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The State uses the highest intolerance for risk in its assessment of the system and thus will insist that all security controls appropriate for a moderate-impact system be implemented. The State requires that the Contractor be compliant with such a security scheme for its system and operations because the State will be transmitting its data to the Contractor. The State will not accept any Contractor solution that does not meet the State's security requirements as specified in the NIST and IRS documents and the DOR's system requirements as itemized in the RFP Attachments.	F	FAST und
		The State will evaluate all system security models based on the State's reading of FISMA, NIST SP800-53 (Rev 4), IRS Publication 1075 (issued September 2016) and security best practices. Contractor agrees to abide by the State's interpretations of these requirements. The Contractor further agrees that new or different requirements specified in later versions of these standards can be incorporated into this contract at the State's request.	F	FAST und
		The State requires each system to provide its own data security for handling input and output by providing native encryption functions that utilize a FIPS 140-2 validated encryption algorithm.	F	FAST und
		The State utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Specific Technology Implementation Guides (STIGs) as an objective way to evaluate compliance with our security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. The implemented system must operate correctly with all requisite STIGs applied to the infrastructure and application components before customization and configuration can begin. The final release candidate for each iteration of the system must maintain its adherence to the STIGs before it can be certified for production. The State will withhold payment due without late charges or penalties at these milestones until the system is certified.	F	FAST und
		The IRS requires that Pub 1075 Exhibit 7 be incorporated into the final contract in its complete form and unchanged by the State and Contractor. Contractor agrees to the inclusion of these terms.	F	FAST und FAST's sol needs of o various ind Standards also opera hardened l standards. (we sp. . IT existing cli National In 4 and U.S. regulatory approved l (SCSEM), compliant v requiremer
Q.02	Vendor Self Assessment	The Vendor shall obtain all Security Technical Implementation Guides (STIGs) relevant to their system, including technology stack, application design, and proposed deployment, and perform a self assessment of their ability to conform to the guidelines. (See Requirement 2.01 for instructions). The results of this self assessment are to be included in the vendors proposal response. The vendor should feel free to request assistance from the DOR Security Team by using the protocol specified by the IDOA.	F	FAST und FAST is cc be mapper IRS Pub 1(FAST conc Security Te FAST's res Requests. configurati "No" and "I
Q.03	System Components	The Vendor shall assume responsibility for each component delivered as part of his solution including those from Vendor-Partners and Third-Parties.	F	FAST und

#	Category	Requirement	Response Code	
Q.04	First Milestone for Payment	The Vendor assures that their system will be able to be installed in the Protected Zone with all firewall rules implemented and all STIGs applied. The Vendor also assures the installed system will perform in a fashion that can be used for configuration and customization.	F	FAST Und

1. General Architecture

#	Category	Requirement	Response Code	ip
1.01	General Architecture - Configuration (1)	The base software is configurable by DOR staff with out of the box instruction.	F	FAST understands a... ...d c
1.02	General Architecture - Configuration (2)	The Vendor's license to DOR shall include the ability to stand up as many non-production instances as we require at any given time. This includes a Disaster Recovery instance at our alternate data center.	F	FAST understands and will c
1.03	General Architecture - Configuration (3)	The system shall limit the amount of configuration data that is stored in configuration files.	F	GenTax configuration data is not use separate configuratio parameters however no appli
1.04	General Architecture - Configuration (4)	Any data that must be in a Configuration File must be allowed to be encrypted without adversely affecting system operation.	F	GenTax configuration data is not use configuration files There are two configuration fi 1. A windows service config f fsv.xml. This file is used as a required to start and so the s connect to obtain the configu obtain the configuration data. setup with integrated authent database instance and name receive client-server commur database instances), which is https connection) for one of tl service is well defined and wi have been authorized to rece 2. GenTax uses two additiona servers that manage the busi processes. These text files c processes, including a conne authentication. The connectic a username or password. The configuration files do not file is used on a web server, connection string and instead type of data contained within encrypted.
1.05	General Architecture - Change Management (1)	The Vendor shall use a defined and documented Change Management process that includes a change request and defect tracking system	F	FAST understands and will c
1.06	General Architecture - Change Management (2)	The Vendor shall implement a repeatable, scripted build and code migration process.	F	FAST understands c
1.07	General Architecture - Base Code Changes (1)	Vendor code changes shall not inhibit our ability to upgrade versions of your system.	F	FAST understands and will c
1.08	General Architecture - Base Code Changes (2)	Vendor code must remain able to receive all Infrastructure and Component security patches within the timeframe prescribed by the issuing vendor.	F	FAST understands and will c The FAST Central Repositor contains the ability to sync ap Development Center located
1.09	General Architecture - Custom System Interfaces (1)	The system shall allow DOR staff to develop secure plug-in interfaces to custom-developed systems (e.g. Other Agencies, Agents, INBiz Registration Portal)	F	FAST understands and will c
1.10	General Architecture - Custom System Interfaces (2)	The Vendor system shall provide a Service Bus architecture that meets DOR's security requirements.	P	FAST assumes the new syst The proposed solution is cap interface and communicate w providing an ESB. The FAST loosely coupled with GenTax internal and external applicati funneled through the system GenTax user interface—mea accessing an external systen

#	Category	Requirement	Response Code	Descrip
1.11	General Architecture - Interface Standards (1)	The Vendor system shall accept PGP-encrypted XML Documents	F	FAST understands and will c GenTax imports and stores F processing, the encrypted file database with the original PG of encryption. The PGP-encr in a decrypted state. In additi third layer of encryption via M (TDE). In some cases, files n code. When this occurs, tem local disk storage and encryp only. Only the original proces temporary files. The architect and generate PGP keys. The limited to the assigned enviro include: 1. Multiple delivery methods i calls, web service calls made and directly from FTPS/SFTF 2. Immediately after the file is system database. It is possib basic attributes such as file e process can receive a tempo which can only be decrypted directly acknowledge the rece later in a bulk process. Please see H. FAST Clarifica detail.
1.12	General Architecture - Interface Standards (2)	The Vendor system shall accept PGP-encrypted Fixed Length, Fixed Zone Flat ASCII Files	F	FAST understands and will c GenTax imports and stores F are supported including XML, During initial file validation or decrypted in memory. If a loc a session key in such a way t files returned to the database additional information.
1.13	General Architecture - Interface Standards (3)	The Vendor system shall accept PGP-encrypted Comma Delimited ASCII Files	F	FAST understands and will c GenTax imports and stores F are supported including XML, During initial file validation or decrypted in memory. If a loc a session key in such a way t files returned to the database additional information.
1.14	General Architecture - Interface Standards (4)	All movement of data files shall be accomplished using SFTP or HTTPS. (I.e. Shares and NFS mounts are not acceptable.)	F	FAST understands and will c No. Project related shares ca reference to interface standa retrieve files by mechanisms from a network shares.
1.15	General Architecture - Interface Standards (5)	The Vendor system shall send a receipt for all files received from an outside party.	F	FAST understands and will c
1.16	General Architecture - Interface Standards (6)	The Vendor system shall send an acknowledgement for all files received from an outside party that have been accepted for processing.	F	FAST understands and will c Acknowledgement can be pe outlined in steps 2 and 4 in o

#	Category	Requirement	Response Code	Descrip
1.17	General Architecture - Interface Standards (7)	The Vendor system shall send a rejection for all files received from an outside party that have been failed to be accepted for processing.	F	FAST understands ar ill c The FAST Gateway es schema validation and manip immediately encrypted and lo possible to validate the file us file extensions and schema n receipt of the file or create a which can include notification Data validations are configur supports schema, logic, valu and many other configurable automatically validated basec and validations are provided REST request can be proces timeouts, and issues related analysis. Alerts and notificati personnel or outside party if directly acknowledge the rec acknowledge later, or create later in a bulk process.
1.18	General Architecture - File Encryption (1)	The Vendor system shall be able to input files that have been encrypted using PGP without having to decrypt them to disk prior to processing the data in the file.	F	FAST understands and will c The GenTax file system archi incoming and outgoing files w processing, the file is written memory session key. Please above for additional informati Outgoing files can be pulled f demand. The files are then lo transferred directly through a In most simple cases, this en configuration and executed o manager.
1.19	General Architecture - File Encryption (2)	The Vendor system shall be able to output files in an encrypted format using PGP/PKI without having to encrypt them after the file closes.	F	FAST understands and will c The GenTax file system archi incoming and outgoing files w processing, the file n memory session key se above for additional informati Outgoing files can be pulled f demand. The files are then lo transferred directly through a In most simple cases, this en configuration and executed o manager.

#	Category	Requirement	Response Code	Descrip
1.20	General Architecture - File Encryption (3)	All files created by the system containing FTI, PTI, or PII shall be encrypted using a FIPS 140-2 validated (list available here http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140val-all.htm) service during output. (i.e. Disk-level encryption is not sufficient. Encryption after file close is not sufficient.)	F	FAST understands and will c When appropriate files create encrypted using a FIPS 140-; system. It is important to note format. For example, a GenT could not be exported to Micr would not be usable within th Files with FTI, PTI, or PII will is encrypted in a Microsoft S(Encryption (TDE) and can be certified algorithm instances. session key which can only b encryption used for the tempo which uses NIST FIPS 140-2 GenTax is capable and suppo mode-enabled environment w comply with the Federal Infor Requirements for Cryptograp a matter of setting the FIPS ç algorithms, modes, and key s validated. FAST will make ev encryption are done so with a
1.21	General Architecture - Web Services (1)	The Vendor system shall provide web service interfaces for standard industry needs (e.g. Taxpayer Status, Taxpayer Liabilities, Mef)	F	FAST understands and will c FAST is able to work with or portals support industry stand • XML • OAP 1.1 or 1.2 • .NET Windows Communica • OASIS WS-Security standa • Compatible with Universal D • Representational State Trar FAST anticipates using the n responsible for interacting wit
1.22	General Architecture - Web Services (2)	The Vendor system shall accommodate web service interfaces developed by DOR for custom needs.	F	FAST understands and will c GenTax contains a Web Ser web service calls. The gatew can host both REST and SO/ contains tools to configure st business objects as a web se endpoints and adaptors. The • provisioning credentials • mapping credentials to auth • managing and generating th • authorizing credentials for th The FAST Web Service Gate and managing interfaces for s

#	Category	Requirement	Response Code	Descrip
1.23	General Architecture - User Interface (1)	The Vendor system shall provide a browser-based user interface supporting versions IE, Google Chrome, Firefox, and Safari that are currently supported by their Vendors. The DOR standard for its internal users is IE11.	F	FAST understands and will c Please see H. FAST ' 'fica detail.
1.24	General Architecture - User Interface (2)	The Vendor system shall allow various user interfaces to access the same business rule processing for the same online transaction without duplicating source code.	F	FAST understands and will c
1.25	General Architecture - User Interface (3)	DOR may wish to expose public portal transactions to more than just the ITS Taxpayer portal. All portal transactions should be processed using the same implementation of the system's business rules regardless of their origin. (e.g. INTax-like transactions could be exposed within the ITS Taxpayer portal and the SOS INBiz portal)	X	FAST requests the opportuni if selected as the Vendor. FA wishes to expose other publ agree as currently stated.
1.26	General Architecture - User Interface (4)	Any user interface should automatically format to the browser on the user's device.	F	FAST understands and will c GenTax is a browser-based Services module uses respor will automatically detect and f mobile devices.
1.27	General Architecture - User Interface (5)	The user interface should be brandable without having to recode it. (e.g. uses CSS or included HTML files for functionality, formatting and branding)	F	FAST understands and will c
1.28	General Architecture - User Interface (6)	The Vendor system shall have management consoles displaying performance indicators for various processes.	F	FAST understands and will c
1.29	General Architecture - Batch Processing (1)	The Vendor system shall be able to use COTS product as the job scheduler for all Batch Processing	F	FAST understands and will c Configurable options are avai batching The functionality is desired, this may be used for estimating returns, or adding normal front-end processing. form versions, which are no l solution. In the event the agency allow directly, business rules can b document locator number (DI return to a physical documen By submitting the original ver "requirement is fully met throu Vendor-Partner products and features are included in Gen operations. FAST is not prop GenTax Batch Manager or th other system's batch ' ess created and added ib system, exchange d. , tri required.
1.30	General Architecture - Batch Processing (2)	The Vendor system shall pre-validate incoming data prior to attempting to process it. (i.e. XML returns must adhere to schema).	F	FAST understands and will c Validation rules are created t for loading XML schemas an schemas.
1.31	General Architecture - Batch Processing (3)	The Vendor system shall balance and report that the number of records passed from the prior process equals the number taken in by the next process	F	FAST understands and will c By submitting the original ver "requirement is fully met throu Vendor-Partner products and configured to ensure the num the number taken in by the n the event the configured valic

#	Category	Requirement	Response Code	Descrip
1.32	General Architecture - Batch Processing (4)	The Vendor system shall allow for checkpoint/restart if a multi-step batch process abnormally terminates in a step?	F	FAST understands and will c By submitting the original ven "requirement is fully met throu Vendor-Partner products and logic to properly handle abno architecture supports databa Additional event triggers can actions are required. The job to allow manual intervention.
1.33	General Architecture - Batch Processing (5)	The Vendor system shall have the ability to bypass a bad input without having to terminate the process for the entire batch.	F	FAST understands and will c By submitting the original ven "requirement is fully met throu Vendor-Partner products and for payment and return proce records without having to ter
1.34	General Architecture - Batch Processing (6)	The Vendor system shall save transactions that have been bypassed so they can be researched, corrected, and processed at a later time	F	FAST understands and will c
1.35	General Architecture - Printing (1)	All print jobs/requests shall go to an assigned print queue requested by the business user	F	FAST understands and will c The GenTax print module cor address, length and other cor stored in PDF format. This ou such as directly to print queu GenTax has supported a larg volume and mainframe printe or print queue management s such as PDF, PCL, or PostS
1.36	General Architecture - Printing (2)	All print jobs shall execute on PCL-compliant printers	F	FAST understands and will c PCL is a Printer Control Lang are printed using PCL drivers before sending the data to th in PDF format which can ther driver, or a printer using a Po PostScript files depending on print queue management soft such as PDF, PCL, or PostS
.37	General Architecture - Printing (3)	The Vendor system shall interface to the agency's designated printing vendor using predefined printing queues.	F	FAST understands and will c The GenTax print module cor address, length and other cor stored in PDF format. This ou such as directly to print queu GenTax has supported a larg volume and mainframe printe or print queue management s such as PDF, PCL, or PostS
1.38	General Architecture - Printing (4)	All print files pushed to the printing vendor shall be PGP encrypted and use sftp for transport.	F	FAST understands and will c By submitting the original ven "requirement is fully met throu Vendor-Partner products and file management features and transport. GenTax natively su
1.39	General Architecture - Scalability	The Vendor system shall be able to execute within containers (e.g. Docker, Windows Server Containers)	X	FAST is evaluating the use o not currently supported.
1.40	General Architecture - Deployment Specifications	The Vendor shall provide the endpoints (symbolic, e.g. DBMS Server, Application Server), protocol, and port for each interserver connection required for each system tier and component to communicate with its peers.	F	FAST understands and will c
1.41	General Architecture - Workflow Support (1)	The Vendor system shall contain or integrate with a configurable workflow engine that can be used to create workflows for Business Processes (e.g. Trust/Excise tax account registration)	F	FAST understands and will c The GenTax workflow module

#	Category	Requirement	Response Code	Descrip
1.42	General Architecture - Workflow Support (2)	The Vendor system shall contain or integrate with a configurable workflow engine that can be used to create workflows for System Administration Processes (e.g. Correspondence Compliance/Editorial process)	F	FAST understands and will c Management Studio ' ` ha specific-items like u h members can take a .age and share statuses and infor

2. System Security

#	Category	Requirement	Response Code	Description/Att
2.01	System Security - Technology Stack STIG Adhere	The Vendor shall identify all technologies with the specific version and release employed utilized to develop and operate the application and submit the list to Indiana DOR. This is the technology stack for the application. Indiana DOR will provide the specific STIG checklists for those technologies to the Vendor. The Vendor shall conduct an assessment as to the technologies' adherence to each STIG.	F	The following technologies and release versions are i - Microsoft Windows Server 2012 R2 / 2016 (preferre - Microsoft SQL Server 2014 / 2016 (preferred) - VMware 5.5 or higher (6.5 preferred) - Microsoft Windows 7 or higher (10 preferred) - Microsoft Visual Studio Professional 2015 or 2017 - Microsoft .NET Framework 4.6.2
2.02	System Security - Application Architecture STIG	The Vendor shall provide to Indiana DOR a description of the architecture used to develop the application (e.g. three tier, web client). Indiana DOR will provide the specific STIG checklists for an application of that specified architecture. The Vendor shall conduct an assessment as to the application's adherence to each STIG.	F	GenTax is based on an n-tier architecture logically di the system. The n-tier architecture provides a mecha presentation from application logic. Through this sepa server applications providing two clear advantages: q logic components, and a shorter test phase, because architectural tiers include: - Web/Presentation - Application - Data GenTax is a service oriented enterprise application th architecture. The core architecture utilizes the Micros Foundation (WCF) to process secured web services. language Visual Basic.NET (VB.NET) and VB.NET is Consequently, custom components are built on the s Integrated Development Environment (IDE). FAST ha developers to create business objects that inherit and components. The preferred Relational Database Management Syst Windows Server as the server-level operating system such as Microsoft Edge, Chrome, Firefox, Safari, or C rendering engine running on Windows Server to provi external users.
2.03	System Security - Technology Stack Vulnerabilit	The Vendor shall maintain development partner relationship of each technology Vendor used in the technology stack so as to receive early access to security patches so that they may test the effect of applying these new patches on their application in advance of the technology Vendor's Day Zero announcement.	F	FAST understands and will comply with this requirem
2.04	System Security - Technology Stack Vulnerabilit	The Vendor shall be able to apply any security patch for a CAT-1 vulnerability for any technology in the technology stack without adversely affecting the operation of the application in Indiana DOR's production environment by Day Zero+30.	F	FAST understands and will comply with this requirem
2.05	System Security - Technology Stack Currency	The Vendor shall keep the technology stack current by ensuring that all technologies are within two release of the current version for maintenance and enhancement releases and the current version for security releases every twelve months.	F	FAST understands and will comply with this requirem
2.06	System Security - Remediation Testing	The Vendor shall implement and regression test each change in application or technology stack in the non-production instances of the DOR system prior to implementing the update in the DOR production instance. DOR shall conduct their final acceptance regression test prior to authorizing migration to Production.	F	FAST understands and will comply with this requirem
2.07	System Security - Identity Protection (1)	All sensitive data elements (e.g. Taxpayer ID Numbers, PII) shall be redacted on all user interfaces and reports	F	FAST understands and will comply with this requirem GenTax applies agency-defined security to applicatio security for each report that restricts access to author subject to the agency's data retention policy. Reports completely. This feature is commonly used for sensiti (SSNs). Automated data output, such as a file provided to a b are stored in encrypted form and can be transferred d the file system. All output files are securely stored to t
2.08	System Security - Identity Protection (2)	The Vendor shall not utilize data direct from the PROD instance of the system for testing purposes. All data will be thoroughly de-identified prior to use.	F	FAST understands and will comply with this requirem The development, testing and training environments system for testing purposes". There is no FAST requi be necessary to create converted data for use in dev thoroughly de-identify data prior to use. Please note: part of the FAST development methodol environments which contain production data. FAST c with the security, logging and retention capabilities in production environment.

#	Category	Requirement	Response Code	Description/Att
2.09	System Security - Encryption Standard (1)	All data shall be encrypted using a FIPS 140-2-validated process when at rest.	F	FAST understands and will comply with this requirem When appropriate files created by the system contain validated method while in the control of the G ax s written out in an encrypted format. For exar ie could not be exported to Microsoft Excel in yp Microsoft Office Suite. Files with FTI, PTI, or PII will be stored in the GenTax Server database using Transparent Data Encryption (FIPS 140-2 certified algorithm instances. In addition, can only be decrypted by the same process in memor the Microsoft .Net Framework which uses NIST FIPS GenTax is capable and supports running our software where Microsoft products and cryptographic modules (FIPS) 140 – Security Requirements for Cryptographi of setting the FIPS group security policy flag. The cry .NET Framework are FIPS 140-2 validated. FAST will encryption are done so with a FIPS 140-2-validated c
2.10	System Security - Encryption Standard (2)	All data shall be encrypted using a FIPS 140-2-validated process when in motion.	F	FAST understands and will comply with this requirem
2.11	System Security - User Authentication (1)	The Vendor system shall authenticate internal users against the State of Indiana Active Directory (SOIAD)	F	FAST understands and will comply with this requirem
2.12	System Security - User Authentication (2)	The Vendor system shall be compatible with a Single Sign-on systems of Indiana DOR's choosing. SSO system to be determined.	F	FAST understands and will comply with this requirem
2.13	System Security - User Authentication (3)	The Vendor system shall determine a user's primary system role based on the role supplied either directly by the SOIAD or from a light directory structure synchronized with the SOIAD.	F	FAST understands and will comply with this requirem FAST requests to modify our original answer to respo GenTax authorization via security groups and roles a external LDAP provider such as SOIAD. GenTax sup Access Protocol (LDAP) repository such as Microsoft into the system, the system uses the LDAP applicatio Directory for authentication. This feature enables sing and enforcement of authentication policies. Leveragi the preferred method of providing authentication to G Federation identity is supported by interfacing with an sending authorization messages using Security Asse within the integrated security manager. GenTax provi functionality using security groups. A security group is a collection of one or more securit access to security identifiers for functions associated managing access to all levels of the system. Groups individuals. A default group feature can automatically User roles may in some cases be so specific that ass requirements. To support this situation, users can be functions. Access to functionality such as administrative tools, a is restricted by assigning a security identifi h an associated security identifier. The syste. ge identifiers and the creation and maintenance ecur
2.14	System Security - User Authentication (4)	The Vendor system shall utilize a secure synchronization protocol (e.g. SAML) for synchronizing with the SOIAD should it utilize its own light directory structure.	F	FAST understands and will comply with this requirem
2.15	System Security - User Authentication (5)	The Vendor system shall maintain a user's authentication to each component of the system once the user has been first authenticated for his session.	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", configuration of currently available Vendor or Vendor integration with an external Lightweight Directory Acc Directory for user authentication. When a user logs in programming interface to communicate with Active Di on across the enterprise and central management an agency's Microsoft Active Directory infrastructure is t Federation identity is supported by interfacing with an sending authorization messages using Security Asse within the integrated security manager. The GenTax maximum session length and inactivity timeouts.

#	Category	Requirement	Response Code	Description/Att
2.16	System Security - User Authentication (6)	The Vendor system shall be able to authenticate constituent users of the external portal using the state's constituent authentication system (Azure B2C).	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- possible to use different authentication system for bot with an external Lightweight Directory Access Protocc user authentication. When a user logs into the system interface to communicate with Active Directory for aut enterprise and central management and enforcement Microsoft Active Directory infrastructure is the preferr FAST clients have used a variety of third party auther support Azure B2C. Federation identity is supported by interfacing with an sending authorization messages using Security Asser within the integrated security manager.
2.17	System Security - User Authentication (7)	The Vendor system shall be able to use a federated authentication model	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- supported by interfacing with an external Federated Id
2.18	System Security - User Authentication (8)	The Vendor system shall require multifactor authentication for all users	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", configuration of currently available Vendor or Vendor- multifactor authentication for all users.
2.19	System Security - User Authentication (9)	The Vendor system shall require multifactor authentication for all administrators	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- multifactor authentication for administrators.
2.20	System Security - User Authorization (1)	The Vendor system shall assign Vendor system-specific rights based on the user's primary being authenticated by the SOIAD.	F	FAST understands and will comply with this requirem FAST requests to modify our original answer to respo user rights authorization. GenTax can support user a is managed and controlled from GenTax.
2.21	System Security - User Authorization (2)	The system shall automatically log the user out of his session after 20 minutes of inactivity.	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- configurable session duration timeout for user inactivi
2.22	System Security - Risk Management (1)	The Vendor system shall require separation of duties making multiple users to complete monetary transactions	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- separation of duties requiring multiple users to compl
2.23	System Security - Risk Management (2)	The Vendor system shall maintain audit trails of before and after values for each record change	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- comprehensive audit trail of all changes to the data, C saved data along with in place audit trails that include is never deleted Versioning is also used to detect wh simultaneously—versioning ensures the second proc FAST is not suggesting the use of Snapshots to meet trail of all changes to the data, GenTax uses a versio versioning, application data is never deleted. Version same record simultaneously—versioning ensures the first process. The taxpayer access log messages can requirement. In addition, user activities in the system GenTax can track all actions performed by a user, inc provide information about a user, such as the date an account was accessed, and whether a user was denie a user has performed various functions over time.
2.24	System Security - Risk Management (3)	System log files shall support the ability to roll over log files on a periodic basis	F	System log files can be backed up and archived at pr By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor- and archived at predefined intervals.

#	Category	Requirement	Response Code	Description/Att
2.25	System Security - Risk Management (5)	The Vendor system shall have thorough logging within batch processes to assist in troubleshooting.	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor c dor-Manager contains extensive logging to ass ib and logs to the appropriate personnel for ex
2.26	System Security - Risk Management (6)	The Vendor system logging debug level shall be configurable	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor-messages provide enough detail to effectively trouble components within the system where additional detail configurable parameter. In terms of developers direct outside the development environment and would requ it would be possible.
2.27	System Security - Risk Management (7)	The Vendor system shall log the access of each taxpayer record showing the taxpayer record UID, the DOR associate's Vendor system id, and a date-time stamp	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor-messages can be configured to include the values in functionality that provides a complete record of each be used to replay the user session. FAST is not suggesting the use of Snapshots to meet trail of all changes to the data, GenTax uses a versio versioning, application data is never deleted. Version same record simultaneously—versioning ensures the first process. The taxpayer access log messages can requirement. In addition, user activities in the system GenTax can track all actions performed by a user, inc provide information about a user, such as the date an account was accessed, and whether a user was denie a user has performed various functions over time.
2.28	System Security - Risk Management (8)	The Vendor system shall log the access to DOR associate-self, DOR associate-family member, or high financial value taxpayer records and report these accesses separately	F	FAST understands and will comply with this requirem By submitting the original vendor response code "F", I configuration of currently available Vendor or Vendor-the log access parameters required via three mechan - Users can be associated with their customer record - The ability to link between different entities, such as security placed on link types to prevent access to the - The ability to create Customer Types that require sp possible to flag customer records with the appropriate Access reports can be generated as desired. Please see H. FAST Clarification Questions and Addi
2.29	System Security - Risk Management (9)	The Vendor system shall operate properly when antivirus software is running on all servers and workstations.	F	FAST understands and will comply with this requirem By submitting the original vendor response ', I configuration of currently available Vendor c dor-negatively impact our solution. FAST does not have a major anti-virus software manufacturer is supported f minimal files for anti-virus software to scan. No specif application. FAST recommends that any best practice are followed.
2.30	System Security - Go Live Requirements (1)	The Vendor shall agree that before the Vendor system can be placed into production, all CAT-1 findings remediable by Vendor in entire application, Vendor system, and infrastructure are remediated or negotiated for acceptance of risk	F	FAST understands and will comply with this requirem
2.31	System Security - Go Live Requirements (2)	The Vendor shall agree that before the Vendor system can be placed into production, specified CAT-2 findings are eliminated or under Plan of Action & Milestones (POA&M). CAT-2 remediation subject to negotiation with DOR final approval.	F	FAST understands and will comply with this requirem
2.32	System Security - Go Live Requirements (4)	The Vendor shall agree that before the Vendor system can be placed into production, they will successfully complete DOR's Security Acceptance Test Plan in highest pre-prod instance	F	FAST understands and will comply with this requirem
2.33	System Security - Go Live Requirements (5)	The Vendor shall prepare and provide to DOR a NIST-compliant System Security Plan prior to going live with the system.	F	FAST understands and will comply with this requirem

#	Category	Requirement	Response Code	Description/Att
2.34	System Security - Payment Processing (1)	The Vendor and system shall be PCI-DSS compliant if the system participates in the acceptance to financial account/credit card information.	F	Although GenTax processes incoming payment inforn GenTax does not actually process or store credit or d processed by a third-party system and transaction de reconciling against a customer account. Payment det capabilities, and more. GenTax contains internal valic been processed and are from a secure and recognize GenTax interfaces with third-party credit/debit card pr functions within GenTax also support interfaces with (ACH/iACH payment, e-check, remittance processing, party credit/debit card systems are in production for n
2.35	System Security - Payment Processing (2)	Regardless of participation in acceptance of account numbers, the system shall protect any account information it stores using the prescribed encryption standards.	F	FAST understands and will comply with this requirem
2.36	System Security - Payment Processing (3)	The Vendor's system shall be able to shell out to a hosted web checkout for credit card payments.	F	FAST understands and will comply with this requirem
2.37	System Security - SEIM	The vendor shall implement a security information and event management (SIEM) solution. The SIEM system shall monitor the solution for potential security events and if a security incident is discovered, it will be addressed according to the approved incident response plan.	C	FAST interprets a security information and event man product provided by DOR. FAST will assist DOR in im solution. The GenTax application-level log files are viewable fr can be configured to be sent to a central SIEM solutic recommends application-level events remain viewabl
2.38	System Security - Data Classification	The vendor shall produce a Data Classification Document that defines the data elements related to the security and privacy controls in the Solution. The Data Classification Document is a key factor in determining the control requirements applicable for the project and detailed in the System Security Plan (SSP). The Data Classification Document shall track and monitor all data from input and output sources.	F	FAST understands and will comply with this requirem Data classification is specific to the project and the cu general guidelines and baselines for classifying data, during the project.
2.39	System Security - SIEM	The system shall create log files using common industry formats that can be loaded and parsed by a Security Information and Event Management system.	C	System components such as networking, virtualizatio capable of ingesting to a central SIEM system. The G from within the application. The GenTax application-level log files are viewable fr can be configured to be sent to a central SIEM solutic recommends application-level events remain viewabl

3. Implementation Security

#	Category	Requirement	Response Code	Description/Att
3.01	Implementation Security - All Implementation Team Personnel (1)	The Vendor shall identify all personnel to be involved in the project before commencing work	F	FAST understands and will comply with this req
3.02	Implementation Security - All Implementation Team Personnel (2)	The Vendor shall immediately identify those personnel who permanently leave the project	F	FAST understands and will comply with this req.
3.03	Implementation Security - All Implementation Team Personnel (3)	All currently identified personnel shall successfully complete all DOR-required annual Security/Confidentiality training. Any failure to complete by the deadline will result in suspension of the non-compliant users' network ids and a suspension of payments to Vendor until rectified	F	FAST understands and will comply with this requirement.
3.04	Implementation Security - All Implementation Team Personnel (4)	Contractor network accounts shall be re-certified monthly	F	FAST understands and will comply with this requirement.
3.05	Implementation Security - On-site Implementation Team Personnel (1)	All on-site Vendor personnel shall utilize Indiana DOR-issued workstations and laptops exclusively	F	FAST understands and will comply with this requirement.
3.06	Implementation Security - On-site Implementation Team Personnel (2)	All on-site Vendor personnel shall exchange email with off-site workers using Indiana DOR issued email accounts	F	FAST understands and will comply with this requirement.
3.07	Implementation Security - Off-site Implementation Team Personnel (1)	All off-site Vendor personnel shall work in development area(s) that conform(s) to NIST requirements	F	FAST understands and will comply with this requirement. The FAST implementation team members are dedicated to with DOR personnel. The development and configuration to the DOR's existing infrastructure
3.08	Implementation Security - Off-site Implementation Team Personnel (2)	All off-site Vendor personnel shall use networks, email systems, development system, testing systems, workstations, and laptops governed by the Vendor's NIST-compliant security policies	F	FAST understands and will comply with this requirement. The FAST implementation team members are dedicated to with DOR personnel. The development and configuration to the DOR's existing infrastructure.
3.09	Implementation Security - Off-site Implementation Team Personnel (3)	All off-site Vendor personnel shall exchange email with on-site team using on-site team members' DOR email accounts	F	FAST understands and will comply with this requirement.
3.10	Implementation Security - Off-site Implementation Team Personnel (4)	All off-site Vendor personnel shall attach to State of Indiana network using only workstations or laptops governed by Vendor's NIST-compliant security policies	F	FAST understands and will comply with this requirement. The FAST implementation team members dedicated to the DOR personnel. The development and configuration for Ind existing infrastructure and NIST-compliant security policies
3.11	Implementation Security - Off-site Implementation Team Personnel (5)	All off-site Vendor personnel shall not share DOR remote access accounts with other off-site team members	F	FAST understands and will comply with this requirement.
3.12	Implementation Security - Off-site Implementation Team Personnel (6)	All off-site Vendor personnel shall access IRS FTI data only from DOR-issued equipment	F	FAST understands and will comply with this requirement.
3.13	Implementation Security - Certification of Development Area(s)	The Vendor shall submit to approval of compliance of development area(s) by DOR Security team	F	FAST understands and will comply with this requirement.

4. On-Premise Implementation

#	Category	Requirement	Response Code	Description/Attach
4.01	On-Premise Implementation - Protected Zone (1)	The Vendor shall implement every instance of the application system in the Indiana Office of Technology Protected Zone (PZ)	F	FAST understands and will comply with this requirement.
4.02	On-Premise Implementation - Protected Zone (2)	The Vendor shall work under IOT protocols to install and maintain the software in the PZ	F	FAST understands and will comply with this requirement.
4.03	On-Premise Implementation - Protected Zone (3)	The Vendor shall provide the IOT system administrator and database administrator with all media containing executables, installation instructions and scripts 7 days prior to the scheduled installation session.	F	FAST understands and will comply with this requirement.
4.04	On-Premise Implementation - Protected Zone (4)	The Vendor shall participate in all installations in person or via WebEX in on premise attendance is not viable.	F	FAST understands and will comply with this requirement.
4.05	On-Premise Implementation - DR/COOP (1)	The system PROD instance shall be deployed simultaneously in the IOT Main Data Center and in the IOT Backup Data Center in order to provide critical system recovery in the case of a disaster in the Indianapolis metro area.	F	FAST understands and will comply with this requirement.
4.06	On-Premise Implementation - DR/COOP (2)	The system shall accommodate asynchronous replication of taxpayer data across data centers.	F	FAST understands and will comply with this requirement.
4.07	On-Premise Implementation - DR/COOP (3)	The system shall accommodate asynchronous replication of system configurations across data centers.	F	FAST understands and will comply with this requirement.
4.08	On-Premise Implementation - DR/COOP (4)	The Vendor shall include this DR/COOP capability in the license for the system.	F	FAST understands and will comply with this requirement.
4.09	On-Premise Implementation - Service Level Assignment Requirements	The Vendor shall be responsible for maintaining the application components only.	F	FAST understands and will comply with this requirement.
4.10	On-Premise Implementation - Go Live Requirements (1)	The system shall be successfully deployed for PROD in the IOT PZ	F	FAST understands and will comply with this requirement.
4.11	On-Premise Implementation - Go Live Requirements (2)	The Vendor shall be able to demonstrate compliant DR/COOP failover capabilities	F	FAST understands and will comply with this requirement. Demonstrating compliant DR/COOP failover capabilities will be Agency in developing a detailed Disaster Recovery Plan to inclu requirements. Prior to finalizing the selection of a disaster recov continuity plan, which should indicate the key metrics of recovery various business processes. The metrics specified for the busine and infrastructure that support those processes. The following ar may be utilized for the project: • Backups made to tape and sent off-site at regular intervals • Backups made to disk on-site and automatically copied to off-s • Replication of data to an off-site location, which overcomes the network (SAN) technology • The use of high availability systems which keep both the data a systems and data, even after a disaster The Disaster Recovery Plan will contain step-by-step instructions document will describe the backup and recovery functions of the those backups. The procedures in the plan will include the detail applications and databases at the disaster recovery site. These technologies, database transaction log mirroring, and replication recovery site mirrors the functionality of the production site as cl FAST has experience assisting clients with their Business Contin plans drafted or implemented. FAST provides the necessary inf Business Continuity and Disaster Recovery plans vary greatly be on the business as a whole, while Disaster Recovery Plans are c Disaster Recovery Plans are typically part or included in the Bus Business Continuity Plans are for the organization as a whole an during an unplanned event. It includes many business processes will work with DOR to include the proposed solution in the existin FAST will assist updating the State's Business Continuity and Di
4.12	On-Premise Implementation - Knowledge Transfer (1)	The Vendor must develop and maintain central repositories or data models for managing architecture, development, business process, and infrastructure metadata such as: • Source Code Repositories (Extensions only) • Work Item Tickets and change control sets • Third Party Integration Platforms and Applications including Licensing, Modules, and version information • Operating System Names and Versions • Deployed systems dependencies • Programming Languages Used to Build and Maintain the Systems • Integrated Development Environments and Versions • Automated Build Systems (Names and Versions) • Data Stores: Names, Versions, Instance Count, Environments, Clustering, and Replication Information	F	The required functionality is available using our FAST Central Re FAST believes this was previously addressed in the demo during unless requested.
4.13	On-Premise Implementation - Knowledge Transfer (2)	The Vendor shall maintain sufficient staffing to cover knowledge gaps in DOR staff until knowledge transfer is achieved.	F	FAST understands and will comply with this requirement.
4.14	On-Premise Implementation - Knowledge Transfer (3)	The Vendor shall update all documentation in DOR's system knowledgebase upon implementation of each new release of the system.	F	FAST understands and will comply with this requirement.
4.15	On-Premise Implementation - Testing (1)	The Vendor shall create a repeatable, scripted baseline testing script.	F	FAST understands and will comply with this requirement.

#	Category	Requirement	Response Code	Description/Attach
4.16	On-Premise Implementation - Testing (2)	The Vendor must utilize a security testing approach that aligns with NIST 800-115, Technical Guide to Information Security Testing and Assessment.	P	The proposed solution is a Commercial Off-The-Shelf (COTS) s in security, secure-by-design, and best-of-breed defensive progr environment, the overall system is resilient to known attack patte NIST controls which correspond to IRS Publication 1 ST after every major software release. In the most rece. en for the most recent version of our software. The secu.. ..is re infrastructure, networking, and hardware for the project, FAST w with NIST 800-115 where applicable to the proposed solution. Although the core architecture of GenTax is similar, each instali i security personnel are best positioned to perform the assessmei Security testing can be performed in a manner that complies wit where it is applicable. FAST affirms such security assessments i to ensure no appearance of impropriety.
4.17	On-Premise Implementation - System Audits	The Vendor shall provide all staffing resources required to assist DOR in their triennial IRS Safeguard Audits as well as all pre-audit activities conducted by DOR and the State Board of Accounts.	F	FAST understands and will comply with this requirement. FAST anticipates supporting the agency through Internal Revem integrated tax solution with an approved IRS Safeguard Comput system as being compliant with IRS confidentiality and data safe IRS Safeguard Audit occurs, support will be covered under the c
4.18	On Premise Implementation - Roadmaps	The Vendor shall maintain a system roadmap to support infrastructure and technology spending decisions for a 5 year planning horizon	F	FAST understands and will comply with this requirement.

5. System Availability

#	Category	Requirement	Response Code	Description/Attachment (<300
5.01	System Availability - Uptime (1)	The Vendor system shall be available to users 24 hours per day (i.e. no requirement to take online interfaces down in order to run batch processes)	F	FAST understands and will comply with this requirement.
5.02	System Availability - Uptime (2)	The Vendor system's user interface functions shall be available to internal users from 6:00am until 10:00pm Monday - Saturday	F	FAST understands and will comply with this requirement.
5.03	System Availability - Uptime (3)	The Vendor system's user interface functions shall be available to public business users 24 hours per day from the 15th of each month through the end of the month	F	FAST understands and will comply with this requirement.
5.04	System Availability - Uptime (4)	The Vendor system's user interface functions shall be available to public Individual users from 6:00am until 12:00pm seven days per week	F	FAST understands and will comply with this requirement. FAST understands and agrees to ensure GenTax e-Service user interface fu corrected time period. Outages due to scheduled maintenance, infrastructure control of FAST are excluded from uptime system availability requirements.
5.05	System Availability - Uptime (5)	The system shall be considered as unavailable if the online response times are a factor of three (3) greater than the response time requirements in the Service Level Requirements worksheet.	X	FAST is unable to agree with this requirement as stated. FAST defines syste users. FAST is not able to agree with this requirement as stated. However, please re responses at any time will be accounted for in the statistic reported as respon

6. Solution Capacity

#	Category	Requirement	Response Code	Description/Attacl
6.01	Solution Capacity - Concurrent Users (1)	The Vendor system shall support at least 700 concurrent internal users	F	FAST understands and will comply with th .er 1. FAST provided the total estimated number of virt GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.02	Solution Capacity - Concurrent Users (2)	The Vendor system shall support at least 10000 (normal load) and 25000 (peak load) concurrent external users	F	FAST understands and will comply with this requirer 1. FAST provided the total estimated number of virt GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.03	Solution Capacity - Individual Income Tax Accounts	The Vendor system shall support at least 4M individual income tax accounts with annual tax filings	F	FAST understands and will comply with this requirer 1. FAST provided the total estimated number of virt GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.04	Solution Capacity - Corporate Income Tax Accounts	The Vendor system shall support at least 400K corporate income tax accounts with annual tax filings	F	FAST understands and will comply with this requirer 1. FAST provided the total estimated number of virt GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.05	Solution Capacity - Trust/Excise Tax Accounts	The Vendor system shall support at least 1.6M business trust and excise tax accounts with monthly tax filings	F	FAST understands and will comply with this requirer 1. FAST provided the total estimated num. int GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.06	Solution Capacity - Income Tax Processing Load	The Vendor system shall process at least 120K income tax returns per day	F	FAST understands and will comply with this requirer 1. FAST provided the total estimated number of virt GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.

#	Category	Requirement	Response Code	Description/Attacl
6.07	Solution Capacity - Trust/Excise Tax Processing Load	The Vendor system shall process at least 70K trust tax returns per day	F	FAST understands and will comply with this requiren 1. FAST provided the total estimated number of virtu GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.08	Solution Capacity - Data Retention	The Vendor system shall store data (i.e. account, filings, correspondence) for each taxpayer for 10 years	F	FAST understands and will comply with this requiren 1. FAST provided the total estimated number of virtu GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.
6.09	Solution Capacity - Unlimited Software Transactions	The software license of the solution shall support an unlimited number of concurrent internal users, concurrent external users, tax accounts, tax returns and other transactions	F	FAST understands and will comply with this requiren 1. FAST provided the total estimated number of virtu GenTax in our response to the critical questions list server requirements have also been included in this to requirements 7.01 - 7.06. 2. Yes. A single large database server with Multi-Sit the Production database server. FAST still recomme expected performance and service levels.

7. Service Level Requirements

#	Category	Requirement	Response Code	Descriptio
7.01	Required Service Levels - General (1)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Concurrent User System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply this r components, licensing, and non-' vdv phase of the project. Please see H. FAST Clarification Questions a
7.02	Required Service Levels - General (2)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Individual Income Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply with this r components, licensing, and non-Vendor softv phase of the project. Please see H. FAST Clarification Questions a
7.03	Required Service Levels - General (3)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Corporate Income Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply with this r components, licensing, and non-Vendor softv phase of the project. Please see H. FAST Clarification Questions a
7.04	Required Service Levels - General (4)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Trust/Excise Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply with this r components, licensing, and non-Vendor softv phase of the project. Please see H. FAST Clarification Questions a
7.05	Required Service Levels - General (5)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Income Tax Processing Load System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply with this r components, licensing, and non-Vendor softv phase of the project. Please see H. FAST Clarification Questions a
7.06	Required Service Levels - General (6)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Trust/Excise Tax Processing Load System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein	F	FAST understands and will comply with this r components, licensing, and non-Vendor softv phase of the project. Please see H. FAST Clarification Questions a
7.07	Required Service Levels - General (7)	The Vendor shall monitor performance of the Services against the Service Levels and provide CUSTOMER with performance reports, as soon as reasonably practicable and in any event within ten (10) days of the end of each month, in a mutually agreed format, specifying the: Service Levels; Provider's performance that month against each of the Service Levels, including full details of any failure to meet the Service Levels; and number of Service Credits due (if any) against each Service Level.	F	FAST understands and will comply with this r
7.08	Required Service Levels - General (8)	The Vendor shall provide remediation plans with respect to underperformed Service Levels and recommendations (if any) for any modifications to the Services and/or the Service Levels.	F	FAST understands and will comply with this r
7.09	Required Service Levels - Response Time (1)	The Vendor system shall respond to user input within 3 seconds for 99.9% of transactions	X	FAST is unable to agree to this requirement a between when GenTax receives a user call a GenTax are typically less than or equal to tw Please note that large reports, file uploading, this response time. Internet response times a response time measurement. Response time reporting is included with the proposed solutio 1. FAST provided the total estimated number our response to the critical questions list requ requirements have also been included in this requirements 7.01 - 7.06. 2. Yes. A single large database ser 'th M Production database server. FAS 'on performance and service levels The infrastructure and expected server level r in the original response. We have also provid control over the total infrastructure which ma Please see H. FAST Clarification Questions a
7.10	Required Service Levels - Response Time (2)	The Vendor system shall respond to user input within 2 second for 99.8% of transactions	X	FAST is unable to agree to this requirement a between when GenTax receives a user call a GenTax are typically less than or equal to tw Please note that large reports, file uploading, this response time. Internet response times a response time measurement. Response time reporting is included with the proposed solutio 1. FAST provided the total estimated number our response to the critical questions list requ requirements have also been included in this requirements 7.01 - 7.06. 2. Yes. A single large database server with M Production database server. FAST still recon performance and service levels.

#	Category	Requirement	Response Code	Descriptk
7.11	Required Service Levels - Security (1)	The Vendor shall agree to comply with the requirement System Security - Technology Stack Vulnerability Remediation (2) 95% of the time	F	FAST understand and will comply with this r FAST believes this was previously addressed response is necessary unless requested
7.12	Required Service Levels - Security (2)	The Vendor shall agree to comply with the requirement System Security - Technology Stack Currency 95% of the time	F	FAST understands and will comply with this r
7.13	Required Service Levels - Security (3)	The Vendor shall agree to comply with the requirement System Security - Remediation Testing 100% of the time	F	FAST understands and will comply with this r
7.14	Required Service Levels - Security (4)	The Vendor shall agree to comply with the requirement System Security - Identity Protection (2) 100% of the time	F	FAST understands and will comply with this r
7.15	Required Service Levels - Security (5)	The Vendor shall agree to update the plan described in requirement System Security - System Security Plan on an annual basis	F	FAST understands and will comply with this r
7.16	Required Service Levels - Security (6)	The Vendor shall agree to comply with all Implementation Security requirements 100% of the time	F	FAST understands and will comply with this r FAST believes this was previously addressed response is necessary unless requested

8. System Integrity

#	Category	Requirement	Response Code	D[illegible]otic
8.01	Audit & Tracking	The Vendor system shall maintain a log of all instances of a user account being employed to access taxpayer data.	F	FAST understands and w[illegible]ly By submitting the vendor response configuration of currently available ' To maintain a comprehensive audit versioning system to record all itera is never deleted. Versioning is also record simultaneously—versioning updates made by the first process. User activities in the system are log GenTax can track all actions perfor The tracking tool can provide inform account was accessed, how many t was denied access. A higher-level u performed various functions over ti The GenTax Snapshots function all step-by-step system activities of on code-based 'snapshots' of session- and stores data that agencies can u the steps that led users to errors, a requirements, GenTax Snapshots u representations. Agencies may cho documentation schemes that meet minimize storage requirements. Please see H. FAST Clarification Q
8.02	Audit & Tracking	Audit logs shall roll over on a periodic basis so their contents can be analyzed and archived without affecting system operation or retention requirements.	F	FAST understands and will comply By submitting the vendor response configuration of currently available ' To maintain a comprehensive audit versioning system to record all itera is never deleted. Versioning is also record simultaneously—versioning updates made by the first process. User activities in the system are log GenTax can track all actions perfon The tracking tool can provide inform account was accessed, h[illegible]y u was denied access. A hig[illegible]el u performed various functions over ti The GenTax Snapshots function all step-by-step system activities of on code-based 'snapshots' of session- and stores data that agencies can u the steps that led users to errors, a requirements. GenTax Snapshots u representations. Agencies may cho documentation schemes that meet minimize storage requirements. Please see H. FAST Clarification Q

8.03	Audit & Tracking	Logging shall be configurable at the component level.	F	FAST understands and will comply By submitting the vendor response configuration of currently available ' To maintain a comprehensive audit versioning system to record all itera is never deleted. Versioning is also record simultaneously—versioning updates made by the first process. User activities in the system are log GenTax can track all actions perfor The tracking tool can provide inform account was accessed, how many t was denied access. A higher-level c performed various functions over ti The GenTax Snapshots function all step-by-step system activities of onl code-based 'snapshots' of session- and stores data that agencies can u the steps that led users to errors, a requirements, GenTax Snapshots u representations. Agencies may cho documentation schemes that meet minimize storage requirements. Please see H. FAST Clarification Q
8.04	Audit & Tracking	Logging detail level shall be configurable to specify the verbosity of the messages.	F	FAST understands and will comply By submitting the vendor response configuration of currently available ' To maintain a comprehensive audit versioning system to record all itera is never deleted. Versioning is also record simultaneously—versioning updates made by the first process. User activities in the system are log GenTax can track all actions perfor The tracking tool can provide inform account was accessed, how many t was denied access. A higher-level c performed various functions over ti The GenTax Snapshots function all step-by-step system activities of on code-based 'snapshots' of session- and stores data that agencies can u the steps that led users to errors, a requirements, GenTax Snapshots u representations. Agencies may cho documentation schemes that meet minimize storage requirements. Please see H. FAST Clarification Q

9. Interface Requirements

#	Category	Requirement	Response Code	Dest
9.001	Interfaces - General (1)	All interfaces shall be maintained and operated in a secure fashion. File read will be decrypted in memory. Files shall be encrypted before they are written. The Vendor must also provide a utility to allow us to decrypt the file for troubleshooting.	F	Management Studio > Interfaces The GenTax architecture inc ac addressed in the demo durin chn
9.002	Interfaces - General (2)	All existing interfaces shall be implemented so as not to cause unwanted additional work (other than testing) for DOR's trading partners. Existing file formats shall be used for existing interfaces unless the partner agrees to update the interface within the ITS Modernization mandated timeframes.	F	Management Studio > Interfaces
9.003	Interfaces - General (3)	The Vendor system shall provide a secure enterprise service bar, (ESB) for moving files through the processing environment. Any interface not using the ESB shall move via SFTP protocol	F	Management Studio > Interfaces > FAST SFTP is supported. The FAST application is an integrated co tor tax and revenue administration and tr Communication between GenTax at a re VS) at a motor vehicle agency, would be FAST application modules are designed or overhead of adding additional middlew and external systems to access publicly- provides the communication mechanism (outgoing). The FAST Gateway is design Architecture (SOA) principles to promote applications. The FAST Gateway is a re required even if additional layers are pres without introducing additional layers due t overhead, and costs incurred
9.004	ITS Application Web User Interface - Authentication	The Vendor system shall provide a web server-based user interface allowing the user to authenticate with the Vendor system.	F	Management Studio > Security
9.005	ITS Application Web User Interface - Authorization (1)	The Vendor system shall provide a web server-based user interface allowing the security manager to establish user roles for purposes of granting rights to specific Vendor system tasks and transactions.	F	Management Studio > Security
9.006	ITS Application Web User Interface - Authorization (2)	The Vendor system shall provide a web server-based user interface allowing the security manager to assign specific users to user roles.	F	Management Studio > Security
9.007	ITS Application Web User Interface - Configuration	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to modify or augment Vendor system configurations.	F	Management Studio > Security
9.008	ITS Application Web User Interface - Business Process Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute business functions made available by the Vendor system.	F	Management Studio > Security
9.009	ITS Application Web User Interface - Financial Process Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute financial functions made available by the Vendor system.	F	Management Studio > Security
9.010	ITS Application Web User Interface - Analytical Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute analytical functions made available by the Vendor system.	F	Management Studio > Security
9.011	OSS Web Service - Taxpayer Status	The Vendor system shall provide a web service allowing the MCSD OSS to obtain the compliance status of a taxpayer using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.012	NACHA Bank File Interface (Bank EFT)	The software shall provide the ability to generate a NACHA format file that can be accepted by each of the Financial Institutions into which DOR deposits funds.	F	Management Studio > Interfaces
9.013	INBiz Web Service - Taxpayer Standing	The Vendor system shall provide a web service allowing the SOS INBiz Vendor system to obtain the compliance status of a taxpayer using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.014	INBiz Web Service - Taxpayer Account	The Vendor system shall provide a web service allowing the SOS INBiz Vendor system to obtain the details of a taxpayer account using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.015	INBiz File - Tax Period Filings	The Vendor system shall provide web server services for Business/Excise/Trust tax returns filed via the INBiz Vendor system. These services shall be the same services as those used to service the same transactions entered via the ITS Taxpayer Portal.	X	The required functionality is capable using
9.016	INBiz Payments	The Vendor system shall receive payments from the INBiz Payment Processing provider (VPS)	C	Management Studio > Interfaces
9.017	ITS Database VRU Web Service - Taxpayer Information	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to obtain the compliance status of a taxpayer using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.018	ITS Database VRU Web Service - Account Status	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to obtain the status of a taxpayer account using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.019	ITS Database VRU File - Taxpayer Payment	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to accept a payment from a taxpayer using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.020	ITS Application PostMasters File (Form-Driven Correspondence)	The Vendor system shall create data files for correspondence items that are formatted and printed by the state's mailing and printing	C	Management Studio > Interfaces
9.021	ITS Application PostMasters File (Correspondence Letter)	The Vendor system shall create portable document files (Postscript) for correspondence items that are printed by the state's mailing and printing vendor.	F	Customer > Correspondence The GenTax output files use ing a printer or print queue software. Using a generated PS files can then be sent to a print queue management software capat PostScript
9.022	ITS Application PostMasters File (Mailing Confirmation)	The Vendor system shall accept a confirmation file from the state's mailing and printing vendor.	C	Management Studio > Interfaces
9.023	ITS Application LexisNexis File	The Vendor system shall provide a file of suspect taxpayer identities and provide them to the DOR's LexisNexis interface	C	Management Studio > Interfaces
9.024	ITS Application LexisNexis Response File	The Vendor system shall accept a file of suspect taxpayer identity confirmation results from the DOR's LexisNexis interface	C	Management Studio > Interfaces
9.025	ITS Application GMIS File (Financial Accounting Transactions)	The Vendor system shall generate a file of Revenue Accounting transactions using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.026	ITS Application GMIS File (Direct Deposit Transactions)	The Vendor system shall generate a file of Direct Refund Deposit Totals using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.027	ITS Application GMIS File (Refund - Paper Transactions)	The Vendor system shall generate a file of Refund (paper) using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.028	Bank - Direct Deposit	The Vendor system shall generate a file of Direct Refund Deposit transactions to be sent to Bank using the format prescribed by the Bank NACHA format. Must balance to GMIS Direct deposit total	C	Management Studio > Interfaces
9.029	ITS Application GMIS File (Warrant Number - Original Transactions)	The Vendor system shall receive a file of tracking ids i.e. check numbers for paper refunds and check payments to collection agents; and the electronic deposit id for electronic collection agent payments using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.030	ITS Application GMIS File (Warrant Number - Replacement Transactions)	The Vendor system shall receive a file of replacement check numbers for paper refunds using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.031	ITS Application GMIS File (Collection agents Transactions - clerks, sheriff, collection agency)	The Vendor system shall generate a file of collection agent payments using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.032	ITS Application GMIS File (VPS rejects)	The Vendor system shall generate a file of VPS rejected payments using the format prescribed by the state's PeopleSoft GMIS.	C	Management Studio > Interfaces
9.033	Bank - Direct Deposit Rejects	The Vendor system shall receive a file of Direct Refund Deposit Rejection transactions from the Bank using the format prescribed by the Bank NACHA format.	C	Management Studio > Interfaces
9.034	ITS Application CIC Web Service (Taxpayer information)	The Vendor system shall provide a web service allowing the CIC telephony Vendor system to obtain the tax account information of a taxpayer using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.035	ITS Application CIC Web Service (Taxpayer information)	The Vendor system shall provide a web service allowing the CIC telephony Vendor system to accept and store the interaction ID for a taxpayer encounter using the WSDL provided by DOR.	C	Management Studio > Interfaces
9.036	DOR Web User Interface (DORStar user interaction)	The Vendor system shall provide a data context sensitive link to the DOR's Image Repository	C	Management Studio > Interfaces
9.037	IRS Modernized eFile (Electronic Returns Download & Filings)	The software shall provide an interface to the IRS Modernized eFile (MeF) system	F	Management Studio > Interfaces

#	Category	Requirement	Response Code	Desc
9.038	IRS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)	The software shall receive file through an interface to IRS Secure Data Facility (SDT) system. Includes IMF, ITRF, BMF, BTRF, IMFR, CP2000, EOAD, PITFR, STATE_LEADRPT_X	F	Compliance > Data Warehouse The Data Warehouse subsystem is prec Internal Revenue Service (IRS), including provide an out-of-the-box interface for tra downloaded/uploaded the files manually, SFTP or other transmission methods.
9.039	IRS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)	The software shall created files and interface to IRS through IRS Secure Data Facility (SDT) system	F	Management Studio > Interfaces The Data Warehouse subsystem is prec Internal Revenue Service (IRS), including provide an out-of-the-box interface for tra downloaded/uploaded the files manually, SFTP or other transmission methods.
9.040	Imaging ITS Database XML File	The software shall accept XML Payment and Return files from the DOR imaging systems.	F	Management Studio > Interfaces
9.041	Imaging ITS Database ASCII File	The software shall accept ASCII Payment and Return files from the DOR imaging systems.	F	Management Studio > Interfaces
9.042	External Agency XML File - SSA	The Vendor system shall accept files from the Social Security Administration using the SSA's prescribed format	C	Management Studio > Interfaces
9.043	External Agency File (92 County Clerks - Warrant Recording Number)	The Vendor system shall create files to be sent to County Clerks to request Entries of Judgement against delinquent taxpayers and to provide warrant numbers for recording using DOR's required file format.	C	Management Studio > Interfaces
9.044	External Agency File (County Clerks - Warrant Recording Number)	The Vendor system shall receive files from County Clerks verifying Entries of Judgement against delinquent taxpayers and recording of warrant numbers.	C	Management Studio > Interfaces
9.045	External Agency File (County Clerks - Warrant Sat of Lien)	The system shall create Satisfaction of Lien files to send to County Clerks releasing Entries of Judgement against delinquent taxpayers and recording of warrant numbers.	C	Management Studio > Interfaces
9.046	External Agency File (70 County Sheriffs - Warrant Status)	The Vendor system shall create files to be sent to County Sheriffs placing tax warrants into their jurisdictions for collection by them.	C	Management Studio > Interfaces
9.047	External Agency File (County Sheriffs - Warrant Status)	The Vendor system shall receive files from County Sheriffs reporting status or changes of tax warrants placed into their jurisdictions for collection by them	C	Management Studio > Interfaces
9.048	External Agency File (County Sheriffs - Warrant Status)	The Vendor system shall receive files from County Sheriffs reporting payments or payment plans on tax warrants placed into their jurisdictions for collection by them.	C	Management Studio > Interfaces
9.049	External Agency File (Third Party Collection Agent - Warrant Status)	The Vendor system shall create files to be sent to Third Party Collection Agents placing tax warrants for collection by them.	C	Management Studio > Interfaces
9.050	External Agency File (Third Party Collection Agent - Warrant Status)	The Vendor system shall receive files from Third Party Collection Agents reporting status or changes of tax warrants placed for collection by them.	C	Management Studio > Interfaces
9.051	External Agency File (Informatix Bank Account Request)	The Vendor system shall request files from Informatics identifying Taxpayers we would wish to know their Bank Accounts.	C	Management Studio > Interfaces
9.052	External Agency File (Informatix Bank Account Data)	The Vendor system shall receive files from Informatics identifying Bank Accounts that could be levied.	C	Management Studio > Interfaces
9.053	External Agency File (Address Standardization)	The Vendor system shall interface with an Address Standardization provider	X	Management Studio > Interfaces GenTax is CASS certified. An interface to is not recommended.
9.054	External Agency File (Address Validation)	The Vendor system shall interface with an Address Validation (NCOA) provider	F	Customer > Registry > Additional Featur GenTax interfaces with NCOA data provi the third-party vendor providing the data commonly used. However, if a transactio service or more frequent file exchanges,
9.055	External Agency File (Bulk Returns Filings)	The Vendor system shall provide the ability for pre approved external entities (e.g. Payroll Providers, Retirement Plans) to upload tax filings for their clients.	C	Management Studio > Interfaces Professional Tax Preparers (PTP) and th the Internet. Authorized 3rd parties have ACH debit payments files through e-servi request is processed in GenTax, the file functionality will take over the processing
9.056	External Agency File (Federal Court System)	The software shall accept a file from the Public Access to Court Electronic Records (PACER) system (www.pacer.gov) using the PACER XML format.	F	Compliance > Bankruptcy > EBN
9.057	External Agency File (IRS - Federal Offset Levy - Candidates)	The Vendor system shall accept a IRS file of available Federal Taxpayer Debts using the DOR's prescribed file format.	F	Management Studio > Interfaces
9.058	External Agency File (IRS - Federal Offset Levy - Refunds)	The Vendor system shall create a file of available Taxpayer Tax Refund Offset Amounts for the IRS (Exchange through EFTPS) using the DOR's prescribed file format.	F	Management Studio > Interfaces
9.059	External Agency File (IRS - Federal Offset Levies Confirmation)	The Vendor system accept a Confirmation file of Indiana Taxpayer Tax Refund Offset Amounts for the IRS using the DOR's prescribed file format.	F	Management Studio > Interfaces
9.060	External Agency File (IRS - Federal Offset Levies Acknowledgement)	The Vendor system accept a acknowledgement file of Indiana Taxpayer Tax Refund Offset Amounts for the IRS using the DOR's prescribed file format.	F	Management Studio > Interfaces
9.061	External Agency File (IRS - State Offset Request - FMS/TOP program)	The Vendor system shall create a file of requests and updates for Indiana Liabilities Amounts for the IRS using the FMS/TOP's prescribed file format.	F	Management Studio > Interfaces
9.062	External Agency File (IRS - Federal Offset Reply - Unprocessable)	The Vendor system shall receive a file of Unprocessable using the FMS/TOP's prescribed file format.	F	Management Studio > Interfaces
9.063	External Agency File (IRS - Federal Offset Reply - Payments/Reversal)	The Vendor system shall receive a file of payments and reversals using the FMS/TOP's prescribed file format.	F	Management Studio > Interfaces
9.064	External Agency File (IRS - State Offset)	The Vendor system shall create a file of available Taxpayer Tax Refund Offset Amounts from the IRS using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.065	External Agency File (Opay - Payment)	The Vendor system shall accept an ASCII payments file from Official Payments for processing.	C	Management Studio > Interfaces
9.066	Internal Agency File (DWD - Employer Employee Census & Withholding)	The Vendor system shall accept from the Department of Workforce Development a file containing reports from employers as to their employee census and their income tax withholding using DOR's prescribed file format.	C	Management Studio > Interfaces
9.067	Internal Agency File (BMV - Title Lien Request)	The Vendor system shall create a file of delinquent taxpayers for evaluation of lienable assets by the Bureau of Motor Vehicles using DOR's prescribed file format.	C	Management Studio > Interfaces
9.068	Internal Agency File (BMV - Title Lien Proposal)	The Vendor system shall accept a file of taxpayer lienable assets from the Bureau of Motor Vehicles using the BMV's prescribed file format.	C	Management Studio > Interfaces
9.069	Internal Agency File (BMV - Title Lien)	The Vendor system shall create a file of lien requests using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.070	Internal Agency File (BMV - Address Changes) ???	The Vendor system shall accept a file of Taxpayer address changes derived from changes to a taxpayer's BMV account using the prescribed format.	C	Management Studio > Interfaces
9.071	Internal Agency File (BMV - Motor Vehicle Rental Excise filing)	The Vendor system shall create a file of Motor Vehicle Rental Excise taxpayer return filing for the BMV using DOR's prescribe format.	C	Management Studio > Interfaces
9.072	Internal Agency File (JTAC)	The Vendor system shall create a file Taxpayer filing individual income tax returns for the last 12 months to Jury Pool selection using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.073	Internal Agency File (DCR - Child Support)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from DCR - Child Support to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.074	Internal Agency File (DCR - Child Support)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for DCR - Child Support using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.075	Internal Agency File (DCR - Child Support)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for DCR - Child Support to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.076	Internal Agency File (DCR - Child Support)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for DCR - Child Support using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.077	Internal Agency File (FSSA - CCDF)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Child Care Development Fund to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.078	Internal Agency File (FSSA - CCDF)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for FSSA - Child Care Development Fund using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.079	Internal Agency File (FSSA - CCDF)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for FSSA - Child Care Development Fund to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.080	Internal Agency File (FSSA - CCDF)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA - Child Care Development Fund using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces

#	Category	Requirement	Response Code	Desc
9.081	Internal Agency File (FSSA - TANF)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Temporary Assistance for Needy Family to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.082	Internal Agency File (FSSA - TANF)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for FSSA - Temporary Assistanre using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.083	Internal Agency File (FSSA - TANF)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for FSSA - Temporary Assistance to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interf
9.084	Internal Agency File (FSSA - TANF)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA - Temporary Assistance using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Inter
9.085	Internal Agency File (FSSA - SNAP)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Supplemental Nutrition Assistance Program to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.086	Internal Agency File (FSSA - SNAP)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for FSSA - Supplemental Nutrition Assistance Program using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.087	Internal Agency File (FSSA - SNAP)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for FSSA -Supplemental Nutrition Assistance Program to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.088	Internal Agency File (FSSA - SNAP)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA - Supplemental Nutrition Assistance Program using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.089	Internal Agency File (DWD - IDET)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from DWD for employment taxes to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.090	Internal Agency File (DWD - IDET)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for DWD using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.091	Internal Agency File (DWD - IDET)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for DWD to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.092	Internal Agency File (DWD - IDET)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for DWD using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.093	Internal Agency File (JTAC)	The Vendor system shall receive a file of Outstanding Court Fees Amount requests (candidates) from JTAC to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.094	Internal Agency File (JTAC)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for JTAC using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.095	Internal Agency File (JTAC)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for JTAC to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.096	Internal Agency File (JTAC)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for JTAC using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.097	Internal Agency File (INDOT)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from INDOT for damages to be offset by Taxpayer refunds using the DOR's prescribed file format	C	Management Studio > Interfaces
9.098	Internal Agency File (INDOT)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for INDOT using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.099	Internal Agency File (INDOT)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for INDOT to apply to debts using the DOR's prescribed file format	C	Management Studio > Interfaces
9.100	Internal Agency File (INDOT)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for INDOT using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.101	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall receive a file of Unpaid Student Debt Amount requests (candidates) from Purdue University (PU) to be offset by Taxpayer refunds using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.102	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for University using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.103	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Amount for University to apply to debts using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.104	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for University using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.	C	Management Studio > Interfaces
9.105	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall receive a file of Unpaid Property Tax Debt Amount requests (candidates) from External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) to use to evaluate eligibility using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.106	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall create a files of possible Intercept Taxpayer Refund Amounts for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) Debt using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.107	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall receive a file approval/changes/releases of Intercepts for Taxpayer Refund Income Amount for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)h using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.108	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of refunds of Taxpayer Refund amounts for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) using the DOR's prescribed file format. The file must reconcile to the refund monies transferred to the agency.	C	Management Studio > Interfaces
9.109	Internal Agency - Auditor of State, Indiana State Department of Health, Dept. of Workforce Development, D.O.C., INDOT, Indiana Arts Commission, Department of Education, Hospitals, State Personnel Department)	The Vendor system shall receive a file taxpayer applying for grants, procurements, contract for check of outstanding debt with DOR using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.110	Internal Agency - Auditor of State, Indiana State Department of Health, Dept. of Workforce Development, D.O.C., INDOT, Indiana Arts Commission, Department of Education, Hospitals, State Personnel Department)	The Vendor system shall create a file taxpayer response for taxpayer's applying for grants, procurements, contract of standing with DOR using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.111	Internal Agency File (PLA - License Renewal Requests)	The Vendor system shall accept a file of professional license new and renewal request from the Professional Licensing Agency using the prescribed format.	C	Management Studio > Interf
9.112	Internal Agency File (PLA - License Renewal Protest)	The Vendor system shall create list of the PLA licenses that have been protested using the prescribed format.	C	Management Studio > Inter
9.113	Internal Agency File (PLA - License Renewal Clearances)	The Vendor system shall create list of the PLA licenses that have been cleared using the prescribed format.	C	Management Studio > Interfaces
9.114	Internal Agency File (ATC - License Renewal Requests)	The Vendor system shall accept a file of Alcoholic beverage license renewal requests from the Alcoholic Beverage Commission using the prescribed format.	C	Management Studio > Interfaces
9.115	Internal Agency File (ATC - License Renewal Protest)	The Vendor system shall create list of the ATC licenses that have been protested using the prescribed format	C	Management Studio > Interfaces
9.116	Internal Agency File (ATC - License Renewal Clearances)	The Vendor system shall create list of the ATC licenses that have been cleared using the prescribed format.	C	Management Studio > Interfaces
9.117	Internal Agency File (HPA - License Renewal Requests)	The Vendor system shall accept a file of health professional license renewal requests from the Health Professions Licensing Agency using the prescribed format.	C	Management Studio > Interfaces
9.118	Internal Agency File (HPA - License Renewal Protest)	The Vendor system shall create list of the HPA licenses that have been protested using the prescribed format.	C	Management Studio > Interfaces
9.119	Internal Agency File (HPA - License Renewal Clearances)	The Vendor system shall create list of the HPA licenses that have been cleared using the prescribed format.	C	Management Studio > Interfaces
9.120	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall accept a list of prospective Lottery retailers from the Hoosier Lottery for determination that each is registered to collect the taxes appropriate for a retail business.	C	Management Studio > Interfaces
9.121	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall create list of the Lottery retailers that have been protested using the prescribed format.	C	Management Studio > Interfaces
9.122	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall create list of the Lottery retailers that have been cleared using the prescribed format.	C	Management Studio > Interfaces
9.123	Internal Agency File (State Universities - Concessionaire Verification)	The Vendor system shall accept a file of business taxpayer identifiers from each state university for use to determine that each is in tax compliance with the DOR.	C	Management Studio > Interfaces
9.124	Internal Agency File (State Universities - Concessionaire Verification) Universities: IU, PU, BSU, IVT, USI)	The Vendor system shall create list of the retailers that have been protested using the prescribed format.	C	Management Studio > Interfaces
9.125	Internal Agency File (State Universities - Concessionaire Verification) Universities: IU, PU, BSU, IVT, USI)	The Vendor system shall create list of the retailers that have been cleared using the prescribed format.	C	Management Studio > Interfaces
9.126	Internal Agency File (FSSA Social Services Data Warehouse)	The Vendor system shall create a files of Taxpayer Refund Amounts for FSSA Social Services Data Warehouse for FSSA interface with Federal programs using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.127	Internal Agency File (Hoosier Lottery)	The Vendor system shall generate a file of delinquent taxpayers for DOR and external agencies involved in the refund offset and provide it to the Hoosier Lottery.	C	Management Studio > Interfaces
9.128	Internal Agency File (ISDH - Death Certificate File)	The Vendor system shall receive a file of death certificates from the Indiana State Department of Health using the prescribed format.	C	Management Studio > Interfaces
9.129	Internal Agency File (IEDC - EDGE Credits)	The Vendor system shall receive a file of EDGE, EDGE-R, HIII and HBIL Credits taken by taxpayers for use by the Indiana Economic Development Corporation in managing their development contracts using the defined format.	C	Management Studio > Interfaces

#	Category	Requirement	Response Code	Desc
9.130	Internal Agency File (IHCDA - NAP Credits)	The Vendor system shall receive a file of Neighborhood Assistance Program Credits taken by taxpayers for use by the Indiana Housing and Community Development Authority in managing their development contracts using the defined format.	C	Management Studio > Interfaces
9.131	Internal Agency File- Ascensus)	The Vendor system shall receive a file of Collect Choice (529) Credits which taxpayers made for use as a tax credit using DOR's prescribe the defined format.	C	Management Studio > Interfaces
9.132	Internal Agency File (College Saving)	The Vendor system shall receive a file of Collect Choice (529) Credits which taxpayers made for use as a tax credit using DOR's prescribe the defined format.	C	Management Studio > Interfaces
9.133	Internal Agency File (IESA -Collect Choice Credits)	The Vendor system shall create a file of Collect Choice (529) Credits taken by taxpayers for use by the Indiana Education Savings Authority in managing their grants using the defined format.	C	Management Studio > Interfaces
9.134	Internal Agency Request (SOS)	The Vendor system shall make and process a request from the INBiz Vendor system for non-public information pertaining to a business' registration standing in the state.	C	Management Studio > Interfaces
9.135	Internal Agency Request (GIS)	The Vendor system shall make and process a request to the state's Geographic Information Vendor system to geo-code taxpayer locations.	C	Management Studio > Interfaces
9.136	Streamlined Sales Tax Registration Clearinghouse	The Vendor system shall provide an interface to the Streamlined Sales Tax Clearinghouse to manage registrations and electronic payments and filings of retail sales tax.	F	Management Studio > Interfaces
9.137	Streamlined Sales Tax Returns/Payments	The Vendor system shall provide an interface for accepting electronic payments and filings of retail sales tax.	F	Customer > e-Services
9.138	ITS Taxpayer Portal - Business Taxpayers	The Vendor system shall provide a portal Vendor system exposing taxpayer account maintenance, account inquiry, tax filing, and tax payment functions to business taxpayers.	F	Customer > e-Services
9.139	ITS Taxpayer Portal - Individual Taxpayers	The Vendor system shall provide a portal Vendor system exposing taxpayer account maintenance, tax account inquiry, and tax payment functions to individual taxpayers.	F	Customer > e-Services
9.140	ITS Tax payment Portal - Credit/Debit Payment Processor	The Vendor system shall use the state's preferred Credit/Debit Payment Processor for collecting payments made by credit/debit card.	F	Revenue > Payments > Accept Payment
9.141	ITS Tax payment Portal - VPS Payment and Payment Rejection	The Vendor system shall use the VPS interface for collecting payments made by eCheck or Credit cards transactions.	F	Revenue > Payments > Accept Payment
9.142	ITS Tax payment Portal - eCheck Payment Processor	The Vendor system shall use the ITS's Bank interface for collecting payments made by eCheck or ACH Debit transactions.	C	Management Studio > Interfaces
9.143	VPS Payment Files (RPE)	The Vendor system shall receive VPS -credit card and ACH debit (echeck) payment file from VPS using the prescribe formats	F	Revenue > Payments > Accept Payment
9.144	Bank Payment Files	The Vendor system shall receive NACHA payment files (ACH Credit) from the States financial institutions.	F	Management Studio > Interfaces
9.145	Tax Knowledgebase	The Vendor system shall generate a context-sensitive line allowing the user to access the DOR's Tax Wiki in order to obtain tax information for reference while processing a transaction.	X	Management Studio > Help GenTax has it's own Help that allows use
9.146	External Agency File (Payroll Vendor Filing Verification Requests) (ADP/PayCheck/Paycor)	The system shall receive a file of customers of Payroll Vendor that are Indiana Withholding Taxpayers to verify Indiana filing frequencies and ids using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.147	External Agency File (Payroll Vendor Filing Verification Responses) (ADP/PayCheck/Paycor)	The system shall create a files verify Indiana filing frequencies and ids to be returned to Payroll Vendor using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.148	Internal Agency Request (OAG)	The system shall create reports/files (PACT) for the Office of Attorney General.	C	Management Studio > Interfaces
9.149	ITS Registration/Liability Portal - MCS	The system shall use the Webservice to verify taxpayer registrations, and outstanding debts status, including payments on debts.	X	The required functionality is capable usin
9.150	External Agency File (Collection Agent) Out-of-Business and Skip filers	The system shall accept files of Taxpayer's that are 'Out of Business' and Skip filers using the DOR's prescribed file format.	C	Management Studio > Interfaces
9.151	External Agency File (Fuel Tax Exchange) (KY, TN, OH, IL)	The system shall exchange a spread sheet file of state fuel tax with Indiana and surrounding states.	C	Management Studio > Interfaces
9.152	External EDI files	The system shall receive a file of return files for taxpayer and 3rd agent filing on behalf of taxpayers using the DOR's prescribed file format.	C	Management Studio > Interfaces

10. General Questions

#	Inquiry	Description/Attachment (<
10.01	We will be migrating primarily from an Accenture Tax Processing System that went live in 2000. Do you have experience converting from this system?	Yes
10.02	Please describe your capabilities for supporting Adaptive technologies, (e.g. ADA, Sec. 508)	GenTax is designed for ADA compliance by allowing easy navigatio[n] [a]yb[e] readers, such as JAWS® for Windows®, to provide accessibility by ta[b] , JSON using ADA-compliant features incorporated into the latest versions of major web GenTax responds to mouse input and keyboard commands and is designed to o experience with easy-to-use graphical controls, wizards, and automated workflo GenTax screens are derived from a core set of classes and Cascading Style She and flexible design. This core design set also allows agencies to configure and c customer interfaces to align with federal, state, and/or agency web design and a
10.03	Please describe all compatible ESB's that can interface with your system?	The FAST API Gateway is a full-service integration layer that is loosely coupled v other internal and external applications. The gateway provides the following feat • Adapters – HTTP/S (SOAP, JSON), JMS, SFTP, SMTP, JDBC, X.400 • Message routing – Rules based, Content based, Synchronous/Asynchronous • Service invocation – WS-I, UDDI, WSDL, JMS, JCA • Message transforming and validation – XSD, XPath, XSLT, transforming across • Security – Authentication and authorization using LDAP, Kerberos, secure dom • Message persistence – Guaranteed messaging (JMS) requires secure persiste • Load balancing and failover management – Cluster setup and management • End point failure management – Retry, roll-back • Reporting and alerting – Against Service Level Agreement • Service registry – Full service lifecycle control • Change management – Version control, hot-deployment of new versions, and GenTax can interface and communicate with any major 3rd party ESB system pr not dependant nor does it require an Enterprise Service Bus (ESB). The FAST W both incoming and outgoing calls. The design incorporates many of the Enterpris principles to promote agility and flexibility in regards to communication between key features for interaction between external applications, including other extern application. The FAST Gateway implements a communication mechanism for interaction wit a central point for outside agencies and external systems to access publicly-offe provides the communication mechanism for the FAST application to interface wi designed with Enterprise Service Bus (ESB) and Service-Oriented Architecture (communication between applications Please see H. FAST Clarification Questions and Additional Requests for more de
10.04	Describe how any COTS software licenses will handled? Also provide a list of all 3rd party software licenses required for your system.	Please see Cost Template Narrative for a description of our third-party software for the list of all necessary third-party software. Third-party applications are included below • Windows Server • SQL Server • MS Visual Studio • VMWare • Adobe Captivate • ANTS Profiler

10.05	Please describe batch processing in your system and your requirements for the scheduling system to manage it.	The batch manager displays an overview of system work scheduled for processi dependency-based batch processing. The batch manager also logs exceptions t the exceptions. Support personnel can schedule tasks to automate batch-related processes on a to run every few seconds or minutes to, for example, check for a particular batch issues or exceptions. Configurable options are available to allow users to add a return online without t the agency. If desired, this may be used for exception processes, such as allowi were not processed through normal front-end processing. Examples may includ longer supported through the front-end scanning solution In the event the agency allows taxpayer received returns to be added online dire identifiers, such as a document locator number (DLN). The DLN could then be u outside the GenTax application The batch processing and scheduling system is included and integrated within G processing functions to set up and maintain ongoing batch and system operation any performance issues or exceptions are identified and tracked for user review. The batch manager displays an overview of system work scheduled for processi dependency-based batch processing. The batch manager also logs exceptions t the exceptions. Support personnel can schedule tasks to automate batch-related processes on a to run every few seconds or minutes to, for example, check for a particular batch issues or exceptions
10.06	Provide a list and description of innovative capabilities that will be included in the scope of your ITS implementation.	Please see Section 2.3.2.13 Other Capabilities for a list of FAST's optional innov The GenTax Analytics subsystem provides advanced analytics capabilities that a Collection, Non-Filer, Returns, and Audit subsystems to improve the effectivenes subsystem allows users to create, run, refine, and store predictive models in Gen The optional Fast Data Services (FDS) referenced in our submittal provides integ and other data source FDS has acquired that can be used manually or atomicall provides additional advanced fraud analytics and additional identity proofing that not required to meet the requirements of the proposal. FDS has an annual fee o analytics. FDS has a one-time set up fee of $500,000. The one-time set up fee v planned rollouts. GenTax can archive financial periods by moving them from the operational datal archived data quickly and easily. Archived data is stored in separate databases f medium for archived information. A key feature of GenTax is that it allows for efficient and effective processing wit retained with the "who/when" of the update – the UserID that made the change a graphical user interface displays the "who/when" information for the current or hi Mechanisms exist for data to be "logically" deleted, depending on the type and c reversed, addresses can be marked "invalid," accounts can be "ceased," and an the superseded data no longer influences processing, but it is always visible as a Even though GenTax provides data archiving capabilities, none of our clients in j anticipate that DOR will analyze its data archiving options with our proposed solu than to retain all data in GenTax as a historical record. GenTax will accommodat retention rules.

10.07	Provide a list and description of requirements not listed in this RFP that will be included in the scope of your ITS implementation.	Please see Section 2.3.2.13 Other Capabilities for a full list of FAST's optional s The GenTax Analytics subsystem provides advanced analytics capabilities that a Collection, Non-Filer, Returns, and Audit subsystems to improve the effectiven subsystem allows users to create, run, refine, and store predictive models in Ge The optional Fast Data Services (FDS) referenced in our submittal p ile and other data source FDS has acquired that can be used manually c ucall provides additional advanced fraud analytics and additional identity proofing tha not required to meet the requirements of the proposal. FDS has an annual fee o analytics. FDS has a one-time set up fee of $500,000. The one-time set up fee planned rollouts GenTax can archive financial periods by moving them from the operational datal archived data quickly and easily. Archived data is stored in separate databases medium for archived information A key feature of GenTax is that it allows for efficient and effective processing wit retained with the 'who/when' of the update – the UserID that made the change graphical user interface displays the 'who/when' information for the current or h Mechanisms exist for data to be "logically" deleted, depending on the type and c reversed, addresses can be marked 'invalid,' accounts can be 'ceased,' and an the superseded data no longer influences processing, but it is always visible as Even though GenTax provides data archiving capabilities, none of our clients in anticipate that DOR will analyze its data archiving options with our proposed sol than to retain all data in GenTax as a historical record. GenTax will accommodat retention rules
10.08	Please provide a list of all phone systems(e.g. genesys, aspect) that you have integrated with your system? Also please describe all the capabilities that your system has with the integrated phone systems?	Interfaces between GenTax and third-party IVR systems are in production for m is designed for ease of implementation of interfaces with other systems and soft interface mechanisms. FAST has interfaced with the following third-party IVR sy • Aspect • AvTex • Avaya • Centurion • Cisco • Contact Solutions • Five9 • First Data • Genesys • Plum Voice

Technical Proposal

RFP 17-082 Attachment F2 - Process Driven Functional Requirements Template

ructions for this Workbook

General Requirements Instructions
The light blue shaded cells indicate information Vendors are expected to provide. The description cells should be limited to 300 words or le
Additional information can be provided beyond what is included in the worksheet descriptions or answers. The additional information mus line item description.
Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be fulfilled by a future state ITS.

Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires to be fulfilled by a future state ITS.

Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coding or code like de accomplished by functional resources without the need for programming experience.

Customization: The modification or extension of software through coding or code like development to meet the specific needs of DOR. A c the Vendor as part of the solution.

Vendor: The primary implementer who will be responsible for their products and services as well as Vendor-Partner products and services.

Vendor-Partner: A partner of the Vendor who will provide products or services, and be managed and contracted by the Vendor.

Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DOR.

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner products and services.

C = Requirement is fully met by currently available Third-Party products and services, or through current Customization.

Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solution cannot meet the commits to having the capability to meet the appropriate implementation timeline.

P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products and services.

X = Requirement not met and not included in the proposal.

Brief Technical Proposal Worksheet Descriptions

Process Diagram - Process overview diagram

FRIC - Complexity Definitions - Definitions of simple, medium, complex and very complex complexity levels for the FRIC (Forms, Reports, Inte

FRIC - Forms - List of forms from business process workshops

FRIC - Reports - List of reports from business process workshops

FRIC - Interface - List of interfaces from business process workshops

Taxpayer Registration -Defines the activities for DOR including but not limited to, create and maintain taxpayer registrations, as well as licen

Correspondence - Defines the activities for DOR including but not limited to, generate and contact taxpayers regarding the status of their ac correspondence between DOR and the taxpayer.
Account Maintenance - Defines the activities for DOR including but not limited to, manage account correspondence, to load and proce xt support, or comptroller offsets), to manually post adjustments and perform clearance of open items, and to process penalties and inte review and approve overpayment and to process fraudulent activity. Finally, also defines the activities to manage postings on an entity's acc
Revenue Accounting and Distribution - Defines the activities for DOR including but not limited to, create distribution rules, to process estima accounting transfers and adjustments, to create and maintain General Ledger master data and bank master data and to reconcile these bala
Taxpayer Self Service - Defines the activities including but not limited to, entity self-service through profile log-in and account maintenance for which are also defined in this process). Also defines activities that an entity can complete through online self-service: online filings, onlin
Customer Service - Defines the activities for DOR including but not limited to, process customer correspondence in the form of fax, email, te calls, and to manage follow-up activities, the call center workforce, and the service desk.
Collections Activities - Defines the activities including but not limited to, capture debts owed to DOR, through outstanding tax payments and activities that are both automated and outsourced from discovery to taxpayer contact and enforcement.
Process Distribution - Defines the activities including but not limited to, process refunds, disbursements, check management, and exception
Process Payments - Defines the activities including but not limited to, post payments by using payment lots, identify and process taxpayer pa items against corresponding payments, and calculate appropriate penalty and interest on delinquent open items.
Manage Case Activities - Defines the activities to initiate, execute, and close cases escalated within DOR, including but not limited to appeals internal affairs, investigations, and taxpayer advocate.
Process Submissions - Defines the activities for DOR including but not limited to, process submission of tax returns, loading returns into the processing the returns and exceptions.
Worklist - Defines the activities including but not limited to, generate and maintain work items along with their attributes in task-specific qu

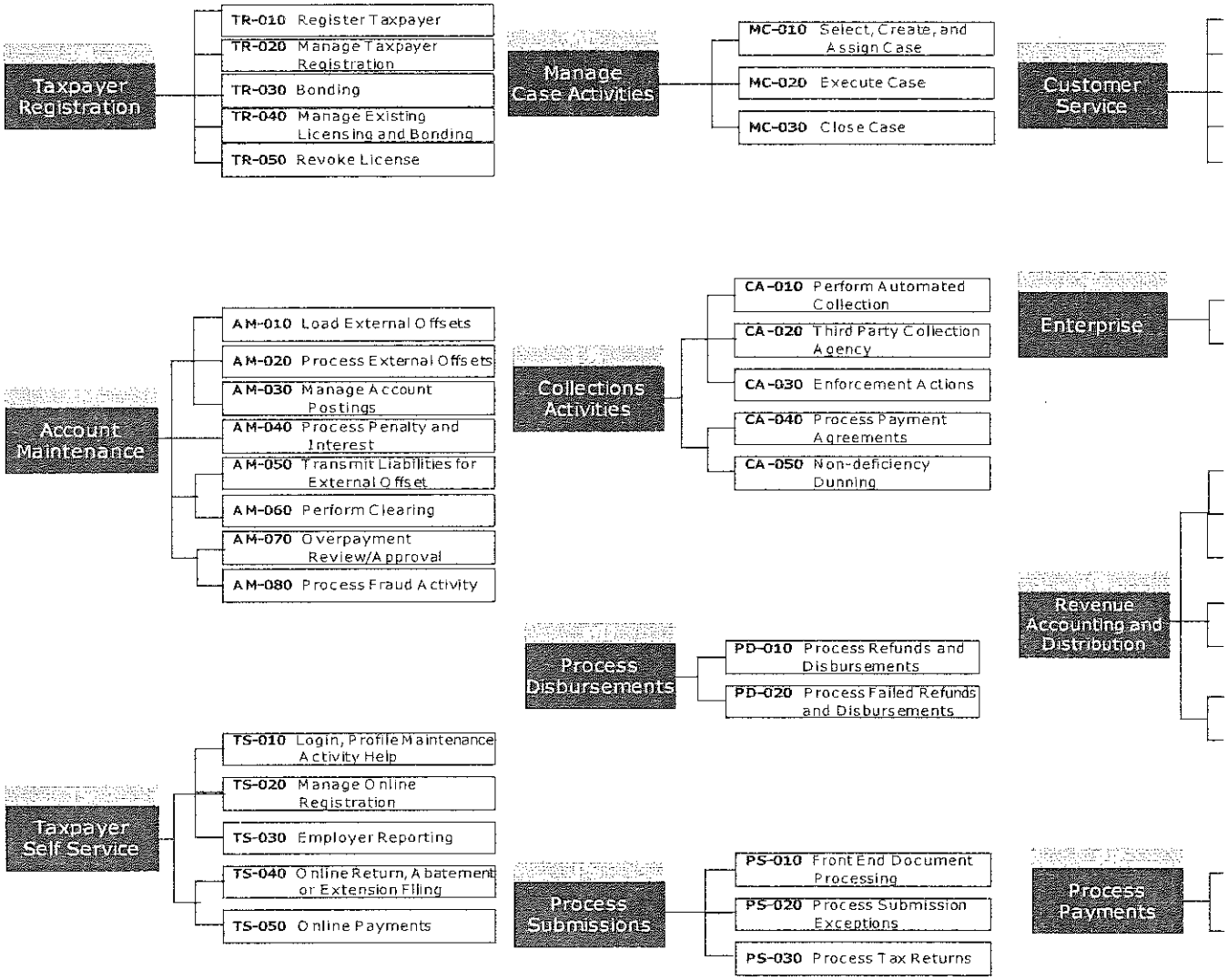
FRIC

Forms, Reports, Interfaces, and Conversions are development objects that are either pre-built as part of the vendor solution or must be dev Department of Revenue. The FRIC tabs in the worksheets have been documented in order to provide additional context to the vendor. It is leverage this list and experience from other implementations to create the appropriate estimate of effort. The development objects are pro estimate based on a full implementation of the desired end state processes as documented in this RFP. Any additional development ob cts the processes included in this RFP are the responsibility of the vendor as DOR is expecting that the vendor has the appropriate experie tc the appropriate contingency within the firm fixed price bid.

FRIC object descriptions will include the following:

- Name – Short name of the object for reference purposes
- Description – Description of the object and the purpose within the execution of the business process
- Process Reference – Mapping to the process or task that generated the object
- Complexity – High, Medium, Low designation for each object that designates the relevant level of complexity. The definitions for high, me elements. The definition for each can be found within the (FRIC - Complexity Definitions tab)
- Justification & Impact – The business impact of not building the object and any potential alternatives/workarounds
- Object Type-Specific Data – Other relevant data items that may be specific to the object type, including timing constraints, frequency, dep

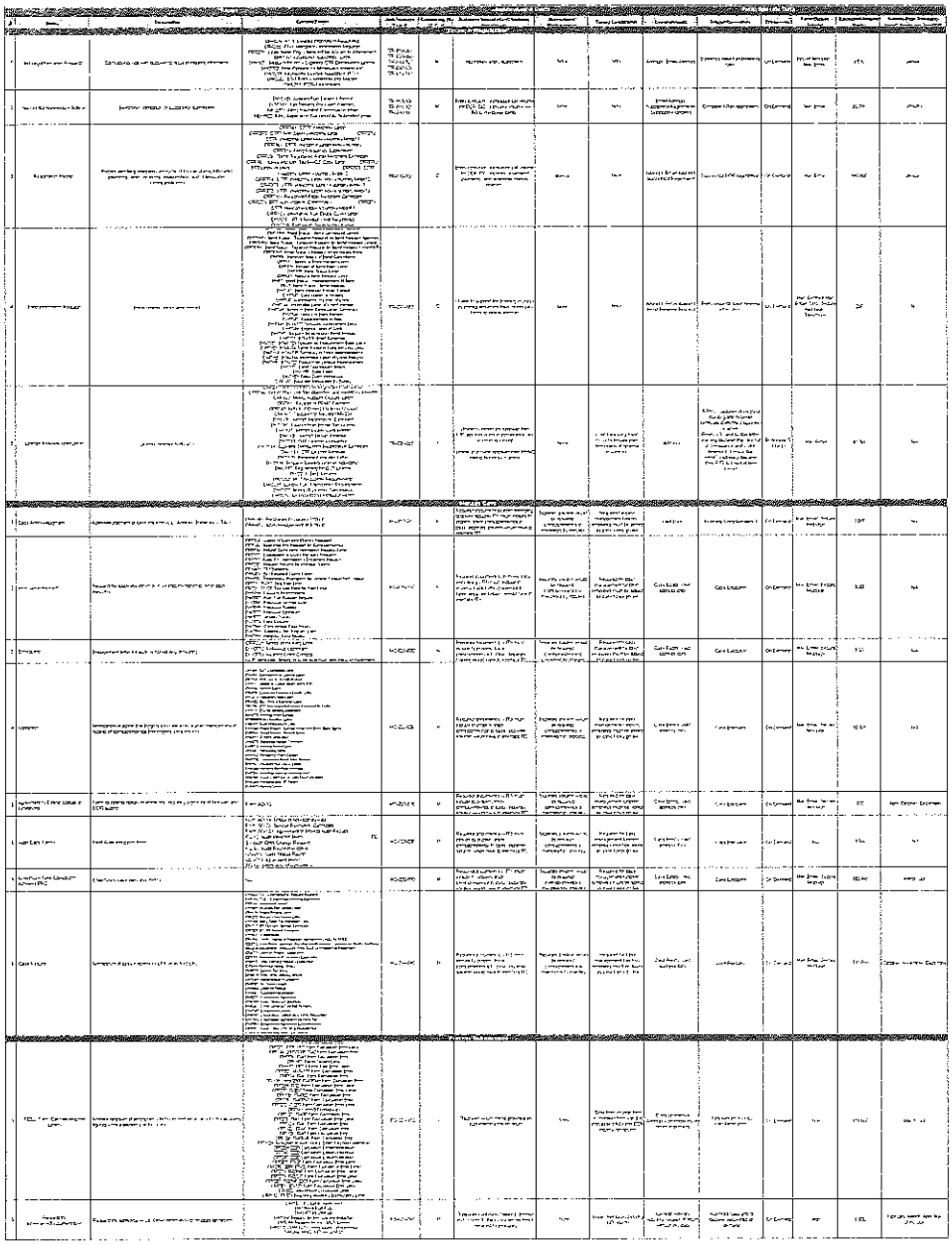
This diagram represents the processes being mapped with requirements defined.



#	Name	Description	Task Reference ID	Response

FRIC Complexity Definitions

Element	Simple (S)	Medium (M)	Complex (C)	VERY complex (V)
Correspondence (Forms)	• Layout/layout changes - Simple • Windows - One main window with few elements • Pages - Minimal changes between pages • Print Program - Minor changes to an existing program • SubRoutines - Changes in the existing subroutine program • Barcodes - No printing • Logo - Standard printing	• Layouts - Complex with multiple windows • Windows - May require new windows with some formal changes, Multiple main windows • Print Program - May require substantial changes or new program • SubRoutines - Creation of a subroutine • Barcodes - Standard printing • Logo - Simple fonts and basic graphics	• Windows - Requires new windows with complex formatting. Contains multiple main windows with multiple elements • Print Programs - Nonstandard with complex logic • SubRoutines - New functionality / business logic or multiple subroutines across different areas • Multiple logical databases • Barcodes - Requires creation of custom Barcodes, Conditional Barcode printing • Requires creation of cosmetics (grids, boxes)	• Layout - Data driven; Different layouts and data selections • Requires new print program with complex window structures • Print Program - Non-standard with complex logic • SubRoutines - Multiple or new functionality / business logic • Comprised
Reports	• Existing Report - Minimal modifications • Standalone simple report • Data Retrieval - Minimal • SQL statements - Standard • Data computations - none • Layout – one with page totals • Repository creation or modification - Minimal or none	• Existing Report - Modifications with new additional fields, alignment, or header/footer changes • Report that calls another program internally • Data retrieval - from multiple tables, views • Contains complex checks and/or authorizations needed • SQL statements - dynamic • Data computations - Arithmetic • Layout - More than one with control break totals. • Logo printing, Input enabled fields, or 2/3D Graphics Printing • Repository creation or modification - Some	• Existing Report - No, Custom built with multiple events • Consolidation of two to four complete reports • Data computations - needed • Requires debug skills and knowledge to determine underlying logic • Requires moderate performance considerations • Layout - dynamic column fields, large number of drilldowns, tree Structure • Requires large amount of repository object creation or modification • Significant effort required to identify components	• Combination of Legacy and data for report generation • Data not readily identifiable for report selection • Ambiguous Report Requirements • Contains large number of alternate views • involves multiple currencies and/or their corresponding calculations/t
Interface	• Simple direct interface to one subsystem with minimum data validation • 0 to 10 data transformations • Web Service request/reply calls with no business logic • No business logic/rules • Uses standard functions • No cross reference lookups • Standard exception handling	• Interface to multiple subsystems that requires some logging, reporting, notification, performance and security capabilities • 11 to 20 data transformations • Uses a combination of standard and/or custom functions • Limited business logic/rules • Uses cross-reference lookups • Orchestration of 1 to 2 end-points/services and processes • Standard exception handling	• Interface that requires routing, data transformation, workflow, role based security, and in real time environment to support high volume transactions • 21 to 30 data transformations • Uses a combination of standard and custom functions • Complex business logic/rules requiring custom functions • Orchestration of 3-4 end-points/services /processes • May require custom exception handling/processing	• Interface that requires complex routing, workflow, role based security, and in real time environment to support high volume transactions including standard/cu on such as NIEM, XML, etc. • 30+ data transformatio ns • Uses a combination of standard and custom functions • Complex



Attachment F2 Functional Requirements

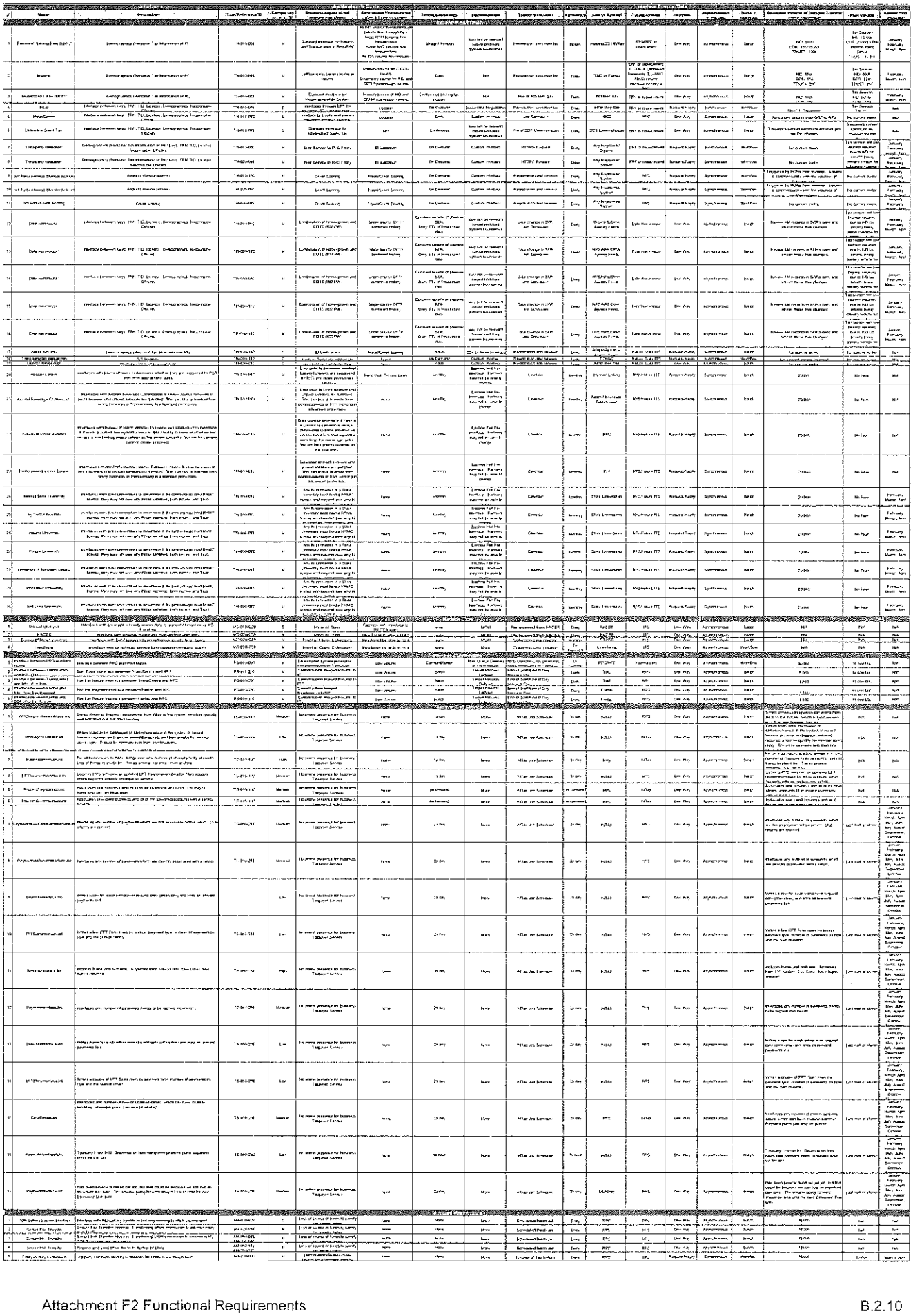


Attachment F2 Functional Requirements

#	Name	Description	Data Provided By	Legal Requirement or Contractual	Complexity	Frequency	Electronic Report Format	Delivery Method	Variable Requested	Ad hoc Requirement	Digital Transmission
				Legal Reporting							
1	New Country Summary	The New Entered Businesses Report lists every new companies in each county	TR-030	Legal	M	Annual	RPT	via Countries RPT	Name of County, Legal Name, DOI, Name, Address, FEI, Registration Date	N	N
2	Licenses	The Licenses Report lists all licenses by license type	TR-031	Legal	M	Monthly	RPT RPT2	DOR website	Taxpayer Name (Licensee Business), Business Type & Effective Date	N	N
3	Service-Based Licenses	The Service-Based Licenses Report lists licenses that are valid in more than one county (licensed to operate in 10% of DOR)	TR-032	Business	M	Monthly	ATC	Special Tax Administrative Extensions	Active Licenses as of the extraction date and is used to determine how to Maintain data	N	N
4	Expired BBNC	The Expired Annual Assessment Licenses Report lists businesses with delinquent taxes as of DOR	TR-033	Legal	M	Weekly	County Region	DOR website	Legal Name, Corporate Name, Address, County	N	N
5	Exemptions	The Exemptions Report provides information that will benefit compliance in the registration process and improve the quality and timeliness of collection process for DOR	NV	Business	C	Monthly	Analytics	Tax Admin Special Tax	Permit registered data as submitted and as required to determine how to Maintain data collection	N	N
6	Online Submissions	The Online Self Service Business Report lists the number of users browsing online and performance, statistics, the registrations and main menus, as well as providing average online transaction management	N/A	Business	M	Monthly	Analytics	Web	Online users browse and to pursue users	N	N
7	Customer Survey	The Customer Service Business provided results in the quantity, quality, and timeliness of service delivered in taxpayers	N/A	Business	M	Monthly	Analytics	Tax Admin Special Tax	To be determined - possibly real-time service process and/or report design to include the suggested KPIs	N	N
8	Licenses	The Licenses Report provides details to licensed and pending licenses and assessments	PAL/DOR	Business	C	Monthly	Analytics	Tax Admin Special Tax	To be determined - possibly real-time service process and/or report design to include the suggested KPIs	N	N
9	Quality Assurance	The QA Report will provide details on the scoring accuracy and effectiveness of questions	N/A	Business	C	Monthly	Analytics	Tax Admin Special Tax	To be determined - possibly real-time service process and/or report design to include the suggested KPIs	N	N
				Taxpayer Service							
1	Audit Assessments	The Audit Assessments report provides details about the annual assessments of audits or dollars assessed	MC-029	Legal	M	Annual	PDF	Annual Report	Assessment Amount	N	Y
2	Case Executed	The Case Executed Report provides insight into performance actions of business units including average length of time from case to case closure, levels of time to complete case activities and compliance efficiency	MC-028	Business	M	On Demand	PDF	Annual Report	Total Case Dollars, Successful Voter Activity Time, 3 Addressees Expressed	Y	N
3	Customer Survey	The Customer Service Report provides customer service satisfaction on Internet / Phone	MC-027	Business	C	On Demand	PDF	Annual Report	Survey Results	N	Y
4	Bankruptcy	The Bankruptcy report provides metrics on the efficiency of filing cases in and close per each FBI	MC-026	Business	M	On Demand	PDF	Annual Report	Number of business bureau of Court, Case data	N	Y
5	Petition Tracking	The Petition Tracking report provides insights on the petition process including [illegible] successful business and collection activities	MC-025	Business	M	On Demand	PDF	Annual Report	Number of Court, Application Date	Y	N
6	Taxpayer Advocate	The Taxpayer Advocate report provides insights in length of time for cases to be resolved and percentage of cases meeting specific timeframes	MC-024	Business	M	On Demand	PDF	Annual Report	Number of Cases, Case Duration, Resolution Date	Y	N
7	Audit	The Audit report provides metrics on audit collections including revenue collections, case selection, and other operation measures	MC-023	Business	M	On Demand	PDF	Annual Report	Case Count, Statute Extension Code, Number Performed	Y	N
				Process Improvement							
1	BPI to RPS Interface	The BPI to RPS interface Log is used to confirm that returns submitted to BPI through MyTPAD were received by RPS	PS-015	Business	M	Daily	Email Distribution	RPD, RPD	Tax Type, Transaction Count, Number Submitted, Approval Situation	N	N
2	RPS to BPS Interface	The RPS to BPI interface Log is used to confirm that returns received by RPS were sent to the Lockbox via BPI	PS-016	Business	M	Daily	Email Distribution	PTD	Log Format	N	N
3	RPS to BPI Interface	The RPS to BPI Interface Log is used to confirm returns were submitted by RPS to BPI	PS-017	Business	M	Daily	Email Distribution	PTD	Log Format	N	N
4	Alerts	An overview of the Alerts RPG and create appropriate rules to review, note, and issue refunds or bills for suspended returns	PS-014 PS-043	Business	C	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
5	Customer Issues	An overview to understand customer identification and [illegible]	PS-013	Business	C	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
6	Rejections	An overview to trace and understand when / identify trends of errors and work to capture common issues	PS-012	Business	M	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
7	Suspension	An overview to understand why and where each suspension originated as well as the reasons to correct them	PS-011 PS-020 PS-021	Business	M	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
8	Errors	An overview of assessments reviewed by the Department	PS-010	Business	M	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
9	Payments	An overview of how assessed amount of issued, received, and other payment and [illegible]	PS-009	Business	A	Daily	Email Distribution	RPD and Finance	DUNS#, Alert Channel, Payment Date, Refund Date	N	N
				Self Service							
1	User Forum	An overview of user surveys perspectives across. The report should help DOR understand areas of the system which are having issues with the goal of continuous self-service product improvement	TS-006 TS-008 TS-009 TS-010	Business	M	On Demand	Email	CSR/Communications	User Type, Transaction Error	N	N
2	User Habits	An overview of how self-service portal users are engaging with the functionality available. This report should help DOR to understand where users are having issues and where functionality or user interest and engagement is low	T1-011 TS-042 TS-043	Business	S	On Demand	Email	CSR/Communications	Weblog Analyzer	N	N
3	User Information	An overview of what information self-service customers are viewing in the self-service portal. The report should help DOR to understand how to [illegible] customer service [illegible]	TS-031 TS-038	Business	M	On Demand	Email	CSR/Communications	User Type	N	Y
4	User Technology	An overview of what technological issues have to engage with the self-service portal. The report should help DOR understand how to best self-service [illegible]	TS-011 TS-012	Business	S	On Demand	Email	CSR/Communications	Weblog Analyzer	N	N
				Account Maintenance							
1	Office Management by External Partner Report	The Office Management by External Partners Report provides insight into the offices that are licensed and operating by DOR for approved service centers	AM-018 AM-019	Business	S	Weekly	PDF	Repository	Agency Name, Electronic Software, Tax Exam	N	Y
2	DOR Issuing Office Inquiries Report	The Business Office Report provides insight into the license offices requested and processed by the IRS and/or Auditor of State on behalf of DOR	AM-020 AM-021	Business	S	Weekly	PDF	Repository	Business Name, Type of Business, Software	N	Y
3	Activity Type Analysis Report	The Activity Type Evaluation Report provides insight into the types of transactions processing online and not processed manually to determine if an activity is active	AM-022	Business	M	Weekly	PDF	Repository	Tax Payer, Services, Account, permit, date issued, permit type, date of last transaction	N	Y
4	Penalty and Interest Report	The Penalty and Interest Reports provides insight into the penalty and interest [illegible]	AM-030 Related	Business	S	Quarterly	PDF	Repository	Tax Type, Services, Account, date, total	N	Y
5	Refund Report	The Refund Report provides insight into refund status reporting from [illegible]	AM-031	Business	S	Weekly	PDF	Repository	Tax Type, date issued, Refund date, invoice [illegible]	N	Y
6	Fraud Activity and Analysis Report	The Fraud Activity and Analysis Report provides insight into the claims reported per jurisdictional boundaries, time lapse / trends to determine if actions at Taxpayer, and how effective reporting is per jurisdiction	AM-032	Business	C	On Demand	PDF	Repository	Tax type, reported fraud date, identified fraud	Y	N
				Collections							
1	Collections Portfolio Report	The Collections Portfolio Report provides high-level insight into collections activities for a "snapshot" of the current status of collections	CA-010 CA-029 CA-030	Business	C	On Demand	PDF	Collection	1) Number and percentage of outstanding accounts by tax type and collections stage 2) Detail value of outstanding accounts, by tax type and collections stage 3) Average age of accounts, by tax type and collections stage 4) Number and percentage of cases with multiple outstanding accounts, by tax	Y	Y
2	Collections Correspondence	The Correspondence Report provides metrics and/or communication between DOR and citizens as it relates to collecting revenue	CA-010 CA-029 CA-030	Business	C	On Demand	PDF	Collection	1) Number and percentage of correspondence per collection stage, by tax type, by tax activity, value and tax profile 2) Average time of response per correspondence type, by tax type, activity, value, and tax profile 3) Number and percentage of responses (by levels (e.g., payment, payment plan, dispute, no response), by tax type, activity, value	N	Y

3	Enforcement Actions	The Enforcement Actions report provides insight into the efficacy of enforcement actions carried out by enforcement officers	CS-ENF-001 CS-ENF-002	Business	C	On Demand	PDF	Collections	1) Number and percentage of collection cases resolved by enforcement actions 2) Dollar value of revenue recovered by enforcement actions 3) The number of enforcement actions taken by each officer, team, or region 4) Average length of enforcement process for each enforcement action 5) Effectiveness and compliance of enforcement actions by debtors 6) Number and percentage of cases where enforcement actions were successful in collecting the debt 7) Number of enforcement actions that were challenged or appealed by debtors 8) Number and percentage of enforcement actions that resulted in successful collection of the debt	M	Y
4	Payment Plans	The Payment Plan Report provides insight into payment plans performed (POA) and makes for community comment.	PA-RPT-001 PA-RPT-002	Business	C	On Demand	PDF	Collections	1) Number of payment plans in place, broken down by type of payment plan (e.g., lump sum, installment, settlement) 2) Average length of payment plans, broken down by type of payment plan 3) Number and percentage of payment plans that have been successfully completed 4) Number and percentage of payment plans that have been defaulted on 5) Number and percentage of payment plans that have been modified or renegotiated 6) Total amount of revenue collected through payment plans 7) Average amount of revenue collected per payment plan 8) Number and percentage of payment plans that have been terminated before completion	M	Y
5	Collection Action Duration Report	Data to identify aspects of all agents (depending on specific collection activity) take to complete a collection action. It includes ensure 5 phases of collection process: face-to-face attempt, attempt by telephone, private letter, public letter, wage garnishment, and account seizure.	CA-RPT-001	Business	C	On Demand	PDF	Collections	Agent Type ID Agent Name Number of Accounts Assigned Number of Successful Collections Number of Unsuccessful Collections Average Time to Collect Debt Total Amount Collected Total Amount Outstanding Collection Rate Number of Complaints Received Number of Disputes Resolved Number of Accounts Closed Number of Accounts Transferred to Other Agents Number of Accounts Written Off Number of Accounts Recovered After Write-Off Total Amount Recovered After Write-Off	N	Y
6	Unresolved Debt Transfer Report	Illustrates assignments made by agents to individuals that have defaulted on their debt payments and have not been successfully collected. Includes information such as the debtor's name, contact information, the amount of debt owed, and the agent to whom the debt was assigned.	DA-RPT-001	Business	M	On Demand	PDF	Collections	Debt ID Debtor Name Debtor Address Debtor Phone Number Debtor Email Address Original Debt Amount Debt Origination Date Debt Due Date Debt Status (e.g., Unresolved, Transferred, Closed) Agent ID Agent Name Agent Contact Information Transfer Date Transfer Reason	N	Y
7	Warrant Inventory Report	Provides an inventory of outstanding warrants. Summary of warrants including the total number of warrants, amount of each warrant, and the status of each warrant (e.g., active, served, expired).	WA-RPT-001	Business	M	On Demand	PDF	Collections	Warrant ID Debtor Name Debtor Address Debtor Phone Number Debtor Email Address Warrant Issue Date Warrant Amount Warrant Type (e.g., bench warrant, arrest warrant) Warrant Status (e.g., active, served, expired) Agent ID Agent Name Agent Contact Information Service Attempts Service Attempt Date Service Attempt Result Service Attempt Notes	N	Y
8	Agents With Over-Recovered Fees	Agents that have been reimbursed fees from collections that exceed the amount they were owed.	OA-RPT-001	Performance	C	On Demand	PDF	Collections	Agent ID Agent Name Agent Contact Information Total Fees Collected Total Fees Owed Over-Recovered Amount Date of Over-Recovery Reason for Over-Recovery Action Taken (e.g., refund issued, fee adjusted) Date of Action Agent Response	N	Y
9	Bail Guaranteed Debtor Spreadsheet	Balance for a particular liability period. Specific PID. Includes debtor identifying information and amounts. A combination of fees, penalties, interest, and principal that is owed by a debtor.	DA-RPT-001	Business	C	On Demand	Spreadsheet	Collections	Debtor ID Debtor Name Debtor Address Debtor Phone Number Debtor Email Address Bail Amount Bail Date Bail Status (e.g., paid, unpaid, forfeited) Court Date Court Location Charges Arresting Officer Arrest Date Arrest Location Bail Bondsman Bail Bondsman Fee Collateral Collateral Value Collateral Status (e.g., returned, forfeited)	Y	N
10	Statement of Account	A comprehensive view for the debtor and their financial obligations, whether it be easy to understand or not.	DA-RPT-002	Business	C	On Demand	PDF	Collections	Debtor ID Debtor Name Debtor Address Debtor Phone Number Debtor Email Address Account Number Account Type Account Status Opening Balance Closing Balance Transaction ID Transaction Date Transaction Type Transaction Amount Transaction Description Payment Method Payment Date Payment Amount Payment Status Interest Rate Interest Amount Late Fee Amount Late Fee Date Collection Agency Name Collection Agency Contact Information Collection Agency Assigned Date Collection Agency Recovered Amount Collection Agency Recovered Date	N	Y
11	Volume and Value of Transfers	Gives numbers for any of the aforementioned and shows comparable and/or current reporting with data showing timely comparisons and/or variances	CA-RPT-001 CA-RPT-002 CA-RPT-003 CA-RPT-004 CA-RPT-005	Business	V	On Demand	PDF	Collections	User Specified	Y	Y
Enforcement Officer Performance Report											
1	Total Collection Value Assigned	Number of communications recommended.	CS-ALL-0	Business	M	On Demand	PDF	Operations	Sum of all communications recommended, counted against, generally by jurisdiction	N	N
2	Communications Actioned by Officer	Percentage of cases resolved actioned by communications officers	CS-ACT-001	Business	M	On Demand	PDF	Operations	Sum of all communications resolved, broken out by officer	Y	Y
3	Resolution by Period	Percentage of resolution by communication officer	CS-RES-001	Business	M	On Demand	PDF	Operations	Number of attempted, number resolved, % of attempted resolved, total communications, first contact resolution, etc.	Y	Y
4	Principal Balance	Number of communications resulting in wage garnishment	CS-PRI-001	Business	M	On Demand, Monthly, Annual	PDF	Operations	Number and sum of open cases and communications by type	N	N
5	Response by type	Number of responses by type	CS-RES-001	Business	M	On Demand, Monthly, Annual	PDF	Operations	Percentage based on any one type	Y	Y
6	Response by name	Number of responses by name	CS-RES-002	Business	M	On Demand, Monthly, Annual	PDF	Operations	Breakdown based on pre-defined response value, number of unresolved resulting responses name, DOB, etc. Allows for	Y	Y
7	Interactions by channel	Number of interactions per channel	CS-CHA-001	Business	M	On Demand, Monthly, Annual	PDF	Operations	Interaction volumes, broken out by channel (phone, SMS, email, etc.)	Y	Y
8	Resolutions by type	Percentage of resolutions by type	CS-RES-003	Business	C	On Demand, Monthly, Annual	PDF	Operations	Summary of resolutions by channel with specifics on reasons, number per average, with average handle time	Y	Y
9	Call streams by type	Percentage of call streams by queue/skill	CS-STR-001	Business	C	On Demand	PDF	Operations	Summary of received numbers, grouped by interactive responses were selected in the IVR, either full or partial	Y	Y
10	Total unsuccessful contacts	Number of logged unsuccessful calls	CS-UNS-001	Business	M	On Demand	PDF	Operations	Total number of logged interactions flagged by specified parameters	Y	N
11	Inbound Outbound by type	Percentage of logged interactions by inbound/outbound by type	CS-INT-001	Business	M	On Demand	PDF	Operations	Ratio of inbound versus outbound communications, broken out by channel	Y	Y
12	Missed touch points	Percentage of contacts/calls missing multiple touch points	CS-MIS-001	Business	C	On Demand	PDF	Operations	% of calls/interactions where multiple touch points were missed by agent (IVR, representatives, supervisors, etc.)	N	N
13	Missed official engagement	Number of unsuccessful official engagements by officer/team	CS-OFF-001	Business	C	On Demand	PDF	Operations	Measurement of unsuccessful engagements by officer/team, broken out by reasons (unresponsive, refused, etc.)	Y	Y
14	Time in queue	Time waiting in queue for interaction handling	CS-QUE-001	Business	M	On Demand	PDF	Operations	Average, median, 90th percentile, maximum, and minimum time spent in queue	Y	N
15	Time to resolution	Time to resolution for interactions	CS-RES-004	Business	C	On Demand	PDF	Operations	Measurement of time to complete an interaction from initiation to resolution, by channel, agent, or type	Y	N

16	Address correspondence	Names in table resulting in address correspondence	ES-ADV	Business	T	On Demand	PDF	Operations	Measure the number and the number of addresses for which a correspondence need arises from the ITS	Y	Y
17	Resolutions by type	Percentage of resolutions by type	ES-RES	Business	Q	On Demand	PDF	Operations	Percentage of the protest resolutions	Y	Y
18	Resolutions by user	Percentage of resolutions by Users Worked	ES-RES	Business	Q	On Demand	PDF	Operations	Percentage of the protest resolutions	Y	Y
19	Time to resolution	Time given in each queue before resolution	ES-RES	Business	D	On Demand	Pdf	Operations	Total time to resolution for all disputed types, broken out by queues. Defines time user moved by removing the was new item at queue, attempt to submit the	Y	Y
20	First contact resolutions	Number of first contact resolutions	ES-CUS	Business	D	On Demand	PDF	Operations	Number of first contact resolutions	Y	Y
21	First call resolutions by channel	Percentage of first contact resolutions by channel	ES-RES	Business	D	On Demand	PDF	Operations	% of first contact resolutions resolved by channel	Y	Y
22	Customer service log summary	Number of inquiries taken by customer service rep (total)	ES-SER	Business	D	On Demand	PDF	Operations	Number of interactions by customer taken by service rep. by a specified time period	Y	Y
23	Customer wait time by channel	Percentage of customer hits delivered by system calls	ES-SER	Business	D	On Demand	PDF	Operations	Number of interactions by channel and level by each time service rep. by a specified time period	Y	Y
24	Response by customer service rep	Number of responses by customer service rep	ES-SER	Business	D	On Demand	PDF	Operations	Total number of responses completed by individual service rep	Y	Y
25	Repeat callers to customer service rep	Number of repeat callers by customer service rep	ES-SER	Business	D	On Demand	PDF	Operations	Number of repeat callers grouped by count per users of customers with the customer service rep	Y	Y
26	Escalation rate	Total per resolved interaction	ES-SER	Business	M	On Demand	PDF	Operations	Used total interactions escalated by the agent to calculate the escalation rate (Number escalated / total interactions)	Y	Y
27	Escalations done by channel	Total per resolved interaction by channels	ES-SER	Business	M	On Demand	PDF	Operations	Used total interactions escalated by the agent to calculate the escalation rate by channel (i.e. escalated by per-channel / channel)	Y	Y
28	Interactions by time period	Number of interactions per channel by the specified (e.g., hour, month, year or day)	ES-SER	Business	D	On Demand	PDF	Operations	Duration of interaction by channel date time period. Used to verify by comparing system hours and vendor	Y	Y
29	Waivers	Number of waivers (total)	ES-WAV	Business	D	On Demand	PDF	Operations	Used to determine codes from waiver. Total interactions passed on IT	Y	Y
30	Waiver by time	Percentage of waivers by time period (e.g., day, hour, week, month, year)	ES-WAV	Business	D	On Demand	PDF	Operations	Used total interactions passed on IT. Total interactions passed on IT	Y	Y
Revenue Accounting											
1	Inc Tax Extension	Monthly reporting of Bad Tax extension to be posted to the DOR Process Extension count of income extended and dismissed by Month, Calendar Year, Fiscal year, by account, period, Fund, Tax type, and Tax category with comparison to prior year.	RA-EXT	Business	D	Monthly	WEE	Revenue and Expense - sub-account - WEE	Accounts, Funds, Current period, Prior Period, Refund, Calendar Year, Fiscal Year, Revenue Function	N	Y
2	Annual report	IE - 4-5-1-2 Annual report - reduces the 8 service categories and internal to 3 reasons mean of revenue collected and distributed by fiscal year, by bank account and amounts in the bank	RA-GTR	Statistical	T	Annual	WEE	Customer - Medical and Expense - sub-account - WEE	Accounts, Fiscal Years	N	Y
3	Mid Month Finance	Monthly review after the primary due date of the 20th has elapsed. Review process at attachment for Early Shutdowns, CMS, review to expedite any	RA-MMS	Business	M	Monthly	Excel	Revenue processor, DOR, CME	Accounts, Funds, Current period, Prior Period, Refunds, Calendar Year, Fiscal Year, Revenue Function	Y	Y
4	Local Income Tax	LIT - Local income Tax collected through the DOR warehouse and processed through the manual report to identify the City of the Revenue collected for distribution by SRA	RA-LIT	Business	Y	Annual	PDF	CAMS/SRA	Accounts, Funds, Current period, Prior Period, Refund, Calendar Year, Fiscal Year, Revenue Function, Equity, Income Tax, other attributes which can assign values	N	Y
5	Reconciliation GL	Variation of Proper split to ITS, in turn. Ensures to new transaction security between the ITS, Internal GL and Finance and - Account, Fund, Expense code, Income code, and bank activity. Same Reconciliation Account, Transfer Agents, Report Name	RA-GEN	Business	M	On Demand	Excel PDF record/ View	Internal Report	Accounts, Funds, Current period, Prior Period, Refund, Calendar Year, Fiscal Year, Revenue Function	N	Y
6	Reconciliation Distribution	Validation of ITS business rules of distribution. Verify account, period, fund, dollar amount and report any discrepancies. Provide improvement of balance over 3 months	RA-DIS	Business	M	On Demand	Excel PDF record/ View	Internal Report	Accounts, Funds, Current period, Prior Period, Refund, Calendar Year, Fiscal Year, Revenue Function	Y	Y
Payment Disbursement											
1	Disbursement Report	Refund of Disbursement Rec. of previous month summary and presentment	PD-DIS	Business	D	Daily	System View pulled report	n	Transaction code, Date, amount by tax type, total value of disbursements by tax type, Time to disbursement average time from issue to intend customer service to disbursement	Y	Y
2	Disbursement Issues Report	Refund to Disbursement Focus Report provides high-level results into failed refunds and disbursements	PD-DIS	Business	D	Daily	System View pulled report	n	Failure by payment type, Percentage of failed refunds or disbursements by type of method (e.g., funds, electronic, charges), ACH failure by bank, Percentage of failed ACH refunds by bank, Check tracking by refund type, Percentage of low-checks delivered by mean time (e.g., received non-cashed 300-day), Number of failures by time period, Number of failed	Y	Y
Payment Processing											
1	Payment Channel Report	Payment Channel Report provides report and payment trends	PP-CHN	Business	T	On Demand	PDF	Finance, RPO	Payments by payment type, dollar value of payments by payment type, payments by time period, dollar value of payments by time period payments by more card brands, dollar value of payments by team, jump, month	Y	Y
2	Suspense Account Inventory Report	Suspense Account Inventory Report provides report on the volume of the suspense account	PP-SPN	Business	M	On Demand	PDF	Finance, RPO	Value of suspense payments, dollar value of suspense account, number of suspense payments, count of suspended payments by payment type in a suspense account, age of suspended payments, age of suspended payments by payment type in	Y	N
3	Suspended Payments Process Report	Suspended Payments Process Report provides report on the Suspense Account inventory	PP-SUS	Business	D	On Demand	PDF	Finance, RPO	Payments in suspense, number of payments by payment channel in suspense, value of payments in suspense, dollar value of payments in suspense, age of payments in suspense, age of payments by payment channel in suspense, time in suspense, suspense rates, average time to resolution of	Y	Y



	Interface	Interface for Work Flow Automation and Scripts																	
1	Customer	Interface for Inquiry, Convenience Use Cases	AM-IN-CUST	M	List of static or dynamic content for Internet or Intranet	Inbox	Push	Note	Exchange of Text Based	Query	Web	HTTP	Low Vol.	Asynchronous	Batch	Web Page	Varies	Month, Apr
2	Inquiry Customer Self Help	Personal Invest Portfolio plus fee with for 401, balance activity. Customer manages level of share and % gross limits.	AM-IN-401K	M	Lists of assets & current market level stored in the 401 Information available in DTC	Menu, Account Mail	Push	Note	Request and Query as	Inquiry	RPC	SMTP	Low Vol.	Asynchronous	Batch	Note: a file list - size is selected Wage	Note: a file list - size is selected Wage	Month, Apr
3	Secure fee transfer to third-party collection agency	Interface to TSCA to be able to open and receive receipt for third party collection agency	CA-IDS-IIB CA-DS-11C CA-DS-11E CA-DS-21E	C	Yes, don't send reference to TSCA	none	none	subscription/ automated	Scheduled	Dem.	ASCII	TSCA	Request/Reply	Asynchronous	Batch	30K	5M	NH
4	Bad checks not sorted post-Lockbox bulkers	Monitor of TIF ALC for what to send/receive (see Lockbox)	CA-DS-11C	N/A	We check and send now	We check and send now	none	subscription/ automated	On Demand	On Demand	RPC	User Interface	Request/Reply	Parallel	Workflow	Unknown	Unknown	NH
5	Escalation Points (Letter to Program Issuer, Lower, Sheriff	ATVCS - Lawsman Interchanges	CA-GDI-01c CA-CCI-11C	C	We don't have this now	none	none	subscription/ automated	Scheduled	Daily	RPC	County Data Stream	One Way	Asynchronous	Batch	5+	10	Always
6	Internal Departments of Labor	Employment history	CA-GDI-01b	N/A	We check and send now	We check and send now	none	subscription/ automated	Scheduled	Daily	PDL System	ITI	Request/Reply	Parallel	Workflow	Unknown	Unknown	NH
7	Income Department of Revenue (Lookup Level)	Employment records verification query	CA-GDI-01D	N/A	We check and send now	We check and send now	none	subscription/ automated	Scheduled	Daily	DMV Income	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
8	Federal Bureau of Prisons Inmates	Locations	CA-GDI-01E	N/A	We query and receive	We query and receive	none	subscription/ automated	Scheduled	Daily	PAY System	ITI	Request/Reply	Asynchronous	Batch	5+	5+	N/A
9	Bank Consortium (e.g. NDM)	Bank Levy	CA-GDI-01F	N/A	We don't levy accounts	Some TSCA may automate	none	subscription/ automated	N/A	Daily	Bank Pro Inc	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	NH
10	Lienholders - Encumbrances	Various Companies that have another (1) vehicle, watercraft, airplane or business equipment, encumbrance liens, property ownership, etc	CA-GDI-01G	C	We run a query for usage of the Lienholder Service to obtain the	Run our request in the form of a query	none	subscription/ automated	No	Daily	Lienholders	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
11	Secretary of State - Enforcement / Non-Disclosure Exempt	Data from SOS linked to passport application data - used to verify business location address and business operation term	CA-GDI-01H	C	We will have an way to Lookup Business Registration data through Name and could formulate form. FOL make an electronic/photo scanned ID and the SOS	Access SOS public business registration system (planned for by 8/30)	none	subscription/ automated	N/A	Daily	DOU Registration	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
12	User Complement Non-Disclosure Agency	Data from User previously used to verify business location address and business operation status	CA-GDI-01I	N/A	We would need updates	Planning positive manner - Lookup	none	subscription/ automated	Scheduled	Daily	Person community data application	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
13	Assessor/Collector Commission	Data (name) ATC - DOR log and ATC know - data file, what capture registration, user requirement developed to unique number of ATC, license (Lookup No. be known sure)	CA-GDI-01J	C	We have an interface to capture Lookup number scenario of Prior license	Current state	none	subscription/ automated	Scheduled	Daily	ATC System	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
14	Lottery Commission	Data (name) Lottery Commission - DOR, records already known only (verification of Player's name) must be capturing in customers contract with	CA-GDI-01K	C	We have an interface to Portion of contract	Current state	none	subscription/ automated	Scheduled	Daily	Lottery Commission Portion	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
15	Intellectual Property Agency	IPA plans to maintain a database for Certain Business Provided Information, etc - Licensee submitted a provisions for DOR's outstanding tax balances, valid	CA-GDI-01L	C	We have an interface to Provide Information Licensee submitted	Current state	none	subscription/ automated	Scheduled	Daily	PLA System	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
16	Secretary of State - Enforcement / Non-Disclosure Agency	SOS Motor Vehicle Lessee Registration - summary of driver license use in	CA-GDI-01M	C	We have an interface to Provide	Manual Industrial and Sales	none	subscription/ automated	Scheduled	Daily	SOS Trade	ITI	Request/Reply	Asynchronous	Batch	Unknown	Unknown	N/A
1	Taxpayers	Interface to receive processing, forms, Manufacturers, payments	CA-WEB-01	M	List of Taxpayer Identity Verification	none	None	None	On-Demand	On-Demand	ITI	Low Volume	Request/Reply	Asynchronous	Batch	10K	50K	Month, April, Nov, June
2	Services Center - Kiosk Interface	Interface to provide walk-in-like Employment form, or mailbox delivery service	CS-KSK-	V	We don't have this now	none	None	We would need: ID, Address, Phone, Email for Individual Taxpayers	On-Demand	On-Demand	ITI	Kiosk	Request/Reply	Private	Workflow	Unknown	Unknown	N/A
3	Commission Resources - Filer	Interface to micro-apps SUI, Suspension system about business, Employment and payment) Efficacy	CS-DEV-	V	We don't have this now	Let SOS or any mutual formula on their business, Employment and Payment	Yes	We would need: ID, Address, Phone, Email for Individual Taxpayers, the same as No, which causes to investigate their answers and see information system was a pursuit, pursuits	On-Demand	On-Demand	ITI	XML's, systems to Systems	Request/Reply	Private	Workflow	Unknown	Unknown	N/A
4	Knowledge resources - Knowledge Tree*	Interface to Facilities or review knowledge management repository	CS-KSK-	M	We don't have this now	Taxable, a repository, similar recipes that can be set up by any DOR employee who is a Support and, by case, network	N/A	Determine which tools to manage Knowledge	On-Demand	On-Demand	ITI	TeamWare	Request/Reply	Asynchronous	Workflow	Unknown	Unknown	N/A
5	Knowledge resources - DOR Staff	Interface to allow statements or portion DOR Staff to directly view information ITS system	CS-KSK-	M	We don't have this now	Users, more the case frequently as to use a TCA/ITS or Internal Staff to Knowledge	Yes	Determine which tools to manage Knowledge	On-Demand	On-Demand	ITI	DOR Staff	Request/Reply	Asynchronous	Workflow	20K	30K	Month, April, Nov, June
1	Party Activity	Dr. Bureau to Vendor Sub. 1	BA-010 BA-020 BA-030 BA-040	M	Manual process - Employee need send it one time	Manual processing transaction - or send a client	Daily End PM	ITS 1 to cover activity and ITS 01 use	Tax Payer Activity	Daily	ITC	Proper Soft	Low Vol.	Parallel	Yield	500 inquiries per month, less than	600	Month, February, March, April, May, June, July, August, September, October, November, December, January, February, March, April, May, June, July, August, September, October, November, December
2	Auditor of State	Report of Collections (NOC) deposit, GL journey	BA-040	C	Manual process - Employee need send it one time	Manual processing transaction - or send a client, Processing daily form deposits, Form Base processing	Daily by 2 AM	Bank Deposits, Collections, ITS 1 to come Internal transaction and transaction data	Tax Transaction	Daily	Bank ITC	Proper Soft	One Way	Parallel	Direct	21k deposits per month written	40K	January, February, March, April, May, June, July, August, September, October, November, December, January, February, March, April, May, June, July, August, September, October, November, December
3	Bank via Bank Statement	Daily bank statement Files to ITS	BA-05	V	Manual process - Employee need send it one time	Manual processing transaction - or send a client, Processing daily form deposits, Form Base processing	Daily by 10 AM	Bank Deposits, Bank Statement and Internal process, data transaction	Bank Transaction	Daily	Bank	ITC	Flat File	Asynchronous	Workflow	Daily statement customers per month for	27K	January, February, March, April, May, June, July, August, September, October, November, December, January, February, March, April, May, June, July, August, September, October, November, December
1	Auditor of State	Interface with AOS to receive disbursement transaction file and to update business accounts	AOS-IN-040	M	Lists of disbursed, active employees and history for all active, paying, and suspended	Manual file to use	Run after the load from AOS to work with the transaction	Independent query base by 5 am	Perform checks, but Payer Agreement	Daily	Payee, acct.	RPC	One Way	Asynchronous	Batch	2.5 M Indexes of Refunds, 401, DOR Refunds per year	150K / 10 wk ASAP, Adv	February, April
2	Banks	Interface with bank for ACH disbursement	BA-010 BA-020 BA-030 BA-040	M	Lists of disbursed, active employees and history for all active, paying, and suspended	Manual file to use	Run after the load from AOS to work with the transaction	Perform checks, but Payer Agreement	Perform checks but Payer Agreement	Daily	Bank	RPC	Two Way	Asynchronous	Batch	17 M ACH	10K / 1 wk	February, April
3	Auditor of State	Update Status of refund if check is deemed no longer valid by business (Cancelled checks)	AOS-IN-040	M	Lists of disbursed, active employees and	Manual process	Immediate, every time by 3 pm	Immediate, every time by 3	Accounts checks, but Payer Agreement	Daily	Auditor GUI	RPC	Two Way	Asynchronous	Batch	2.5 M Individual Refunds 401k, DOR	150K / 10 wk ASAP, Adv	February, April
4	Banks	Receipt of electronic file from bank(s) for billing linked ACH Debit or to adjustments	AOS-IN-040	M	Lists of disbursed, active employees and	Manual process	Immediate every time by 3 pm	Perform checks, but Payer Agreement	Perform checks but Payer Agreement	Daily	Bank	RPC	One Way	Asynchronous	Batch	17 M, ACH Debits	5 M, Feb	February, April
5	Internal users with Business addresses	Interface to check for whitelisted email addresses (SMV, USPS, etc.)	PD-DOI-01F	C	Lists of disbursed, active employees and history for all active, paying, and suspended	Manual process	Immediate every time by 3 pm	Immediate every time by 3	Perform checks, but Payer Agreement	Daily	SMV, USPS	RPC	Request/Reply	Parallel	Workflow	2.5 M Individual Refunds, 401K, DOR Refunds per year	150K / 10 wk ASAP, Adv	February, April
6	Auditor of State	Interface with AOS for Direct Disbursement	PD-DOI-04E	M	Lists of disbursed, active employees and history for all active, paying, and suspended	Manual file to use	Run after the load from AOS to work with the transaction	Perform checks, but Payer Agreement	Perform checks but Payer Agreement	Daily	RPC	Proper Soft	One Way	Asynchronous	Batch	600 K Checks	150K / Feb	February, April
7	Business Systems	System PDOI Fix – Issue PD-DOI-10B to send to user because an issued check issued by the Auditor of State	PD-DOI-05	M	Business user send back, issue an ITC	Business user send back, issue an ITC	Immediate every time by 3 pm	Immediate every time by 3	Employment	On-Demand	RPC	RPC	One Way	Parallel	Workflow	Approximately 700K checks scanning per	150K per day	February, April
1	Vendor Images	Interface with Vendor for check processing	PD-DOI-04B	C	Printing of check, payment manually to bank and to the tax	Manual work and processing	None	None	Tax Payer Payment	Daily	Banks	NFS	One Way	Asynchronous	Workflow	10 000 / day	60 000 / day	April, February, June
2	Third Party Credit Card Processor	Receipt of electronic file from third party credit card company for payment	PD-DOI-01E	M	Printing of check, payment manually to bank and to the tax	Manual work and processing	None	None	Tax Payer Payment	Daily	Third Party Bank	NFS	One Way	Asynchronous	Batch	None at this time, – will implement later	Below at this time, will implement later	March, April
3	Banks	Interface with DOR research of banks for reports	PD-DOI-02	M	Printing of check, payment manually to bank and to the tax	Manual work and processing	None	None	Tax Payer Payment	Daily	Third Party Bank	NFS	One Way	Asynchronous	Batch	None at this time, – will implement later	Below at this time, will implement later	March, April
4	Treasurer Treasurer of State	Interface to exchange file from Treasurer of State with exception data	PD-DOI-05E	M	Manual process - Employee need send it one time	Manual work and processing	None	Yes, Treasurer of State	Payment, payment, check for reverse	Daily	TOS GL Posting and res.	RPC	One Way	Asynchronous	Batch	None at this time, – will implement later	Below at this time, will implement later	March, April
5	Income Office of Technology	Receipt of exceptions file from Income Office of Technology with indicator data	PD-DOI-05D	M	Manual process - Employee need send it one time	Manual work and processing	None	IRT GL Posting Process	Payment, payment, check for reverse	Daily	IRT Income Tax Third Party data	RPC	One Way	Asynchronous	Batch	None at this time, – will implement later	Below at this time, will implement later	March, April

TR - Taxpayer Registration

Defines the activities to create and maintain taxpayer registrations, as well as licensing and bonding, for all tax types.
- Register Taxpayer: Defines the activities to receive and process new taxpayer registrations, create temporary and permanent taxpayer master data records, and develop and distribute initial taxpayer correspondence with filing and account maintenance information.
- Manage Taxpayer Registration: Defines the activities to receive and process updates to existing taxpayer master data records, including proof of identity confirmation, location, filing obligation, and/or relationship information across all DOR channels.
- Manage Taxpayer Licensing: Defines the activities to determine bonding requirements, monitor expiring license and/bonds, and revoke licenses.

#	Name	Description	Task Reference ID	Response Code	
		"Register Taxpayer" Functional Requirements			
TR-1	Interface Validation	System shall validate interface format prior to processing	TR-010-010	F	Manage Processi
TR-2	Automated Registration Processing	System shall support automated processing of taxpayer registration data	TR-010-010	F	Manage Processi Custome
TR-3	Manual User Interface	System shall provide a user interface for manual taxpayer registration	TR-010-010	F	Custome
TR-4	Address Standardization	System shall support automated address standardization	TR-010-150	F	Custome
TR-5	Duplicate Check	System shall support automated checks for duplication of data items, including: FEIN, SSN, TID, ITIN, email, and address	TR-010-020	P	IDs such through resolve c conversi bring du
TR-6	Potential Duplicate Listing	System shall provide an automated listing of potential duplicate entity accounts before creating new taxpayer profiles	TR-010-020	F	Custome duplicat Custome capabilit already
TR-7	Fuzzy Matching--Name	System shall allow for approximate string matching of names	TR-010-020	F	Custome
TR-8	Fuzzy Matching--Address	System shall allow for approximate string matching of addresses	TR-010-020	F	Custome
TR-9	Third-party Validation	System shall support automated validation of registration data with third-party provider	TR-010-030	P	Custome against r interface
TR-10	External ID	System shall capture external identification numbers in the entity profile	TR-010-030	F	Custome
TR-11	Unique Identification	System shall support automated creation of a unique identification number upon initiation of registration process	TR-010-040	F	Custome
TR-12	Registration Source	System shall support automated recording of source data by which an entity is registered	TR-010-070	F	ne
TR-13	Non-taxpayer Entities	System shall allow registration for non-taxpayer entities, including service providers	TR-010-070	F	Custome
TR-14	Create Tax ID	System shall support automated assignment of a unique tax identification number	TR-010-070	F	Custome
TR-15	Demographics	System shall record entity demographics, including: name, address, contact info, and tax identification number	TR-010-070	F	Custome
TR-16	Temporary Suspension	System shall allow for temporary filers to be placed on hold for a specified period of time based on business rules	TR-010-070	F	Custome
TR-17	Seasonal Filing	System shall allow for seasonal filers to be placed on hold a specified period of time based on business rules	TR-010-070	F	Custome
TR-18	Seasonal Address	System shall allow for the use of seasonal addresses, including manual entry of start and end dates	TR-010-070	F	Custome
TR-19	Filing Start Dates	System shall enforce that start dates are applied to all filings	TR-010-070	F	Custome
TR-20	Filing End Dates	System shall enforce that end dates are applied to all filings	TR-010-070	F	Custome
TR-21	Entity Start Dates	System shall enforce that start dates are applied to all entities associated with the FEIN or SSN	TR-010-070	F	Custome
TR-22	Entity End Dates	System shall enforce that end dates are applied to all entities associated with the FEIN or SSN	TR-010-070	F	Custome

#	Name	Description	Task Reference ID	Response Code	
		"Register Taxpayer" Functional Requirements			
3	Multiple Names	System shall allow for different names for the same FEIN or SSN	TR-010-070	F	Custome
TR-24	Multiple Address Types	System shall record different address types, including: physical, mailing by tax types, and corporate	TR-010-070	F	Custome
TR-25	Fiscal Year Status	System shall record fiscal year status for entities	TR-010-070	F	Custome
TR-26	Channel Preference	System shall record entity communication channel preference if available	TR-010-070	F	Custome
TR-27	Bank Account Information	System shall record entity bank account information	TR-010-070	F	Custome
TR-28	IP Address Capture	System shall record IP address entity used to register	TR-010-070	F	Custome
TR-29	Military Addresses	System shall allow record of military addresses	TR-010-070	F	Custome
TR-30	Foreign Addresses	System shall allow record of non-US addresses	TR-010-070	F	Custome
TR-31	Flags and Codes	System shall maintain a number of flags and codes of various lengths across tax types in the entity profile based on business rules	TR-010-070	F	Custome
TR-32	NAICS Codes	System shall allow for capture of NAICS Codes	TR-010-070	F	Custome
TR-33	SIC Codes	System shall allow for capture of SIC Codes	TR-010-070	F	Custome
TR-34	Start Dates	System shall enforce that start dates are applied to all registration items, including: address, filing obligations, and responsible officers	TR-010-070	F	Custome
TR-35	End Dates	System shall enforce that end dates are applied to all registration items, including: address, filing obligations, and responsible officers	TR-010-070	F	Custome
TR-36	Entity Without Nexus	System shall allow denotation on the entity's profile that the entity does not have nexus for a given period	TR-010-070	F	Custome
TR-37	Entity Type	System shall support automated recording of entity type based on business rules	TR-010-080	F	Custome
TR-38	Register Tax Type	System shall support automated registration of entity for appropriate tax type(s) based on business rules	TR-010-110	F	Custome
TR-39	Multiple Tax Types	System shall allow registration of an entity for multiple tax types	TR-010-110	F	Custome
TR-40	GIS Location Services	System shall support automated third-party geographic information system (GIS) verification	TR-010-110	C	Manage A site-sp geograp GenTax 3rd party could us and/or r
TR-41	GIS Information Storage	System shall store data provided by a third-party geographic information system (GIS)	TR-010-110	C	Custome Attribute to a thir would b them. GenTax 3rd party could us and/or r
TR-42	Multiple Locations	System shall allow registration of an entity conducting business from multiple locations	TR-010-110	F	Custome
TR-43	Location Tax Types	System shall allow registration of each entity location for one or more tax types	TR-010-110	F	Custome
TR-44	Location Activities	System shall allow registration of each entity location for one or more activities per tax type	TR-010-110	F	Custome
TR-45	Consolidated Location Tracking	System shall support automated consolidation of locations based on business rules	TR-010-110	F	Custome
TR-46	Parent-Child Relationships	System shall capture parent-child relationships	TR-010-120	F	Custome
TR-47	Contact Persons	System shall record contact persons and associated roles	TR-010-120	F	Custome
TR-48	Business to Business	System shall establish business-to-business relationships	TR-010-120	F	Custome
TR-49	Responsible Officers to Business Entity	System shall support automated linking of responsible officers to business entity	TR-010-120	P	Custome responsi
TR-50	Business Entity to Responsible Officers	System shall support automated linking of business entity to responsible officers	TR-010-120	P	Custome business

#	Name	Description	Task Reference ID	Response Code	
		"Register Taxpayer" Functional Requirements			
TR-51	Multiple Contacts--Entity	System shall allow data entry of information for multiple contacts at the entity level	TR-010-120	F	' ne
TR-52	Multiple Contacts--Tax Type	System shall allow data entry of information for multiple contacts at the tax type level	TR-010-120	F	me
TR-53	Multiple Contacts--Location	System shall allow data entry of information for multiple contacts at the location level	TR-010-120	F	Custome
TR-54	Multiple Contacts--License Permit	System shall allow data entry of information for multiple contacts at the license permit level	TR-010-120	F	Custome
TR-55	Contact Start Dates	System shall enforce that start dates are applied to contacts	TR-010-120	P	Custome be active within th to be ent
TR-56	Contact End Dates	System shall enforce that end dates are applied to contacts	TR-010-120	P	Custome be active within th to be enl
TR-57	Filing Frequency	System shall support the automated recording of entity filing frequency based on tax type business rules, including: monthly, annual, and ad hoc frequencies	TR-010-120	F	Custome
TR-58	Form Type	System shall support automated identification of appropriate form types for filing based on tax type business rules	TR-010-120	F	Custome
TR-59	Online Account	System shall support automated establishment of an online account for registrant based on tax type business rules	TR-010-090	F	Custome
TR-60	Generate Registration Packet	System shall support automated generation of registration packets based on business rules	TR-010-100	F	Custome
		"Manage Taxpayer Registration" Functional Requirements			
TR-61	Proof of Identity	System shall support automated confirmation of identity method associated with ITIN	TR-020-010	C	These re typical fc combina requiren configur
TR-62	Notify Downstream Processes	System shall allow notification to other processes that may be impacted by a change in master data	TR-020-020	F	Manage
TR-63	Disallow Changes	System shall disallow updates to certain data fields, such as first name, based on business rules	TR-020-020	F	Custome
TR-64	Determine Updates	System shall determine necessary updates to master data record automatically based on incoming inputs and business rules	TR-020-020	F	Custome
TR-65	Risk Scoring	System shall support automated assignment of a risk score based on business rules for use in registration maintenance	TR-020-020	F	' 'ia
TR-66	Deceased Flagging	System shall capture and flag information related to taxpayers that are deceased, including date of death	TR-020-070	F	Custome Revenue
TR-67	Entity Type Change	System shall allow for changes to be made to entity type	TR-020-070	F	Custome
TR-68	Version History	System shall capture all versions of entity profile information by maintaining historical data and tracking changes	TR-020-070	F	Custome
TR-69	Manual Merger	System shall allow for the manual account mergers	TR-020-070	P	Cutomer and retu
TR-70	Manual Separation	System shall allow for the manual processing of account separations	TR-020-070	F	Custome
TR-71	Automatic Merger	System shall support automated account mergers based on business rules	TR-020-070	P	Custome and retu
TR-72	Automatic Separation	System shall support automated account separations based on business rules	TR-020-070	P	Custome and retu
TR-73	Different Names--FEIN	System shall maintain different names for the same FEIN	TR-020-070	F	The Regi be assoc custome business

#	Name	Description	Task Reference ID	Response Code	
		"Register Taxpayer" Functional Requirements			
	Different Names--SSN	System shall maintain different names for the same SSN	TR-020-070	F	Custrom Multiple with a SS would ty
TR-75	Inactive Taxpayer	System shall allow designation of an entity as inactive	TR-020-070	F	Custome
TR-76	Inactive Account	System shall allow designation of an account as inactive	TR-020-070	F	Custome
TR-77	Period of Inactivity	System shall allow designation of the period of inactivity for an inactive account or entity	TR-020-070	F	Custome
TR-78	Reinstate Registration	System shall allow reinstatement of an entity's registration	TR-020-070	F	Custome
TR-79	End-date Assignment	System shall allow for end-date assignment to tax type or entity type based on business rules	TR-020-150	F	Custome
TR-80	Retroactive Tax Type Updates	System shall allow for retroactive tax type updates	TR-020-150	P	Custome Retroact already i scope.
TR-81	Future Tax Type Updates	System shall allow for future tax type updates	TR-020-150	P	Custome New tax are out c
TR-82	Duplicate Accounts/Addresses	System shall support automated identification of possible duplicate accounts or locations based on business rules	TR-020-080	C	These re typical fc combina duplicate conversi evaluate
TR-83	Duplicate Deletion	System shall allow for deletion of duplicates	TR-020-080	P	Deletion subsyste Duplicat purified.
TR-84	Duplicate Modification	System shall allow for modification of duplicates	TR-020-080	F	The Regi supports usually a business
TR-85	Undeliverable Address Flagging	System shall allow flagging a specific address as undeliverable or invalid based on business rules	TR-020-080	F	Custome
[illegible]	Seasonal Filers	System shall allow for multi-year seasonal filers with varying obligation periods per year	TR-020-090	F	Custome
TR-87	Filing Frequency Changes	System shall support automated updates to filing frequency based on business rules	TR-020-090	F	Custome
TR-88	Consolidated Filers	System shall allow for consolidated filers	TR-020-090	F	Custome
TR-89	Consolidated Filer Maintenance	System shall allow for edits of existing locations under consolidated filers	TR-020-090	F	Custome
TR-90	Filing Status Changes	System shall allow for edits to a taxpayer's filing status	TR-020-090	F	Custome
TR-91	Maintain Relationships - Edit	System shall allow for edits to business relationships	TR-020-100	F	Custome
TR-92	Maintain Relationships - Add	System shall allow for added business relationships	TR-020-100	F	Custome
TR-93	Maintain Relationships - Delete	System shall allow for deleted business relationships	TR-020-100	P	Deletion subsyste
TR-94	Entity-level Relationships	System shall specify relationships at the entity level	TR-020-100	F	Custome
TR-95	Tax type-level Relationships	System shall specify relationships at the tax type level	TR-020-100	F	Custome
TR-96	Return-level Relationships	System shall specify relationships at the return level	TR-020-100	F	Custome
TR-97	Non-taxpayer Entities	System shall allow maintenance of relationships for non-taxpayer entities, including tax preparers	TR-020-100	F	Custome
TR-98	Business Merger	System shall allow for linked history of businesses that have merged to form a new entity	TR-020-100	F	Custome
TR-99	Automatic Correspondence	System shall support automated generation of notifications to confirm updates to entity accounts	TR-020-120	F	The Corr

#	Name	Description	Task Reference ID	Response Code	
		"Register Taxpayer" Functional Requirements			
		"Bonding" Functional Requirements			
TR-100	Bonding Start Date Determination	System shall support automated determination of required bond start dates based on business rules	TR-030-010	F	ne
TR-101	Bonding End Date Determination	System shall support automated determination of required bond end dates based on business rules	TR-030-010	F	Custome
TR-102	Bond Value Requirement	System shall support automated determination of required bond value based on business rules	TR-030-010	F	Custome
TR-103	Manual Bond Record Updates	System shall provide a user interface for manual updates to entity bonding record	TR-030-030	F	Custome
TR-104	Bond Start Dates	System shall enforce that start dates are applied to bonds	TR-030-030	F	Custome
TR-105	Bond End Dates	System shall enforce that end dates are applied to bonds	TR-030-030	F	Custome
TR-106	Bond Value	System shall record bond value automatically based on data received	TR-030-030	F	Custome
TR-107	Bond Agent History	System shall record bonding agent history automatically based on data received	TR-030-030	F	Custome
		"Manage Existing Licensing and Bonding" Functional Requirements			
TR-108	Monitor Bond Dates	System shall support automated monitoring of bond renewal dates	TR-040-010	F	Informat Custome
TR-109	Monitor License Dates	System shall support automated monitoring of license renewal dates	TR-040-010	F	Informat Custome
TR-110	Monitor Bond Value Requirements	System shall support automated monitoring of entity risk score to determine adjustment of bond values based on business rules	TR-040-010	F	Informat Custome
TR-111	Revised Bond Renewal	System shall support automated determination of bond requirements (e.g., requirement, value, duration) based on business rules	TR-040-040	F	Custome
TR-112	Bond Renewal Notification	System shall support automated generation of bond renewal notifications	TR-040-040	F	Manage Processi Custome
TR-113	Generate License Renewal Notification	System shall support automated generation of license renewal notification based on business rules	TR-040-020	F	Manage Processi Custome
TR-114	License Fee Determination	System shall support automated determination of license fee based on business rules	TR-040-020	F	Custome
TR-115	Confirmation Notification Generation	System shall support the automated generation of a successful license renewal notification based on business rules	TR-040-030	F	Manage Processi Custome
		"Revoke License" Functional Requirements			
TR-116	Manual License Revocation	System shall provide a user interface for manual updates to process license revocations	TR-050-050	F	Custome
TR-117	Revocation Data	System should capture revocation data based on data received	TR-050-050	F	me
TR-118	Update Filing Obligations	System shall support automated updates to filing obligation end date based on license revocation business rules	TR-050-070	F	ne
TR-119	Flagging	System shall support automated flagging of account with revoked license	TR-050-070	F	Custome
TR-120	License Revocation Notification	System shall support automated generation of license revocation notification based on business rules	TR-050-080	F	Manage Processi Custome

CO - Correspondence

Defines the activities to generate and contact taxpayers regarding the status of their accounts and to track the history of correspondence between DOR and the taxpayer.

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-1	Auto-Generated Correspondence--Create Business Rules	System shall support automated generation of correspondence based on business rules	Auto-Generate - Fixed	F	Cu
CO-2	Auto-Generated Correspondence--Create Business Events	System shall support automated generation of correspondence based on business events	Auto-Generate - Fixed	F	Cu
CO-3	Auto-Generated Correspondence--Edit	System shall allow for the manual editing of automatically generated correspondence (e.g., changing text field or free form box)	Auto-Generate - Fixed	P	Cu Co for re
CO-4	Auto-Generated Correspondence--Data Elements	System shall support automated generation of correspondence that includes specific data elements	Auto-Generate - Fixed	F	Cu
CO-5	Auto-Generated Correspondence--Page Designation	System shall support automated generation of correspondence with specific page designations	Auto-Generate - Fixed	F	Cu
CO-6	Auto-Generated Correspondence--Individual	System shall support automated generation of documents individually (such as licenses, exemption letters, notices, custom and canned correspondence)	Auto-Generate - Fixed	F	Cu
CO-7	Auto-Generated Correspondence--Generate Bulk	System shall support automated generation of documents in bulk, such as licenses, exemption letters, notices, custom and canned correspondence	Auto-Generate - Fixed	F	Cu
CO-8	Auto-Generated Correspondence--Generate Bulk in Real Time	System shall support automated generation of documents in real time, such as licenses, exemption letters, notices, custom and canned correspondence	Auto-Generate - Fixed	F	Cu
CO-9	Auto-Generated Correspondence--Reason Code	System shall support automated generation of tailored correspondence based on unique reason codes	Auto-Generate - Dynamic	F	Cu
CO-10	Auto-Generated Correspondence--Demographics	System shall support automated generation of correspondence based on demographic data	Auto-Generate - Dynamic	F	Cu
CO-11	Auto-Generated Correspondence--Business Rules	System shall support automated generation of correspondence based on notification type as defined by business rules	Auto-Generate - Dynamic	F	Cu
CO-12	Manual-Generated Correspondence--Create Business Rules	System shall allow for the manual generation of correspondence based on business rules	Manual-Generate - Triggered	F	Cu
3	Manual-Generated Correspondence--Edit (Triggered)	System shall allow for personalization of manually generated correspondence triggered during a specific step in the work flow	Manual-Generate - Triggered	F	Cu Pe fre ap
CO-14	Manual-Generated Correspondence--Data Elements	System shall allow for the manual generation of correspondence that includes specific data elements	Manual-Generate - Triggered	F	Cu
CO-15	Manual-Generated Correspondence--Page Designation	System shall allow for the manual generation of correspondence that includes specific page designations	Manual-Generate - Triggered	F	Cu
CO-16	Manual-Generated Correspondence--Individual	System shall allow for the manual generation of documents individually, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered	F	Cu
CO-17	Manual-Generated Correspondence--Generate Bulk	System shall allow for the manual generation of documents in bulk, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered	F	Cu
CO-18	Manual-Generated Correspondence--Generate Bulk in Real Time	System shall allow for the manual generation of documents in real time, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered	F	Cu
CO-19	Manual-Generated Correspondence--Create Business Events	System shall allow for the manual generation of correspondence based on business events	Manual-Generate - Selected	F	Cu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-20	Manual-Generated Correspondence--Demographics	System shall allow for the manual generation of correspondence based on demographic data	Manual-Generate - Selected	F	Cu
CO-21	Manual-Generated Correspondence--Business Rules	System shall allow for the manual generation of correspondence based on notification type as defined by business rules	Manual-Generate - Selected	F	Cu
CO-22	Manual-Generated Correspondence--Multi-Level Criteria	System shall provide for DOR-categorized mailings using multi-level criteria (e.g., sending notices to accounts with balances due that are greater than $500)	Manual-Generate - Selected	F	Cu
CO-23	Manual-Generated Correspondence--Reason Code	System shall allow for the manual generation of tailored correspondence based on unique reason codes	Manual-Generate - Dynamic	F	Cu
CO-24	Manual-Generated Correspondence--Pre-Defined by Business Rules	System shall allow for the manual generation of correspondence with pre-defined text alternatives, based on business rules	Manual-Generate - Dynamic	F	Cu
CO-25	Manual-Generated Correspondence--Pre-Defined by Business Events	System shall allow for the manual generation of correspondence with pre-defined text alternatives, based on business events	Manual-Generate - Dynamic	F	Cu
CO-26	Manual-Generated Correspondence--Pre-Defined Editable	System shall allow for the manual generation of correspondence with pre-defined text alternatives that are editable	Manual-Generate - Dynamic	P	Cu fo ar Th cr ot co te fo cr int fo sy ha
CO-27	Manual-Generated Correspondence--Pre-Defined Nonedible	System shall allow for the manual generation of correspondence with pre-defined text alternatives that are not editable	Manual-Generate - Dynamic	F	Cu Th cr ot co te or cr int fo sy ha
CO-28	Manual-Generated Correspondence--Free Form	System shall allow for the manual generation of correspondence that includes free form text fields	Manual-Generate - Free-Format	F	Cu
CO-29	Notification Generation	System shall support automated generation of notification to external agency upon file upload	Generate - Miscellaneous	F	M Pr Int
CO-30	Automatic Correspondence	System shall support automated generation of notifications to confirm updates to entity accounts	Generate - Miscellaneous	F	M. Pr Cu
CO-31	Standardization	System shall generate standard or customizable notices, forms, and correspondence according to DOR-defined business rules	Generate - Miscellaneous	F	Cu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
2	Correspondence--Templates	System shall provide templates for automated correspondence	Generate - Miscellaneous	F	Cu All
CO-33	Correspondence--Personalize	System shall provide action item notifications for manually personalized correspondence templates	Generate - Miscellaneous	F	Cu W W co cr co
CO-34	Correspondence--Free Form	System shall provide for free form field entry on automated correspondence	Generate - Miscellaneous	P	Cu Co for re
CO-35	Manual Voucher Generation	System shall allow for the manual generation of account vouchers, including: tax type, penalty, interest, and year	Generate - Miscellaneous	F	Re
CO-36	Auto-Population	System shall support automated population of entity information into manually personalized correspondence	Generate - Miscellaneous	P	Cu po wh
CO-37	System Calculations	System shall support automated calculations of information such as interest, penalties, or fees in correspondence	Generate - Miscellaneous	F	Cu
CO-38	Types of Entries	System shall provide for combinations of database variables, shell text, variable paragraphs, and free form text in correspondence	Generate - Miscellaneous	F	Cu
CO-39	Display--Auto-Generated Correspondence	System shall display auto-generated correspondence as it would appear to recipient	Generate - Miscellaneous	F	Cu
CO-40	Display--Manual Generated Correspondence	System shall display manually generated correspondence as it would appear to recipient	Generate - Miscellaneous	F	Cu
CO-41	Display--Correspondence	System shall provide central repository of correspondence (e.g., templates, unpopulated forms)	Generate - Miscellaneous	F	Cu M:
CO-42	Confirmation--Auto-Generated Correspondence	System shall provide confirmation to DOR employee of auto-generated correspondence submission	Generate - Miscellaneous	F	Cu All inf
CO-43	Confirmation--Manual Generated Correspondence	System shall provide confirmation to DOR employee of manually generated correspondence submission	Generate - Miscellaneous	F	Cu All inf
CO-44	Language--Multiple	System shall provide for correspondence to be generated in different language(s)	Generate - Miscellaneous	P	Cu co Tri co of
CO-45	Language--Bilingual	System shall provide for correspondence to be generated with two languages (e.g., English and Spanish)	Generate - Miscellaneous	P	Cu co Tri co of
CO-46	Spell Check	System shall provide spelling check capabilities equivalent to the spell check capabilities in software products such as the Microsoft Office suite	Generate - Miscellaneous	F	Cu fu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-47	Grammar Check	System shall provide grammar checking capabilities equivalent to the grammar check capabilities in software products such as the Microsoft Office suite	Generate - Miscellaneous	P	Cu A bu te ca At ar int
CO-48	Character Validation	System shall provide real-time character validation for free form text fields (such as character limits or alpha/numeric-only fields)	Generate - Miscellaneous	F	Cu
CO-49	User Creation--With Pre-Population	System shall support automated pre-population of DOR-specific information based on user (e.g., department contact information)	Generate - Miscellaneous	F	Cu
CO-50	User Creation--Without Pre-Population	System shall allow for the manual override of DOR-specific information based on user (i.e., not include department-specific information)	Generate - Miscellaneous	P	Ini an te pu
CO-51	Mail Merge	System shall provide for the capability to auto-generate bulk correspondence through mail merge	Generate - Miscellaneous	P	Cu of to
CO-52	Employee Notification of Correspondence	System shall support automated employee alerts for the generation of high volume taxpayer correspondences based on business rules	Generate - Miscellaneous	F	Inf
CO-53	Formatting Based on Method	System shall adhere to formatting correspondence based on USPS guidelines (e.g., size, markings), with correspondence originating in U.S.	Generate - Miscellaneous	F	Cu
CO-54	Auto-Generated Correspondence--Suspend	System shall provide for the capability to suspend auto-generated correspondence for an entity (i.e., suspend due to lien, default, etc.)	Generate - Miscellaneous	F	Cu
		"Fulfillment" Functional Requirements			
CO-55	Print Preview--Entity-Specific Information (Manual)	System shall provide print preview for manually personalized correspondence with entity-specific information	Fulfillment - Print/Process	F	Cu
CO-56	Print Preview--No Entity-Specific Information (Manual)	System shall provide print preview for manually personalized correspondence without entity-specific information	Fulfillment - Print/Process	F	Cu
CO-57	Print Preview--Entity-Specific Information (Automated)	System shall provide print preview for automatically generated correspondence with entity specific information	Fulfillment - Print/Process	P	Co .ic cr ne
CO-58	Print Preview--No Entity-Specific Information (Automated)	System shall provide print preview for automatically generated correspondence without entity-specific information	Fulfillment - Print/Process	P	Co no cr ne
CO-59	Print Preview--Entirety	System shall provide for the ability to view complete packages (including letters, notices, and other related documents) online, before and after printing, in their entirety	Fulfillment - Print/Process	F	Cu
CO-60	Print--Bulk	System shall provide for printing correspondence in bulk	Fulfillment - Print/Process	F	Cu
CO-61	Print--Desktop	System shall provide for desktop printing	Fulfillment - Print/Process	F	Cu
CO-62	Print--Limited (User Type)	System shall provide limited desktop printing by user type	Fulfillment - Print/Process	F	M: Cu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
3	Print--Limited (Correspondence Type)	System shall provide limited desktop printing by correspondence type	Fulfillment - Print/Process	F	Cu
CO-64	Print—Choose Printing Method	System shall provide for the ability for DOR employee to choose printing method (e.g., fulfillment center, locally)	Fulfillment - Print/Process	F	Cu Co ba is Co th as
CO-65	Forecasting	System shall provide for print forecasting dashboard for fulfillment of bulk orders	Fulfillment - Print/Process	F	Cu Ge
CO-66	Folding and Packaging	System shall provide for enclosure printing, folding, and packaging	Fulfillment - Print/Process	F	Cu Te Co co Ph en
CO-67	Multiple Page Printing	System shall provide for printing multiple-page documents with formatting that varies for each page	Fulfillment - Print/Process	F	Cu
CO-68	Alternative Printing Methods	System shall provide alternative printing options, such as printing locally	Fulfillment - Print/Process	F	Cu
CO-69	Print Outcomes	System shall provide tracking of printing outcomes (e.g., stopped, deleted, in-process, processed)	Fulfillment - Print/Process	P	Cu ha
CO-70	Automated Inline Mailing System (AIMS) Marks	System shall provide automated inline mailing system marks (AIMS)	Fulfillment - Print/Process	F	Cu
CO-71	Print Queues	System shall provide correspondence print queues based on business rules	Fulfillment - Print/Process	F	Cu
CO-72	Print Queue—Prioritization	System shall provide differing correspondence print queue timelines based on business rules (e.g. time-sensitive correspondence, black-out dates, triggered by defined date)	Fulfillment - Print/Process	C	Th ty co re
CO-73	Document Locator Number	System shall provide the capability to print a document locator number on all generated correspondence	Fulfillment - Print/Process	F	Cu ID av
CO-74	Fulfillment Center—Print	System shall interface with fulfillment center for the purpose of processing bulk processing, printing, and mailing	Fulfillment - Print/Process	C	Th ty co
CO-75	Fulfillment Center--Status	System shall interface with fulfillment center to provide a work order dashboard (e.g., print jobs, print history, etc.)	Fulfillment - Print/Process	P	Mi Pr Cu Th pri jol

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-76	Notification--General	System shall support automated notification(s) of pending printing jobs based on business rules (e.g., color, large quantity)	Fulfillment - Print/Process	P	Cu ha ba ar
CO-77	Notification--Confirmation	System shall support automated confirmation notification(s) of completed printing jobs	Fulfillment - Print/Process	C	M Cu
CO-78	Notification--Unsuccessful	System shall support automated notification(s) of unsuccessful printing jobs	Fulfillment - Print/Process	C	M Cu
CO-79	Correspondence Channels	System shall provide ability to send correspondence by preferred correspondence channel based on business rules (e.g., mail, email, self-service portal message)	Fulfillment - Print/Process	C	Th ty co re
CO-80	Reduced Suspends	System shall minimize the quantity of correspondence sent to entity by collating notifications based on business rules	Fulfillment - Print	F	Cu
CO-81	Generate Spool	System shall provide for generation of correspondence sent to a print spool where correspondence is printed in bulk	Fulfillment - Print	P	Cu ba re M Pr
CO-82	USPS "Bulk Mail" Discount	System shall provide for sending correspondence in bulk using USPS "bulk mail" discount	Fulfillment - Print	F	Cu
CO-83	Alternative Fulfillment Methods	System shall provide alternative delivery mechanisms (e.g., fax, certified mail, overnight)	Fulfillment - Print	F	Pr te m or
CO-84	Bulk Print Alert	System shall send alert to DOR employees when correspondences are printed based on business rules (i.e. some may generate department wide alerts)	Fulfillment - Print	F	Inf
		"Archiving" Functional Requirements			
CO-85	Business Reply--Tracking	System shall provide for the use of business reply mail in order to track mailing	Archiving - Document Management	F	Cu
CO-86	Business Reply--Confirmation	System shall provide for the use of business reply mail in order to confirm mailing	Archiving - Document Management	F	Cu
CO-87	DLN Unique Identifier	System shall assign a unique, searchable internal identifier number to each taxpayer for tracking correspondence, such as Document Locator Number (DLN) or Correspondence Locator Number (CLN)	Archiving - Document Management	F	Cu
CO-88	Automated Correspondence Tracking	System shall support automated tracking of correspondence by internal identifier number	Archiving - Document Management	F	Cu
CO-89	Manual Correspondence Tracking	System shall allow for the manual tracking of correspondence by internal identifier number	Archiving - Document Management	F	Cu
CO-90	Customer Contact History	System shall provide access to customer contact thread history	Archiving - Document Management	F	Cu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
91	Customer Contact History--Interface	System shall interface with content management system to provide customer contact history	Archiving - Document Management	C	Mi
CO-92	Link Correspondence	System shall support automated linking of correspondence across correspondence channels in customer contact history (e.g., email, mail, phone, secure messaging through portal)	Archiving - Document Management	C	Th co dri Th co mc thi
CO-93	Link Attachments	System shall support automated linking of correspondence attachments across correspondence channels (e.g., documents, images)	Archiving - Document Management	F	Co in cu
CO-94	Customer Contact History--Filter	System shall provide filtering of customer contact history in viewable list based on business rules (e.g., entity, date, case)	Archiving - Document Management	F	Cu
CO-95	Image Record	System shall support automated image recording of system-generated correspondence	Archiving - Document Management	F	Cu All
CO-96	Image Access	System shall provide access to images of system-generated correspondence from within correspondence history	Archiving - Document Management	F	Cu
CO-97	Scanned Images	System shall provide storage for scanned correspondence	Archiving - Document Management	F	Sp
CO-98	Scan Lines	System shall provide correspondence with scan lines and/or bar codes to provide for tracking	Archiving - Document Management	F	Cu
CO-99	Correspondence Information	System shall display taxpayer correspondence history	Archiving - Document Management	F	Cu
-100	Correspondence--Tracking by Message	System shall create a contact record when correspondence is sent	Archiving - Document Management	F	Cu
CO-101	Correspondence--Document Tracking	System shall provide ability to track the fulfillment of correspondence by DLN	Archiving - Document Management	F	Cu Tr pri
CO-102	Correspondence--Throttling	System shall provide ability to designate correspondence throttling based on business rules	Archiving - Document Management	C	Th ty co re
CO-103	Effective Dates	System shall create effective dates for all data elements including: tax types, filing frequencies, and addresses	Archiving - Document Management	P	M inc ad
CO-104	Expiry Dates	System shall create expiry dates for all data elements including: tax types, filing frequencies, and addresses	Archiving - Document Management	P	M: inc ad

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-105	Correspondence History	System shall store correspondence received history based on business rules	Archiving - Document Management	C	y co re
CO-106	Return Tracking	System shall provide for tracking of USPS returned/undeliverable mail	Archiving - Document Management	C	Th ty co re
CO-107	Address--Updates	System shall support automated address update based on USPS returned/undeliverable mail	Archiving - Document Management	C	Th ty co re
CO-108	Flag Correspondence	System shall provide for flagging of correspondence to be removed from discovery	Archiving - Document Management	P	De su pr
CO-109	Correspondence--Regeneration (Employee)	System shall allow for the manual exact re-generation of correspondence (e.g. dates, DLN#) by employee	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-110	Correspondence--Reproduction (Employee)	System shall allow for the manual editing of previously sent correspondence (e.g. dates, DLN#) by employee to created a correspondence reproduction	Archiving - Maintenance (Publish/Confirm/Edit)	P	Co Le
CO-111	Correspondence--Regeneration (Taxpayer)	System shall allow for the manual exact re-generation of correspondence (e.g. dates, DLN#) by taxpayer	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-112	Branding	System shall provide correspondence with DOR-specific branding	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-113	Special Characters	System shall provide the use of graphics, electronic signatures, or special characters	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-114	Quality Control--Ability	System shall provide quality control mechanisms based on business rules (e.g., spot checks)	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu Co de Co mi
CO-115	Address--Undeliverable	System shall support automated identification of undeliverable or invalid addresses by the United States Postal Service (USPS) for future correspondence	Archiving - Maintenance (Publish/Confirm/Edit)	C	Th ty co re

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
16	Address--Change of Address (Bulk)	System shall interface with National Change of Address in bulk	Archiving - Maintenance (Publish/Confirm/Edit)	C	Th ty co re
CO-117	Address--Change of Address (Real-Time)	System shall interface with National Change of Address in real-time	Archiving - Maintenance (Publish/Confirm/Edit)	C	Th ty co re
CO-118	Address--Change of Address History	System shall support automated notification of undeliverable or invalid addresses in self service profile (if applicable)	Archiving - Maintenance (Publish/Confirm/Edit)	C	Th ty co re
CO-119	Address--Validation	System shall validate city and state based on entry of a zip code entered	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-120	Address--Validation by Zip	System shall validate city and state based on entry of a zip code by displaying a selection of cities valid for the zip code	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-121	Address--Assign	System shall support automated identification of the correct zip code based on entry of a street, city, and state address	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-122	Address--Non-Traditional	System shall provide for correspondence to be sent to non-traditional addresses (e.g. foreign, military, etc.)	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
123	Address--Manual Override	System shall provide for employees to override address standardization changes based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-124	Address--Special Attention	System shall provide for a "special attention" line in the address format	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-125	Address--Select	System shall support automated selection of correspondence address based on business rules when multiple addresses exist on the account	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-126	Name Change--Flagging	System shall support automated flagging of name changes	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu

#	Name	Description	Task Reference ID	Response Code	
		"Generation" Functional Requirements			
CO-127	Name Change—Tracking	System shall support automated tracking of entity name changes in self service profile	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-128	Correspondence--Follow-Up	System shall support automated flagging of an account for follow-up correspondence based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu
CO-129	Correspondence Holds	System shall support automated account hold on entity correspondence based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)	F	Cu

AM - Account Maintenance

Defines the activities to manage account correspondence, to load and process external offsets (e.g. unemployment, child support, or comptroller offsets), to manually post adjustments and perform clearance of open items, and to process penalties and interest. Also defines the activities to review and approve overpayment and to process fraudulent activity. Finally, also defines the activities to manage postings on an entity's account.
- Load External Offsets: Defines activities to load external offsets from various external agencies and appropriately update taxpayer accounts.
- Process External Offsets: Defines activities to process external offsets and determine any debt hierarchy to be followed in clearing process.
- Manage Account Postings: Defines activities to make financial adjustments to payments or liabilities to correct taxpayer accounts and returns ensuring minimal downstream impact.
- Process Penalty and Interest: Defines activities to identify eligible items for penalty and interest, and calculate and post any penalties and interest to a taxpayer's account.
- Transmit Liabilities to IRS for External Offset: Defines the activities to transmit open liabilities to external agencies and to notify taxpayers that their account has been reported to these external agencies.
- Perform Clearing: Defines activities to identify liabilities and credits at the taxpayer account period to clear liabilities.
- Overpayment Review/Approval: Defines activities to review and approve overpayments made by taxpayers before issuance of refunds.
- Process Fraud Activity: Defines activities to process and escalate fraudulent taxpayer activity.

#	Name	Description	Task Reference ID	Response Code
		"Load External Offsets" Functional Requirements		
AM-1	External Offset File Acceptance	System shall allow for offset files to be accepted from approved external entities	AM-010-010	C
AM-2	External Entity Addition	System shall allow for the manual addition of an external entity to the system	AM-010-010	F
AM-3	File Validation	System shall support automated file validation based on business rules	AM-010-010	C
AM-4	File Record Validation	System shall support automated file record validation based on business rules	AM-010-010	C
AM-5	Automated Format Error Identification	System shall support automated file rejection based on business rules	AM-010-020	C
VI-6	Error Reason Code	System shall support automated generation of rejection reason code	AM-010-020	C
AM-7	Automated Offset Upload	System shall support automated loading of offset data, including: name, SSN, FEIN, address, offset amount	AM-010-030	C
AM-8	External Entity Log	System shall allow for logging of external offset data, including: multiple external entity aliases, case number, and expiration dates	AM-010-030	F
AM-9	Offset Refresh--Update	System shall allow for refresh of offset details through update based on business rules	AM-010-030	C
AM-10	Offset Refresh--Replacement	System shall allow for refresh of offset details through replacement based on business rules	AM-010-030	C
AM-11	Debt Expiration Check	System shall support automated check of debt expiration date against current date	AM-010-050	F
AM-12	Refund to Offset Check	System shall support automated check for matching accounts eligible for refund to offset data, including: name, SSN, FEIN, address, alias	AM-010-040	F

#	Name	Description	Task Reference ID	Response Code
AM-13	Taxpayer Address Matching	System shall support automated matching of taxpayer address from refund to offset data based on business rules	AM-010-040	F
AM-14	Phonetic Name Variations	System shall integrate with a tool that provides phonetic spelling for creation of alternate names	AM-010-040	λ
AM-15	Name Logic Matching	System shall support automated matching of first name / last name logic from refund to offset data	AM-010-040	F
AM-16	Scoring of Matching	System shall support automated scoring of data matching based on business rules	AM-010-040	C
AM-17	Refund Hold	System shall support automated refund holds based on business rules	AM-010-040	F
AM-18	Account Flagging--Offsets	System shall support automated flagging of accounts held for offset	AM-010-040	F
AM-19	Account Notes--Offsets	System shall provide details of refund hold in taxpayer account based on entity that originated the offset	AM-010-040	F
		"Process External Offsets" Functional Requirements		
AM-20	External Offset Allocation	System shall support automated offset of refund based on defined offset debt prioritization	AM-020-060	F
AM-21	Offset Prioritization Definition	System shall allow for offset debt prioritization based on business rules, including: entity type, debt age, debt amount, application date	AM-020-060	F
AM-22	Partial Offset	System shall support automated partial offset of refund to external debt based on defined prioritization	AM-020-060	F
AM-23	Refund Holding	System shall support automated hold of refund based on pending offset amount	AM-020-040	F
AM-24	Refund Disbursement	System shall allow non-pending portion of refund offset to continue through the refund process	AM-020-040	F
AM-25	Account Note Update	System shall support automated update of offset details in taxpayer account based on entity that originated offset	AM-020-040	F
AM-26	Refund Hold Updates	System shall support automated updates to refund hold details in taxpayer account based on updates from originating entity requesting offset	AM-020-040	F
AM-27	Apply Offset	System shall support automated application of offset to taxpayer account based on business rules	AM-020-100	F
AM-28	Pending Offset File	System shall support automated generation of a file to a designated entity containing pending offset details, including: taxpayer ID, external agency case number, taxpayer name, offset amount	AM-020-050	C
AM-29	Automated Push Notifications	System shall support automated push notifications to external entity after successful file upload	AM-020-050	
AM-30	Hold Release--No Response	System shall support automated release of refund hold due to lack of response from entity requesting offset based on business rules	AM-020-050	F
AM-31	Hold Release--Approved	System shall support automated release of refund hold once pending offset is approved	AM-020-050	F
AM-32	Hold Release--Reject	System shall support automated release of refund hold once pending offset is rejected	AM-020-050	F
AM-33	Rejection Details	System shall support automated posting of rejection details and reason code to taxpayer account	AM-020-050	F
AM-34	Account Flag Clearing	System shall support automated removal of pending offset notification flag	AM-020-090	F
AM-35	Pending Offset Removal	System shall support automated removal of pending offset refund hold based on business rules	AM-020-090	F
AM-36	Manual Adjustments to Offset	System shall support manual employee adjustments of external debt amounts available for offset	AM-020-080	F
AM-37	Manual Adjustments Approval	System shall support approval process of manual adjustments based on business rules, including: threshold amount and entity type	AM-020-080	F
AM-38	Supervisor Review	System shall support automated push of manual offset revisions to supervisor for review	AM-020-150	F

#	Name	Description	Task Reference ID	Response Code
AM-39	Manual Offset Revision Adjustment	System shall support automated push of manual offset revision for adjustment if supervisor rejects	AM-020-150	F
		"Manage Account Postings" Functional Requirements		
AM-40	Open Error--Log	System shall log open taxpayer account errors, including: events, date of identification, and error type based on business rules	AM-030-010	F
AM-41	Open Error--Reporting	System shall provide general error reporting for open taxpayer account errors based on business rules	AM-030-010	F
AM-42	Open Error--Performance Management	System shall provide analytical reports (e.g., trend, aging, type, etc.) for open taxpayer account errors based on business rules	AM-030-010	F
AM-43	Open Error View	System shall allow employee to view open errors in taxpayer account summary	AM-030-010	F
AM-44	Error Reason Codes	System shall allow for reason code(s) to be applied to an error	AM-030-010	F
AM-45	View--Account Summary	System shall allow employee to view taxpayer account summary data	AM-030-010	F
AM-46	View--Entity	System shall allow employee to view entity-level data	AM-030-010	F
AM-47	View--Account Summary	System shall allow employee to view account-level data	AM-030-010	F
AM-48	View--Transactions	System shall allow employee to drill-down on fields within account summary to view transaction-level data	AM-030-010	F
AM-49	Online Report/View	System shall allow employee to generate online reports/views with specified account summary data, including: date, type, and amount	AM-030-010	F
AM-50	Sorting	System shall allow employee to sort fields within account summary data, including: date, type, and amount	AM-030-010	F
AM-51	Filtering	System shall allow employee to filter account summary data based on fields, including: date, type, and amount	AM-030-010	F
AM-52	Account Summary Print	System shall allow employee to print account summary data	AM-030-010	F
AM-53	Transaction Notes	System shall allow for notes to be included against manual transactions (e.g., adjustments, postings, etc.).	AM-030-010	F
AM-54	Transaction Notes--Lock	System shall not allow for updates to be made on existing notes	AM-030-010	F
AM-55	Root Cause	System should provide list of frequent root causes by error type based on business rules	AM-030-010	F
AM-56	Assisted Navigation	System shall provide hyperlinks to frequent actions to error codes to assist navigation for users within system	AM-030-010	F
AM-57	Payment Search	System shall support search capability for specific payment data, including: dollar amount, routing number, and channel	AM-030-010	F
AM-58	Imaging--Physical	System shall provide links to images (e.g., scanned documents) in account summary for specific transactions	AM-030-010	F
AM-59	Fuzzy Matching	System should support search capability for approximate string matching, including: name and address	AM-030-010	F
AM-60	Multiple Account View	System shall allow employee to view multiple taxpayer accounts at the same time (e.g., split screens)	AM-030-010	F
AM-61	Return Search	System shall support search capability for available payment data, including: date received, SSN, payment amount, and FEIN	AM-030-010	F
AM-62	Relationships	System shall display all linkages between known relationships	AM-030-010	F
AM-63	Relational Graph	System should display all entity relationships graphically	AM-030-010	F

#	Name	Description	Task Reference ID	Response Code
AM-64	Search	System shall support search of entity information, including: Payment Locator Number (PLN), warrant numbers, and liability numbers	AM-030-010	F
AM-65	NOL Carry Forward	System shall support automated carry forward of Net Operating Loss (NOL) from previous period(s)	AM-030-010	F
AM-66	Resolution Management	System shall provide descriptions for reason codes	AM-030-010	F
AM-67	Thresholds	System shall enforce supervisor review for financial impact of posting based on business rules	AM-030-010	F
AM-68	Automated Error Adjustment	System shall support automated adjustments to transactions/postings based on business rule	AM-030-010	F
AM-69	Bulk Fix	System shall allow for errors to be corrected in bulk based on business rules	AM-030-020	F
AM-70	Bulk Fix--Selection	System shall allow for transactions logs to be filtered for bulk fix	AM-030-020	P
AM-71	Bulk Fix--Highlight	System should highlight bulk updates that will result in significant errors based on business rules	AM-030-020	F
AM-72	Informational Returns	System shall allow for informational returns to post based on business rules.	AM-030-020	F
AM-73	Process--Missing Voucher	System shall provide a process to accommodate for entities with a missing voucher based on business rules	AM-030-020	F
AM-74	Process--Money Transfer	System shall provide a process to transfer money between accounts based on business rules	AM-030-020	F
AM-75	Process--Return Transfer	System shall provide a process to transfer returns between accounts based on business rules	AM-030-020	F
AM-76	Process--Refund Transfer	System shall provide a process to transfer refunds between accounts based on business rules	AM-030-020	F
AM-77	Process--Payment Postmark Adjustment	System shall provide a process to adjust payment postmarks based on business rules	AM-030-020	F
AM-78	Process--Return Postmark Adjustment	System shall provide a process to adjust return postmarks based on business rules	AM-030-020	F
AM-79	Process--Adjustments by Period	System shall provide a process to adjust transactions by period based on business rules	AM-030-020	F
AM-80	Process--Redeposit Dates	System shall provide a process to accommodate for missed redeposit dates based on business rules	AM-030-020	F
AM-81	Process--Payment Reallocation	System shall provide a process to reallocate payments based on business rules	AM-030-020	F
AM-82	Process--Reverse Offset	System shall provide a process to reverse offsets based on business rules	AM-030-020	F
AM-83	Process--Liability Creation	System shall provide a process to create liabilities based on business rules	AM-030-020	F
AM-84	Process--Liability Cancellation	System shall provide a process to cancel liabilities based on business rules	AM-030-020	F
AM-85	Process--Liability Satisfaction	System shall provide a process to satisfy liabilities based on business rules	AM-030-020	F
AM-86	Process--Penalty Adjustment	System shall provide a process to adjust penalties based on business rules	AM-030-020	F
AM-87	Process--Interest Adjustment	System shall provide a process to adjust interest based on business rules	AM-030-020	F
AM-88	Process--Agent Collection Date	System shall provide a process to adjust agent collections date based on business rules	AM-030-020	F
AM-89	Process--Delinquency Clearance	System shall provide a process to clear delinquencies based on business rules	AM-030-020	F
AM-90	Process--Batch Correction	System shall provide a process to make batch corrections based on business rules	AM-030-020	F
AM-91	Process--SOL	System shall provide a process to maintain compliance within Statute of Limitations based on business rules	AM-030-020	F

#	Name	Description	Task Reference ID	Response Code
AM-92	Process--Entity Merges	System shall provide a process to merge entities' transaction data, including: postings, and returns based on business rules	AM-030-020	P
AM-93	Process--Form Line-item Adjustments	System shall provide a process to adjust form line-item data based on business rules	AM-030-020	F
AM-94	Process--Abatement Penalty	System shall provide a process to apply abate penalties on an account period	AM-030-020	F
AM-95	Process--Abatement Interest	System shall provide a process to abate interest on an account period	AM-030-020	F
AM-96	Process--Disaster	System shall provide a process to lock tax account periods to accommodate disaster relief scenarios by account summary data, including: zip code, NAICS/SIC code, and tax jurisdiction	AM-030-020	F
AM-97	Process--Disaster Penalty Postponement	System shall provide a process to postpone calculation date for penalty based on application of disaster relief scenario.	AM-030-020	F
AM-98	Process--Disaster Interest Postponement	System shall provide a process to postpone calculation date for interest based on application of disaster relief scenario.	AM-030-020	F
AM-99	Process--Military Due-Date	System shall provide a process to adjust due-dates for military professionals based on business rules	AM-030-020	F
AM-100	Process--Expungements	System shall provide a process to automatically trigger expungements (i.e., erasure of previous incident such as warrants and liens) based on business rules	AM-030-020	C
AM-101	Process--Split Payments	System shall provide a process to split a payment during a payment transfer based on business rules	AM-030-020	F
AM-102	Simulation	System shall support simulation of processes (e.g., Missing Voucher, Money Transfer, Return Transfer, etc.) to determine potential outcomes of actions	AM-030-040	F
AM-103	Financial Impacts	System shall support automated calculation of financial impact to account transactions and balances for simulations	AM-030-040	F
AM-104	Transaction Reversal	System shall allow for the reversal of transactions based on business rules	AM-030-050	F
AM-105	Prior Financial Impact	System shall support automated adjustments to all impacted tax account periods (including previous periods and other tax accounts) resulting from an adjustment to the tax account period	AM-030-050	F
AM-106	Prior Financial Impact--Relationships	System shall include the financial impact to previous periods from related entities when posting account updates	AM-030-050	F
AM-107	Future Period Impact	System shall support automated carry forward of account data to future financial periods based on business rules	AM-030-050	F
		"Process Penalty and Interest" Functional Requirements		
AM-108	Event Identification	System shall support automated identification of events eligible for penalty based on business rules	AM-040-010	F

#	Name	Description	Task Reference ID	Response Code
AM-109	Liability Identification	System shall support automated identification of outstanding liabilities eligible for interest based on business rules	AM-040-010	F
AM-110	Amnesty	System shall provide capabilities to support amnesty	AM-040-010	F
AM-111	Penalty Calculation	System shall support automated calculation of penalties based on business rules	AM-040-020	F
AM-112	Penalty Determination	System shall support automated use of historical data to determine penalty	AM-040-020	F
AM-113	Penalty Application - Reason Code	System shall support automated application of penalty based on selected reason code	AM-040-020	F
AM-114	Penalty Calculation	System shall support calculation of penalty, including: flat rates, percentage of transaction based on business rules	AM-040-020	F
AM-115	Penalty Rounding Up	System shall support automated rounding up of applicable penalties to predetermined penalty floor based on business rules	AM-040-020	F
AM-116	Penalty Write Off	System shall support automated write off of penalties below a predetermined threshold based on business rules	AM-040-020	F
AM-117	Supervisor Review - Penalty	System shall support automated triggering of supervisor approval for penalty above a threshold based on business rules	AM-040-020	C
AM-118	Penalty Block	System shall allow for blocking penalty at entity tax account period	AM-040-020	F
AM-119	Interest Calculation	System shall support automated calculation of interest based on business rules	AM-040-040	F
AM-120	External Rate	System shall support calculation of interest based on external rates	AM-040-040	F
AM-121	Reverse Interest Rate	System shall allow for determination of a DOR incurred rate of interest based on business rules	AM-040-040	F
AM-122	Decoupling Interest Rate	System shall allow for decoupled interest rates for applied and incurred	AM-040-040	F
AM-123	Rate Percentage	System shall support calculation of interest rate as a percent of transaction for a specific time period	AM-040-040	F
AM-124	Compound Interest Rate	System shall support calculation of compound interest rate for a specific time period	AM-040-040	F
AM-125	Simple Interest Rate	System shall support calculation of simple interest rates for a specific time period	AM-040-040	F
AM-126	Forecasted Interest to Taxpayer Bill	System shall support calculation of forecasted interest for specific time periods based on business rules	AM-040-040	F
AM-127	Interest Block	System shall allow for blocking interest at entity tax account period	AM-040-040	F
AM-128	Post Penalty	System shall support automated posting of penalty to taxpayer account period	AM-040-050	F
AM-129	Post Interest	System shall support automated posting of interest to taxpayer account period	AM-040-050	F

#	Name	Description	Task Reference ID	Response Code
AM-130	Batch Posting of Penalty	System shall support periodic batch posting of penalty	AM-040-050	F
AM-131	Batch Posting of Interest	System shall support periodic batch posting of interest	AM-040-050	F
		"Transmit Liabilities to IRS for External Offset" Functional Requirements		
AM-132	Eligible Debt Identification	System shall support automated identification of outstanding liabilities eligible for offset based on business rules	AM-050-010	F
AM-133	Correspondence Allocation	System shall support automated correspondence applied to relevant liability(ies) based on business rules	AM-050-020	F
AM-134	Tracking Details	System shall track correspondence details (e.g., date, type, document locator number, etc.) based on business rules	AM-050-020	F
AM-135	Entity Response Tracking	System shall support automated tracking of the number of days between sending entity correspondence and response from entity	AM-050-020	F
AM-136	TOPs Requirements	System shall produce an offset request file that conforms with TOPs published guidelines	AM-050-070	F
AM-137	Offset Request File Update	System shall support automated update to TOPs offset request file with new liabilities based on business rules	AM-050-070	F
AM-138	TOPs Offset Refresh	System shall support automated refresh of TOPs offset request file details through update based on business rules	AM-050-070	F
AM-139	Offset Refresh	System shall support automated refresh of TOPs offset request file details through replacement based on business rules	AM-050-070	F

#	Name	Description	Task Reference ID	Response Code
AM-140	Offset File Updates	System shall support automated sending of an offset request file to TOPs based on business rules	AM-050-070	F
AM-141	Name Logic Matching	System shall allow for the capture multiple name variances per entity based on business rules	AM-050-070	F
AM-142	Variances in File	System shall support automated inclusion of all name variances in TOPs offset request file	AM-050-070	F
AM-143	Third Party Alias Software	System should allow third party software to determine name variations, including: additional aliases, common misspellings	AM-050-070	X
AM-144	Add Aliases	System shall allow for manual addition of name variations based on business rules	AM-050-070	F
AM-145	Offset File Receipt	System shall support automated upload of TOPs offset file via secure file transfer	AM-050-090	F
AM-146	Reinstate Liability	System shall support automated reinstatement of a liability to TOPs offset file for reversal process	AM-050-090	F
AM-147	Redistribute Funds	System shall support automated distribution of funds back to TOPs based on business rules	AM-050-090	F
AM-148	Partial Match Report--TOPS	System shall support automated generation of a report of partial matches based on TOPS offset file received	AM-050-100	X
AM-149	Match SSN/FEIN	System shall enable a matching algorithm for data from vendor payment file and eligible liabilities for offset	AM-050-150	X
AM-150	Offset File Generation	System shall support automated generation of vendor payment offset file with complete matches, including: details of match, amount of offset	AM-050-120	F
AM-151	Offset File Sent to State Auditor	System shall support automated sending of vendor payment offset file to Auditor of State based on business rules	AM-050-120	F
AM-152	Partial Match Report--Vendor	System shall support automated generation of a report of partial matches based on vendor offset file received	AM-050-140	X
		"Perform Clearing" Functional Requirements		
AM-153	Obligation Identification	System shall identify obligations posted within the tax account period at the transaction level	AM-060-010	F
AM-154	Credit Identification	System shall identify credits posted within the tax account period	AM-060-020	F
AM-155	Payment Identification	System shall identify payments posted within the tax account period	AM-060-020	F
AM-156	Eligibility	System shall determine eligibility of clearing (e.g., payment type, date, status) based on business rules	AM-060-030	F
AM-157	Account Clearing	System shall calculate the tax account period balance by comparing eligible credits against associated obligations at the transaction level	AM-060-030	F
AM-158	Order of Precedence	System shall apply eligible credits to associated obligations at the transaction level in order of precedence (i.e., penalty being cleared before interest and then base tax) based on business rules	AM-060-030	F
AM-159	Updated Balance	System shall post updated balance within the tax account period based on results of clearing	AM-060-030	F
AM-160	Transaction History	System shall log history of clearing at the transaction level within the tax account period	AM-060-030	F
		"Overpayment Review/Approval" Functional Requirements		

#	Name	Description	Task Reference ID	Response Code
AM-161	Payment Amount Validation	System shall validate amount due on tax return against the amount paid by entity	AM-070-010	F
AM-162	Multiple Payment Type Validation	System shall validate payments that include multiple payment types (e.g., checks, EFT, etc.)	AM-070-010	F
AM-163	Payment Source	System shall log the sources of payment used by each entity	AM-070-010	F
AM-164	Payment Tracking	System shall track payment due dates based on business rules	AM-070-010	F
AM-165	Payment Date	System shall log the date a payment is made	AM-070-010	F
AM-166	Past-due Payment Interest	System shall apply interest on payments that are made after their due date based on business rules	AM-070-010	F
AM-167	Statute of Limitations Validation	System shall validate overpayments against Statute of Limitations rules based on business rules	AM-070-010	F
AM-168	Suspended Return Validation	System shall validate overpayments against suspended returns from previous tax account periods	AM-070-010	F
AM-169	Refund Amendment Validation	System shall validate refunds against amendments made within the current tax account period	AM-070-010	F
AM-170	Tax Credit Offset	System shall allow for issuance of tax credits for overpayments	AM-070-010	F
AM-171	Overpayment Source	System shall log the source of overpayment (e.g., Audit, Legal, etc.)	AM-070-010	F
AM-172	Overpayment Notes	System shall allow for notes to be included against overpayment	AM-070-010	F
AM-173	Tax Type Log	System shall log the tax type from which the taxpayer is requesting a refund	AM-070-030	F
AM-174	ID Verification	System shall verify identification of taxpayer for refund requests	AM-070-030	F
AM-175	Power of Attorney Verification	System shall verify identification of power of attorney for refund requests	AM-070-030	F
AM-176	ID Verification--Third Party	System shall allow for third party identification verification	AM-070-030	C
AM-177	Refund Request Notes	System shall allow for notes to be included against refund requests	AM-070-030	F
AM-178	File Attachments--Refund Request	System shall allow for file attachments to be included against refund requests	AM-070-030	F
AM-179	Distribution	System shall allow for distribution of refund request to appropriate employee(s)	AM-070-030	F
AM-180	Data Capture	System shall enforce sufficient information is captured from refund request form	AM-070-030	F
AM-181	Request Receipt Acknowledgment	System shall allow for acknowledgment of refund request receipt	AM-070-030	F
AM-182	Request Receipt Channels	System shall accept refund requests through multiple channels (e.g., online, physical documentation, etc.)	AM-070-030	F
AM-183	Sign-off	System shall validate sign-off of work item closure	AM-070-060	F
AM-184	Bulk Review	System shall provide the ability to review work items in bulk based on business rules	AM-070-060	F
AM-185	Bulk Approval	System shall provide the ability to approve changes to work items in bulk based on business rules	AM-070-060	P
AM-186	Bulk Reassignment	System shall provide the ability to reassign work items in bulk based on business rules	AM-070-060	F
AM-187	Work Item Age	System shall track the age of work items in queue	AM-070-060	F
AM-188	Online Report/View	System shall allow employee to generate dynamic reports/views with specified work item data including: date, type, and age	AM-070-060	F
AM-189	Sorting	System shall allow employee to sort fields within work item data including: date, type, and age	AM-070-060	F

#	Name	Description	Task Reference ID	Response Code
AM-190	File Attachments--Work Item	System shall allow for file attachments to be included against work items	AM-070-060	F
AM-191	Queue Case Generation	System shall allow for the creation of a case from the work item queue based on business rules	AM-070-060	F
AM-192	Thresholds	System shall maintain dollar amount thresholds by tax type based on business rules	AM-070-020	F
AM-193	Threshold Recognition	System shall allow for recognition of refund requests below minimum dollar amount thresholds	AM-070-020	F
AM-194	Prioritization--Overpayment	System shall prioritize processing of overpayments based on business rules	AM-070-020	F
AM-195	Line-item Comparison	System shall support automated line-item comparison against normalized range based on business rules	AM-070-020	F
AM-196	Suspended Refund	System shall allow for refunds to be put into suspense based on business rules	AM-070-020	F
AM-197	Random Review	System shall support random review of refund requests based on business rules	AM-070-020	F
AM-198	Overpayment Reason Codes	System shall allow for reason code(s) to be applied to an overpayment	AM-070-020	F
AM-199	Overpayment Offset	System shall allow for overpayment offset of liabilities	AM-070-020	F
AM-200	Cross-TAP Application	System shall allow for overpayment offset across different tax account periods	AM-070-020	F
AM-201	Overpayment Transfer	System shall allow for overpayments to be transferred between taxpayer account periods based on business rules	AM-070-020	F
AM-202	Injured Spouse	System shall allow for identification of an injured spouse	AM-070-020	F
AM-203	Injured Spouse--Accommodation	System shall accommodate for injured spouse based on business rules	AM-070-020	F
AM-204	Offset Details	System shall provide detailed description of how refunds are offset and applied to entity based on business rules	AM-070-020	F
AM-205	Appeal--Refund Denial	System shall allow for appeal of refund denial	AM-070-020	F
AM-206	Appeal--Refund Offset	System shall allow for appeal of refund offsetting	AM-070-020	F
AM-207	Donations	System shall allow for donation of refund based on business rules	AM-070-020	F
AM-208	System Override	System shall allow system override of processing refund	AM-070-020	F
AM-209	Overpayment Application Hierarchy	System shall enforce hierarchy of overpayment application (i.e., offsetting before refunding)	AM-070-020	F
AM-210	Taxpayer Adjustment Correspondence	System shall support automated generation of correspondence to taxpayer via taxpayer's desired channel informing them of adjustments to their return	AM-070-070	F
		"Process Fraud Activity" Functional Requirements		
AM-211	Document Retrieval	System shall support employee ability to manually retrieve an archived suspected or confirmed fraud document by unique identification number	AM-080-070	F
AM-212	Archive Document	System shall support the ability to automatically archive a document for potential fraudulence based on business rules	AM-080-070	F
AM-213	Unarchive Document	System shall support the ability to manually unarchive a document that had been archived for potential fraudulence	AM-080-070	F
AM-214	Reason Code	System shall support automated assignment of fraud reason code to a document prior to archiving	AM-080-070	F
AM-215	Fraud Analysis vs Audit Analysis	System shall automatically make recommendation for case action (creation of SIU or audit case) based on business rules	AM-080-090	F
AM-216	Fraud Score Creation	System shall create a fraud score, indicating likelihood of fraud, for each return based on business rules (e.g., examining trends and historical information, using external data sets)	AM-080-090	F
AM-217	Similar Fraud Return Display	System shall display returns that correlate with the fraudulent tax return under review based on business rules (e.g. taxpayer demographics, fraud score)	AM-080-090	F
AM-218	Implicit Registration Prevention	System shall support safeguards preventing returns suspended for potential fraudulence do not trigger the creation of implicit taxpayer registration	AM-080-080	F

#	Name	Description	Task Reference ID	Response Code
AM-219	Customized Views - Analyst	System shall support customized views of entity data for fraud analysts based on fraud analyst input	AM-080-030	F
AM-220	Dynamic Views - Analyst	System shall support dynamic views of entity data for fraud analysts based on entity demographics	AM-080-030	F
AM-221	Entity Data View	System shall display entity data in fraud analyst view(i.e. ISP address, PTIN, return account, filing history, W2 data from employer, Responsible Officer classification, SSN of all claimed dependents)	AM-080-030	F
AM-222	Standardization Comparison	System shall automatically assign a return a fraud score by utilizing historical return data (i.e., withholding amount for gross income, refund claim for number of claimed dependents)	AM-080-030	F
AM-223	Remove Fraud Manually	System shall support fraud analyst marking a return as not fraudulent	AM-080-030	F
AM-224	Log Fraud Removal Info	System shall automatically support logging information about removing fraud flag, including: time, date, worker ID, document ID	AM-080-030	F
AM-225	Blocked Refund	System shall support fraud analyst blocking a refund from processing at any point in the process	AM-080-030	F
AM-226	Blocked Refund Details	System shall automatically support logging information about blocking a refund from processing including: time, date, worker ID, document ID	AM-080-030	F
AM-227	Unique Identification Number - Assignment	System shall automatically assign unique numeric identification number to each identity quiz	AM-080-040	F
AM-228	Entity Account Quiz Date	System shall automatically update entity account with the date the identify quiz was mailed	AM-080-040	P
AM-229	Entity Account Quiz Status	System shall automatically update entity account with the identity quiz status (e.g., passed, failed, not taken)	AM-080-040	F
AM-230	Log Entity Online Quiz Info	System shall log information entered by entity in response to the online identity quiz, including: unique identification number, tax year, and refund amount entered	AM-080-060	F
AM-231	Log Entity Phone Quiz Info	System shall provide call center employee with the ability to log information supplied by entity, including: unique identification number, tax year, and refund amount	AM-080-060	F
AM-232	Quiz Administration	System shall support identity quiz administration via online or by call center	AM-080-060	F
AM-233	Custom Views - Phone Representative	System shall support custom views of entity data for a phone representative administering an identity quiz based on business rules	AM-080-060	F
AM-234	Spouse Attempt	The system shall allow joint filers to select which spouse is taking the quiz and adapt the quiz to the specific taxpayer	AM-080-060	F
AM-235	Load Data for Quiz Content	System shall automatically receive and load data for identity quiz questions from third party	AM-080-060	C
AM-236	Error Messages	System shall display identity quiz outcome messages as needed (e.g., to entity if administered online or to call center employee if taken on phone) for quiz results	AM-080-060	F
AM-237	Manual Quiz Need Override	System shall support the ability to manually override the requirement for an entity to take an identity quiz	AM-080-100	F

#	Name	Description	Task Reference ID	Response Code
AM-238	Manual Quiz Need Override Log	System shall automatically support logging information about waiving a quiz, including: time, date, worker ID, document ID	AM-080-100	F
AM-239	Manual Results Override	System shall support the ability to manually override identity quiz results	AM-080-100	F
AM-240	Manual Results Override Log	System shall automatically support logging information about overriding quiz results, including: time, date, worker ID, document ID	AM-080-100	F
AM-241	Exception Processing - No Response	System shall support the ability for employee to manually enter identity quiz result notes against entity	AM-080-100	F
AM-242	Exception Processing - No Quiz	System shall support the ability for employee to manually flag entity as fraud candidate that cannot be given an identity quiz	AM-080-100	F
AM-243	Exception Processing - Failing Score	System shall automatically create work item for fraud analyst based on results of an identity quiz	AM-080-100	F
AM-244	Exception Processing Application	System shall support automated routing of fraud work items to fraud analyst work queues based on business rules	AM-080-100	F
AM-245	Fraud Flag Removal	System shall automatically remove fraud review flag after registering a passing identity quiz score	AM-080-050	F
AM-246	Fraud Flag Removal Info	System shall automatically log key information when removing a fraud flag (e.g. time, date, employee ID, quiz ID)	AM-080-050	F
AM-247	Account Notes Maintenance	System shall log all fraud-related notes within entity account history	AM-080-050	F
AM-248	Fraudulence Marking	System shall support ability to manually re-flag a return as requiring fraud review at any point in the process	AM-080-050	F

RA - Revenue Accounting

Defines the activities to create distribution rules, to process estimated and final distributions, to make accounting transfers and adjustments, to create and maintain General Ledger master data and bank master data and to reconcile these balances, and to perform closing.
- Create and Maintain GL Master Data: Defines the activities to approve and review the chart of accounts and to determine whether a general ledger account needs to be created or maintained.
- Create and Maintain Bank Master Data: Defines the activities to load and reconcile bank deposits (inflows) and disbursements (outflows).
- Transfer and Reconciliation of Account Activity: Defines the activities to process the transfer of data from the sub-ledger to the general ledger and to resolve exceptions.
- Manage Distribution Rules: Defines the activities to create master data and rules associated with revenue distribution.
- Process Distributions: Defines the activities to allocate funds, calculate revenue distribution, identify revenue distribution exceptions, and post account entries in the sub-ledger
- Reconcile Bank Deposits: Defines the activities to load and reconcile bank deposits (inflows) and disbursements (outflows).
- Perform Closing: Defines the activities to execute period end closing activities (e.g., maintaining closing schedules, generating reports, reconciling activities, etc.).

#	Name	Description	Task Reference ID	Response Code	
		"Create and Maintain GL Master Data" Functional Requirements			
RA-1	Report Generation	System shall support automated generation of chart of accounts report	RA-010-010	F	In
RA-2	Partial Reports	System shall allow employee to generate customized chart of accounts report	RA-010-010	F	In
RA-3	Sorting	System shall allow employee to sort data fields when generating chart of accounts report data	RA-010-010	F	In
RA-4	Filtering	System shall allow employee to filter data fields when generating chart of accounts report data	RA-010-010	F	In
RA-5	Updates	System shall log updates to chart of accounts, including: user, date, and time	RA-010-010	F	R
RA-6	Allocations--GL	System shall provide daily batch reporting of total amount of money allocated to the general ledger	RA-010-010	F	R
RA-7	Allocations--Sub-ledger	System shall provide daily batch reporting of total amount of money allocated to sub-ledgers	RA-010-010	F	In R
RA-8	Allocations--Transaction	System shall track the total, up-to-date amount of money allocated to designated transactions	RA-010-010	F	R W p A p V tr p G JV li hi d R
RA-9	Refund Tax Type	System shall log refund amounts by tax type	RA-010-010	F	R
RA-10	Transaction Mapping--Transaction to GL	System shall map transaction data to state general ledger data	RA-010-010	F	R
RA-11	Transaction Mapping--GL to Transaction	System shall map state general ledger data to transaction data	RA-010-010	F	R
RA-12	Transaction Mapping--Tax Type to GL	System shall map tax type data to state general ledger data	RA-010-010	F	R
RA-13	Transaction Mapping--GL to Tax Type	System shall map state general ledger data to tax type data	RA-010-010	F	R

#	Name	Description	Task Reference ID	Response Code	
RA-14	Transaction Mapping--Account to GL	System shall map account data to state general ledger data	RA-010-010	F	R
RA-15	Transaction Mapping--GL to Account	System shall map state general ledger data to account data	RA-010-010	F	R
RA-16	Parent-Child Relationship--Update	System shall enforce parent-child relationship rules for updating chart of accounts details	RA-010-020	F	R
RA-17	GL Update--Reason Code	System shall allow for manual assignment of reason codes for updating chart of account details	RA-010-020	P	U ac
RA-18	GL Update--Note	System shall enforce logging of notes when employees update chart of accounts details	RA-010-020	F	R
RA-19	Account Creation	System shall allow for the manual creation of a new account within the chart of accounts based on business rules	RA-010-030	F	R
RA-20	Account Creation--Drop Down	System shall provide drop down capability to populate designated account data fields	RA-010-030	F	R ID
RA-21	Account Creation--Freeform	System shall provide standard format to populate freeform text based on business rules	RA-010-030	F	R ID G ac si
RA-22	Thresholds	System shall define threshold amounts for general ledger data fields based on business rules	RA-010-030	F	R
RA-23	Duplicate Account Search	System shall support automated search for duplicate accounts	RA-010-030	F	R
RA-24	Duplicate Account Prevention	System shall prevent creation of duplicate accounts	RA-010-030	F	R
RA-25	Account--Start Dates	System shall enforce that start dates are applied to chart of accounts	RA-010-030	F	R
RA-26	Account--End Dates	System shall enforce that end dates are applied to chart of accounts	RA-010-030	F	R
		"Create and Maintain Bank Master Data" Functional Requirements			
RA-27	Bank Account List	System shall display list of all active bank accounts	RA-020-060	C	Tl
RA-28	Master Data Log	System shall allow for manual logging of bank account master data (e.g., name, account	RA-020-060	C	Tl
RA-29	Partial Reports	System shall allow employee to generate customized bank master data report	RA-020-060	F	In
RA-30	Sorting	System shall allow employee to sort data fields when generating bank master data	RA-020-060	F	In
RA-31	Filtering	System shall allow employee to filter data fields when generating bank master data	RA-020-060	F	In
RA-32	Searching	System shall allow employee to search data fields when generating bank master data	RA-020-060	F	In
RA-33	Data Update	System shall allow employee to update bank account master data based on business rules	RA-020-020	C	Tl
RA-34	Update Log	System shall log all updates made to bank account master data	RA-020-020	C	Tl
RA-35	Update Note	System shall enforce logging of notes when employees update bank data fields	RA-020-020	C	Tl
RA-36	Duplicate Account Search	System shall support automated search for duplicate accounts	RA-020-020	C	Tl
RA-37	Duplicate Account Prevention	System shall prevent creation of duplicate accounts	RA-020-020	C	Tl
RA-38	Account Merging	System shall provide a process to merge bank account master data based on business	RA-020-020	C	Tl
RA-39	GL Mapping	System shall map bank accounts to the general ledger	RA-020-030	C	Tl
RA-40	Bank Account Mapping	System shall map the general ledger to bank accounts	RA-020-030	C	Tl
RA-41	Master Data Creation	System shall allow for manual creation of bank account master data based on business	RA-020-030	C	Tl
RA-42	Open Date--Creation	System shall allow for manual creation of bank account open dates	RA-020-030	C	Tl
RA-43	Close Date--Creation	System shall allow for manual creation of bank account close dates	RA-020-030	C	Tl
RA-44	Holding	System should suspend posting bank account updates based on business rules	RA-020-030	C	Tl
RA-45	Thresholds	System shall establish thresholds for bank account master data fields based on business	RA-020-030	C	Tl
		"Transfer and Reconciliation of Account Activity" Functional Requirements			

#	Name	Description	Task Reference ID	Response Code	
6	GL Posting	System shall post sub ledger transactions to the general ledger at the appropriate level	RA-030-010	F	R
7	Taxpayer Posting Enforcement	System shall enforce that each transaction is created by an underlying accounting event	RA-030-010	F	R
RA-48	1:1 Posting Enforcement	System shall enforce each taxpayer posting result in a financial transaction at the sub	RA-030-010	F	R
RA-49	Credit Or Debit Enforcement	System shall enforce standard account functions for each debit or credit transaction	RA-030-010	F	R
RA-50	GAAP Compliant	System shall use GAAP-compliant, fund revenue accounting standards	RA-030-010	F	R
RA-51	GASB Compliant	System shall use GASB-compliant, fund revenue accounting standards	RA-030-010	F	R
RA-52	Transaction Mapping	System shall enforce each transaction to map to a COA allocation	RA-030-010	F	R
RA-53	Clawback	System shall allow for the manual reversal of a transaction (clawback) posted to the State's financial hub via an additional posting in the negative amount	RA-030-010	F	R
RA-54	Sub Ledger Synchronization	System shall reconcile across all accounts to assure that sub ledgers are synchronized and	RA-030-010	C	T
RA-55	Manual Transaction Review	System shall allow for the manual review of each transaction transferred to the GL based on key criteria (e.g., date, entity, dollar amount)	RA-030-020	F	R
RA-56	Manual PLN Review	System shall allow for the manual review of the Payment Locator Number (PLN) associated with each transaction	RA-030-020	F	R
RA-57	Manual Transfer Reports	System shall allow for the manual generation of transfer reports (from sub ledger to general ledger) based on input (e.g. date, entity, period)	RA-030-020	F	R
RA-58	Create COA Schema	System shall allow for the manual creation of a payment outbound interface of DOR	RA-030-030	C	T
RA-59	Edit COA Schema	System shall allow for the manual altering of a payment outbound interface of DOR	RA-030-030	C	T
RA-60	Manual Transaction Reports	System shall allow for the manual creation of custom transaction reports with filters (e.g., date, taxpayer, PLN)	RA-030-040	F	R
		"Manage Distribution Rules" Functional Requirements			
RA-61	Rules Save	System shall save distribution rules	RA-040-010	F	R
RA-62	Multiple Account Distribution	System shall allow for manual selection of multiple accounts to apply distribution calculation	RA-040-010	F	R
RA-63	Updates	System shall log updates to distribution rules, including: user, date, and time	RA-040-010	F	R
RA-64	Reconcillation	System shall confirm that the distribution rules equal 100% for the account	RA-040-030	F	R
RA-65	Varying Rules--Account	System shall allow for varying distribution rules by account	RA-040-030	F	R
RA-66	Conflict	System shall monitor for conflicting distribution rules	RA-040-030	F	M
RA-67	Distribution Rule Execution	System shall execute distribution rules based on payment date	RA-040-030	F	R
RA-68	Distribution--Dollar Amount	System shall support distributions by dollar amounts	RA-040-030	F	R
9	Distribution--Percentage	System shall support distributions by percentages	RA-040-030	F	R
RA-70	Start Dates	System shall enforce that start dates are applied to distribution rules	RA-040-030	F	R
RA-71	End Dates	System shall enforce that end dates are applied to distribution rules	RA-040-030	F	R
RA-72	Distribution--Internal Data	System shall support automated use of internal data for distribution calculations	RA-040-040	F	R
RA-73	Distribution--External Data	System shall support automated use of external data for distribution calculations	RA-040-040	C	T cc di T cc
RA-74	Distribution--Multiple	System shall support distributions by multiple parameters (i.e., dollar amounts and	RA-040-040	P	D
RA-75	Order of Operations	System shall enforce order of operations to dynamic distributions	RA-040-040	C	T
RA-76	Anomaly Detection	System shall identify possible data anomalies (e.g., outliers, errors, etc.)	RA-040-050	F	In R
RA-77	Proposed Against Historical	System shall provide comparison of proposed distribution calculation against historical data	RA-040-050	F	In R
RA-78	Calculation Save	System shall allow user to save proposed distribution calculation	RA-040-050	F	R

#	Name	Description	Task Reference ID	Response Code	
RA-79	Comparison	System shall provide side-by-side view to compare multiple scenario analyses at once	RA-040-050	F	R
		"Process Distributions" Functional Requirements			
RA-80	GL Fund Balance	System shall support automated check of GL funds for positive balance	RA-050-010	F	R
RA-81	Distribution Calculation	System shall calculate distributions based on business rules	RA-050-010	F	R
RA-82	Execute Distribution -- Receive Date	System shall allow for the ability to execute rules against distribution from the date funds	RA-050-010	C	Tl
RA-83	Execute Distribution -- Current Date	System shall allow for the ability to execute current rule set against distribution	RA-050-010	C	Tl
RA-84	Compile Pre-distribution Report	System shall support automated generation of pre-distribution report	RA-050-050	F	In R
RA-85	Sum Distributions	System shall sum all cash distributions and allocations due to the State, localities, or other programs	RA-050-090	F	R
RA-86	Reconcile GL	System shall match total cash distributions against the GL positive fund balance	RA-050-090	F	R
RA-87	Identify Discrepancies	System shall identify discrepancies between the sums of the distributions and GL balance	RA-050-070	F	R
RA-88	Reconcile Discrepancies	System shall identify distribution discrepancies by fund or account	RA-050-070	F	R
RA-89	Manual Override Posting	System shall allow for manual posting of distributions (e.g., even if there is an existing reconciliation discrepancy)	RA-050-060	F	R
RA-90	Post to PeopleSoft	System shall support automated posting of distribution data to PeopleSoft based on business rules	RA-050-060	C	Tl cc di Tl cc Tl in tr in tr tr re G re
RA-91	Identify Failed Postings	System shall identify failed postings using unique identifiers (e.g., deposit identification,	RA-050-060	C	Tl
RA-92	Adjustable Posting--Frequency	System shall allow for adjustable frequency posting to PeopleSoft	RA-050-060	C	Tl cc di Tl cc
RA-93	Adjustable Posting--Time	System shall allow for adjustable time posting to PeopleSoft	RA-050-060	C	Tl cc di Tl cc
RA-94	Mid-day Posting	System shall allow for mid-day (during business hours) posting to PeopleSoft	RA-050-060	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
5	Identify Distributions	System shall allow updates to fund distributions in certain accounts that have already been posted via distribution rules	RA-050-080	F	R
RA-96	Distribution Rules	System shall allow distribution based on established or new distribution rules	RA-050-080	F	R
RA-97	Save Distribution Rules	System shall archive distribution rules aligned to tax type, account type, or other indicator	RA-050-080	F	R
		"Reconcile Bank Deposits" Functional Requirements			
RA-98	EBS Acceptance	System shall allow for electronic bank statement to be accepted from the bank	RA-060-010	C	Tl cc di Tl cc
RA-99	EBS Manual Upload	System shall allow for manual upload of electronic bank statement	RA-060-010	C	Tl cc di Tl cc
RA-100	File Validation	System shall support automated EBS validation based on business rules	RA-060-010	C	Tl cc di Tl cc
RA-101	File Record Validation	System shall support automated EBS record validation based on business rules	RA-060-010	C	Tl cc di Tl cc
RA-102	Automated EBS Upload	System shall support automated loading of EBS data, including: date, bank account details, payment transaction details	RA-060-010	C	Tl cc di Tl cc
RA-103	Automated Format Error Identification	System shall support automated EBS rejection based on business rules	RA-060-020	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
RA-104	Error Reason Code	System shall support automated generation of rejection reason code	RA-060-020	C	Tl cc di Tl cc G b: d tr lo If in d in is
RA-105	Summary Comparison	System shall support automated comparison of the transaction detail from DOR's ITS and the EBS	RA-060-030	C	Tl cc di Tl cc
RA-106	Payment Transaction Details	System shall support automated comparison of payment transaction details (i.e., routing number, account number, dollar amount) from DOR's ITS and the EBS	RA-060-030	C	Tl cc di Tl cc
RA-107	Transaction Discrepancies	System shall identify discrepancies in payment transaction details from DOR's ITS and the	RA-060-030	C	Tl
RA-108	Drill Down--Summary	System shall allow employee to drill-down into payment transaction-level data fields	RA-060-030	F	R
RA-109	Static Reporting	System shall generate summary report based on manually selected dates	RA-060-030	C	Tl
RA-110	Reconciliation Tracking	System shall generate a finalized reconciliation report	RA-060-040	C	Tl
RA-111	Reconciliation Tracking Export	System shall allow users to export finalized reconciliation report to an Excel file	RA-060-040	F	In
RA-112	Transaction-Level--Payment	System shall provide transaction-level detail from all payment channels (e.g., cash, check,	RA-060-050	F	r
RA-113	Transaction-Level--Imbalance	System shall provide DOR imbalances at the transaction-level	RA-060-060	C	Tl
RA-114	Drill Down--Imbalance	System shall allow employee to drill-down into imbalance transaction-level data fields	RA-060-060	F	In
		"Perform Closing" Functional Requirements			
RA-115	Determine period	System shall provide ability to define a fiscal calendar	RA-070-010	F	R
RA-116	Adjust period	System shall allow for ability to define period beginning and period end dates for each period within a fiscal calendar	RA-070-010	F	R
RA-117	Overlap period	System shall allow for multiple fiscal/accounting periods to be open concurrently based on DOR-specified criteria	RA-070-010	F	R
RA-118	Create closing checklist module	System shall provide closing module to facilitate the period end closing process	RA-070-010	F	R
RA-119	Create closing checklist	System shall allow for the creation of closing checklists within the closing module based on DOR-defined criteria	RA-070-010	F	R
RA-120	Edit closing checklist	System shall provide ability to edit closing checklists based on DOR-defined criteria	RA-070-010	F	R
RA-121	Assign checklist	System shall support automated assigning of closing checklist to a fiscal/accounting period based on DOR-specified criteria	RA-070-010	F	R

#	Name	Description	Task Reference ID	Response Code	
22	Checklist functionality	System shall provide checklist functionality, such as: ability to define dependencies between checklist items, monitor task progress, clarify task owners, and monitor countdowns	RA-070-010	F	R W
RA-123	Alert notifications	System shall support automated alerts based on DOR-defined rules (e.g. thresholds,	RA-070-020	F	R
RA-124	Identify corrections	System shall identify and highlight potential anomalies on preliminary reports based on DOR-defined rules	RA-070-030	F	In R
RA-125	Re-Identify corrections	System shall identify corrected anomalies on preliminary reports after corrections process	RA-070-030	F	In R
RA-126	Configurable reports	System shall allow preliminary reports to be configurable based on DOR-defined criteria	RA-070-030	F	In R
RA-127	Multiple versions	System shall provide the ability to produce multiple versions of preliminary report(s)	RA-070-030	F	In R
RA-128	Test corrections	System shall provide ability to view corrections using tools such as side-by-side comparison (e.g., before/after corrections, comparisons of corrected results to benchmarks/thresholds) and simulation	RA-070-050	F	R
RA-129	Verify corrections	System shall provide the ability to update the corresponding closing checklist item as closing activities are completed	RA-070-050	F	R
RA-130	Close period	System shall allow for the manual closing of a fiscal/accounting period	RA-070-080	F	R
RA-131	Open period	System shall allow for the manual opening of a fiscal/accounting period	RA-070-080	F	R
RA-132	Closing report	System shall support automated generation of final closing report	RA-070-080	F	R
RA-133	Edit closing report features	System shall provide ability to edit the structure of final closing report	RA-070-080	F	In R

TS - Taxpayer Self Service

Defines the activities for entity self-service through profile log-in and account maintenance after online registration (the activities for which are also defined in this process). Also defines activities that an entity can complete through online self-service: online filings, online payments, and viewing history.
- Login, Profile Maintenance, Activity Help: Defines the activities to login, view and maintain online and taxpayer profile information, and seek help.
- Manage Online Registration: Defines the activities to create online taxpayer registration and maintain taxpayer registration.
- Employer Reporting: Defines the activities to report employer data as a bulk file upload, through online data entry, or via Mapped Data Upload functionality.
- Online Return, Abatement, Extension Filing: Defines the activities to file amended returns, vouchers, and extensions online.
- Online Payments: Defines the activities to make payments online, edit payment details or cancel a payment after the payment has been submitted online, and create a payment agreement.

#	Name	Description	Task Reference ID	Response Code	
		"Login, Profile Maintenance, Activity Help" Functional Requirements			
TS-1	Unique Usernames	System shall enforce unique user IDs	TS-010-010	F	C
TS-2	Email Username	System shall support email addresses to be used for a self service portal username	TS-010-010	F	C
TS-3	Sole Proprietors--View	System shall support automated linking of entity self service portal accounts into a single view for individuals who also operate sole proprietorships	TS-010-010	F	C
TS-4	Solve Proprietors--Individual View	System shall require user logged into self service portal via Sole Proprietor account to reauthenticate with individual taxpayer credentials to view individual taxpayer account	TS-010-010	P	e- a b m b w
TS-5	Hidden Characters	System shall support automated password hashing with set character during password keying	TS-010-010	F	C
TS-6	Upper Username Characters	System shall support account usernames that contain lowercase characters	TS-010-010	F	C
TS-7	Lower Username Characters	System shall support account usernames that contain special characters	TS-010-010	F	C
TS-8	Special Username Characters	System shall support account usernames that contain uppercase characters	TS-010-010	F	C
TS-9	Upper Password Characters	System shall support account passwords that contain lowercase characters	TS-010-010	F	C
TS-10	Lower Password Characters	System shall support account passwords that contain special characters	TS-010-010	F	C
TS-11	Special Password Characters	System shall support account passwords that contain uppercase characters	TS-010-010	F	C
TS-12	Username Length	System shall enforce a minimum number of characters for account usernames based on business rules	TS-010-010	F	C
TS-13	Password Length	System shall enforce a minimum number of characters for account passwords based on business rules	TS-010-010	F	C
TS-14	Username Change	System shall allow entity to change username	TS-010-010	P	E
TS-15	Password Change--User Initiated	System shall support entity password changes	TS-010-010	F	C
TS-16	Bulk Password Change	System shall support administrative, bulk password changes for a selectable set of entities	TS-010-010	C	T c d T c
TS-17	Password Login Attempts	System shall support automated tracking of number of unsuccessful login attempts per user ID	TS-010-010	F	C
TS-18	Mobile and Tablet Access	System shall support self service portal access for mobile and tablet device browsers	TS-010-010	F	C

#	Name	Description	Task Reference ID	Response Code	
9	Mobile Application	System should allow for creation of mobile apps	TS-010-010	P	G el
TS-20	Time-outs	System shall support automated login page time-out based on business rules	TS-010-010	F	C
TS-21	Authentication--Email	System shall support multi factor authentication through authentication code sent via email	TS-010-010	F	C
TS-22	Authentication--SMS	System shall support multi factor authentication through authentication code sent via SMS	TS-010-010	F	C
TS-23	Authentication--Shared Secret	System shall support user login after correctly answered shared secrets	TS-010-010	F	C
TS-24	Authentication--Website	System should allow for integration with State single sign on page	TS-010-010	C	Tl cc di Tl cc
TS-25	Captcha Usage	System shall utilize captchas for human authentication	TS-010-010	F	re
TS-26	Multi-factor Authentication Bypass	System should allow entity to bypass multi-factor authentication for future logins	TS-010-010	F	C
TS-27	Failed Consecutive Login--Lock Out	System shall support automated locking of an account due to multiple failed logins based on business rules	TS-010-010	F	C
TS-28	Personalized Home Page	System should allow users to customize the layout of home page within self service portal	TS-010-010	X	O
TS-29	Password Expiration	System shall support automated password expiration based on business rules	TS-010-010	F	C
TS-30	Expiring Passwords--Tracking	System shall support automated tracking of password expiration dates	TS-010-010	F	C
TS-31	Temporary Passwords	System shall allow creation of temporary passwords based on business rules	TS-010-110	F	C
TS-32	Temporary Password Confirmation	System shall support automated correspondence following creation of temporary password	TS-010-110	F	C
TS-33	Temporary Password Deletion	System shall support automated time-out of temporary passwords based on business rules	TS-010-110	F	C
TS-34	Expiring Passwords--Update Correspondence	System shall generate automated notification of pending business events such as expiring passwords	TS-010-110	F	C
TS-35	Password Reset Correspondence	System shall generate automated notification following successful password reset	TS-010-110	F	C
TS-36	Rules-based Alerts--Audience	System shall allow creation of alerts for specific users based on business rules	TS-010-120	F	C
TS-37	Export Account Summary	System shall allow users to export account financial transaction data to an Excel file	TS-010-120	X	O
TS-38	Alerts Reception--Email	System shall allow users to receive alerts or notifications through email	TS-010-120	F	C
TS-39	Alerts Reception--SMS	System shall allow users to receive alerts or notifications through SMS text message	TS-010-120	P	Te cc
TS-40	Alerts Reception--Portal	System shall allow users to receive alerts or notifications through self service portal message	TS-010-120	F	C
TS-41	Alert--Due Dates	System shall support automated alerts for upcoming action item due dates	TS-010-120	F	C
TS-42	Alert--Message Response	System shall support automated email notification for non-email based notification	TS-010-120	F	C
TS-43	Alert--Liabilities	System shall support automated alerts when an entity's account has outstanding liabilities	TS-010-120	F	C
TS-44	Alert--Payment Accepted	System shall support automated alerts when an entity's payment has been accepted by DOR	TS-010-120	F	C
TS-45	Alert--Zero Based Return	System shall support automated alerts for returns that do not meet financial thresholds and thus will not issue a refund or bill	TS-010-120	F	C
TS-46	Alert--Legislative Change	System shall support automated alerts based on user demographics	TS-010-120	F	C
TS-47	Bulk Alerts	System shall support alerts to be sent in bulk to users on an ad-hoc basis by business users	TS-010-120	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
TS-48	Ad-hoc Alerts	System shall support ad-hoc alerts to be sent to individuals or in bulk based on business rules	TS-010-120	F	C
TS-49	Help Chat	System shall support secure, online messaging platform between DOR and self service portal user	TS-010-020	F	C a
TS-50	Real-time Chat	System shall support in-portal, real-time secure chat functionality	TS-010-020	F	e-
TS-51	Assisted Navigation	System shall provide a frequent actions dropdown with hyperlink paths to assist navigation of within self service portal	TS-010-020	F	C
TS-52	Frequent User Navigation	System shall provide a webpage bookmarking capability within self service portal	TS-010-020	P	C H ca
TS-53	Keyword Search	System shall support keyword search to navigate self service portal	TS-010-020	X	O Se
TS-54	Frequently Asked Questions	System shall provide a frequently asked questions section on the self service portal	TS-010-020	F	C
TS-55	Video Tutorials	System shall provide ability to embed video files into webpages within self service portal	TS-010-020	X	O Se
TS-56	Video Tutorials--Linking	System shall provide ability to link to video files on other websites	TS-010-020	F	C
TS-57	Screen Sharing	System shall provide screen sharing between user and employee based on business rules	TS-010-020	P	Sc th h
TS-58	User Role Stratification	System shall confirm profile information at specified intervals through specified user roles	TS-010-020	F	C
TS-59	Account Balance--Time	System shall display account balance history by tax period	TS-010-080	F	C
TS-60	License Status	System shall display the license status of licenses associated with the account	TS-010-080	F	C
TS-61	License Type Display	System shall display license types that are applicable to the business type of the user account based on business rules	TS-010-080	F	C
TS-62	License Status History	System shall display license status history of all active and inactive licenses	TS-010-080	C	Th co di Th co
TS-63	Address History	System shall display user address history	TS-010-080	C	Th co di Th co
TS-64	Undelivered Mail History	System shall display addresses that caused undeliverable mail	TS-010-080	C	Th co di Th co
TS-65	Address History Acquisition	System shall display updated user addresses from USPS address return history	TS-010-080	F	C
TS-66	Image Viewing	System shall allow users to view imaged correspondences sent to the user via mail	TS-010-080	F	C
TS-67	Bond--History	System shall maintain record of user bond-related activities, including: bond type, date received, and expiration date	TS-010-080	C	Th co di Th co

#	Name	Description	Task Reference ID	Response Code	
TS-68	Bond--Display	System shall display user bond information, including: bond type, locality, and expiration date	TS-010-080	C	Tl cc di Tl cc
TS-69	Bond Status	System shall display user bond status	TS-010-080	C	Tl cc di Tl cc
TS-70	Bond Type	System shall display user bond types	TS-010-080	C	Tl cc di Tl cc
TS-71	Bond Expiry	System shall display user bond expiration dates	TS-010-080	C	Tl cc di Tl cc
TS-72	Correspondence History--Date	System shall display correspondence history by date	TS-010-080	F	Cı
TS-73	Correspondence History--IN DOR	System shall display correspondence history by IN DOR document locator number	TS-010-080	F	Cı
TS-74	Correspondence History--Content	System shall display correspondence history by type/content	TS-010-080	F	Cı
TS-75	Account Summary--Time	System shall generate account summary across specified time periods	TS-010-080	F	Cı Sc fil
TS-76	Account Summary-- Statuses	System shall display account status summary across specified tax types	TS-010-080	F	Cı
TS-77	Account Summary-- Open Liabilities	System shall display all open liabilities in viewable list based on business rules (e.g. tax type, amount, due date)	TS-010-080	F	Cı
TS-78	Account Summary-- Filters	System shall provide filtering of liabilities in viewable list based on business rules (e.g. tax type, amount, due date)	TS-010-080	F	Cı
TS-79	Print Account Summary	System shall allow users to print account summary	TS-010-080	C	Tl cc di Tl cc
TS-80	Survey	System shall allow customer feedback surveys to be triggered based on business rules	TS-010-080	C	Tl cc di Tl cc
TS-81	Survey Completion	System must provide customer feedback survey in self service portal	TS-010-080	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
TS-82	Survey CRM Integration	System shall support data analysis/analytics against survey results	TS-010-080	C	Tl cc di Tl cc
TS-83	User Access and Privileges	System shall establish designated self service portal user access with varying level of access (e.g. "administrator", "Power of Attorney", "view-only")	TS-010-070	F	Ci
TS-84	Account Deactivation	System shall support automated deactivation of account based on user request or life event such as death	TS-010-070	F	Ci
TS-85	Practitioner View	System shall allow practitioners to view all clients, in list format, who have granted filing access	TS-010-070	F	Ci
TS-86	User Access Administration	System shall allow users to administer access levels	TS-010-090	F	Ci
TS-87	Display Access	System shall display users and access privileges	TS-010-090	F	Ci
TS-88	Revoke Access	System shall allow users to revoke user access privileges	TS-010-090	F	Ci
TS-89	Notify of Access Change	System shall notify administrator and user of access change	TS-010-090	F	Ci
TS-90	Divide User Privileges	System shall allow company administrators to set user privileges to allow for roles-based access for specific business needs	TS-010-090	F	Ci
TS-91	Delegate User Privileges	System shall allow company administrators to delegate user privileges to allow for specific business needs	TS-010-090	F	Ci
TS-92	Audit Security Logs	System shall support audit logs of user actions taken in self service portal	TS-010-090	F	Ci U pi se
TS-93	Audit Security Log Availability	System shall make audit logs of user action available to administrator	TS-010-090	F	Ci U pi se
TS-94	Communication Preference--Type	System shall allow for users to select communication preference by type	TS-010-100	F	Ci
TS-95	Communication Preference--Frequency	System shall allow for users to select communication preference by frequency	TS-010-100	C	Tl cc di Tl cc
TS-96	Personal Address	System shall allow users to update physical personal address based on business rules	TS-010-100	F	Ci
TS-97	Business Address	System shall allow users to update physical business address based on business rules	TS-010-100	F	Ci
TS-98	Address Change Notification	System shall notify taxpayer via taxpayer's channel of choice once an address change has been submitted	TS-010-100	C	Tl cc di Tl cc
TS-99	Personal Telephone	System shall allow users to update personal telephone number	TS-010-100	F	Ci
TS-100	Business Telephone	System shall allow users to update business telephone number	TS-010-100	F	Ci
TS-101	Season Periods	System shall allow users to change seasonal periods	TS-010-100	F	Ci
TS-102	NAICS Codes--Edit	System shall allow users to edit their business North American Industry Classification System (NAICS) codes	TS-010-100	F	Ci
TS-103	Rules-Based Questions	System shall allow users to update answers to shared secrets	TS-010-100	F	Ci
TS-104	DBA Name	System shall allow users to change "doing business as" (DBA) name	TS-010-100	F	Ci
TS-105	Linked Account Updates	System should update linked business account information when personal account information is updated (vice versa) based on business rules	TS-010-100	F	Ci

#	Name	Description	Task Reference ID	Response Code	
		"Manage Online Registration" Functional Requirements			
TS-106	Validate Registration	System shall require self service portal registration with a unique user ID, not already in use	TS-020-010	F	C
TS-107	Dynamic Help	System shall support dynamic help options for users based on business rules	TS-020-010	F	C
TS-108	Page-level Help	System shall support help options relevant to page subject matter (page level help)	TS-020-010	F	C
TS-109	Unique User	System shall require one user ID per self service portal registration	TS-020-010	F	C
TS-110	Link Accounts	System shall allow users to link multiple accounts under one user ID	TS-020-010	F	C
TS-111	Single Account Registration	System shall enforce users to register as a single entity	TS-020-010	F	C
TS-112	Linked Account Access	System shall allow users to access multiple accounts under one user ID	TS-020-010	F	C
TS-113	Language Support	System shall support multiple languages for user interface	TS-020-010	P	C G la sc
TS-114	Language Selection	System shall allow end users to select their language of choice	TS-020-010	P	C G la sc
TS-115	Remember Language	System shall display selected language for future user visits	TS-020-010	C	Tl cc di Tl cc
TS-116	Access Code	System shall support automated generation of access code for first-time self service portal access	TS-020-020	F	C
TS-117	Correspondence for Access Code	System shall support distribution of access code to user through correspondence	TS-020-020	C	Tl cc di Tl cc
TS-118	User Acknowledgements	System shall prompt user to electronically sign acknowledgement for self service portal registration	TS-020-020	F	C
:9	3rd Party Identity Proofing	System shall accommodate identity proofing through third party service	TS-020-020	C	Tl cc di Tl cc
TS-120	3rd Party Identity Proofing Integration	System shall provide identity proofing through third party service	TS-020-020	C	Tl cc di Tl cc
TS-121	Shared Secret Creation	System shall allow user to select answers to shared secret questions	TS-020-020	F	C
TS-122	Re-Authentication	System shall require user to re-authenticate identity based on access to specified business transactions	TS-020-020	F	C
TS-123	Levels of Authorization	System shall support multiple levels of authorized access to users based on business events	TS-020-020	F	C
TS-124	Contact Email	System shall require user to specify contact email	TS-020-030	F	C
TS-125	Double Verify Email	System shall require user to confirm email through double entry	TS-020-030	F	C

#	Name	Description	Task Reference ID	Response Code	
TS-126	Contact Phone Number	System shall require user to specify contact phone number	TS-020-030	F	C
TS-127	Double Verify Phone Number	System shall require user to confirm contact phone number through double entry	TS-020-030	I	C
TS-128	Initial Password	System shall require user to specify initial login password	TS-020-030	F	C
TS-129	Double Verify Initial Password	System shall require user to confirm initial login password through double entry	TS-020-030	F	C
TS-130	Communication Preferences--Identify	System shall allow user to select communication preferences based on correspondence type	TS-020-030	C	T c d T c
TS-131	Communication Preferences--Generate	System shall support automated generation of correspondence according to user's preferred correspondence selection	TS-020-030	C	T c d T c
TS-132	Communication Preferences--Override	System shall support automated override of preferred correspondence type based on business rules	TS-020-030	C	T c d T c
TS-133	Alert Preferences--Identify	System shall allow user to select alert preferences based on alert type	TS-020-030	C	T c d T c
TS-134	Alert Preferences--Generate	System shall support automated generation of alert according to user's preferred alert selection	TS-020-030	C	T c d T c
TS-135	Access Portal	System shall allow user to access self service portal directly following portal registration without re-authentication	TS-020-040	X	O re
TS-136	Push to Homepage	System shall push user to desired page directly following self service portal registration based on business rules	TS-020-040	X	O re
		"Employer Reporting" Functional Requirements			
TS-137	XML Test Schema	System shall verify XML file transmission follows DOR test file schema (e.g. format, summin	TS-030-260	C	T c d T c
TS-138	Transmission Response	System shall support automated response in .ack format following SFTP transmission	TS-030-260	C	T c d T c

#	Name	Description	Task Reference ID	Response Code	
9	Transmission Status	System shall include status (such as 'processed successfully') of transmission in .ack messag	TS-030-260	C	Tl cc di Tl cc
TS-140	Transmission Errors	System shall display file process error codes with corresponding error explanation in .ack fc	TS-030-260	C	Tl cc di Tl cc
TS-141	Certification Status Tracking	System shall support automated tracking of entity certification status in self service portal	TS-030-260	C	Tl cc di Tl cc
TS-142	Certification Status Tracking--Entity	System shall provide visual status tracker updates for entity of certification status in self se	TS-030-270	C	Tl cc di Tl cc
TS-143	Certification Status Updates	System shall update visual status tracker of certification status based on test file submissio	TS-030-270	C	Tl cc di Tl cc
TS-144	Certification Status Reset	System shall enforce reset of entity certification status from approved to unapproved based on business rules (annually, bi-annually)	TS-030-270	C	Tl cc di Tl cc
TS-145	Certification Status Admin	System shall provide an administrator entity certification status page	TS-030-270	C	Tl cc di Tl cc
TS-146	Certification Status Admin Status	System shall provide text search capability on entity certification status page	TS-030-270	C	Tl cc di Tl cc
TS-147	Certification Status Admin Dashboard	System shall provide an administrator dashboard of entity certification status page	TS-030-270	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
TS-148	Certification Status Export	System shall provide option for exportable, customized test file submission status reports	TS-030-270	C	Tl cc di Tl cc
TS-149	XML Production Schema	System shall verify XML file transmission follows DOR production file schema (e.g. format, summing of form totals)	TS-030-160	C	Tl cc di Tl cc
TS-150	File Status Tracking	System shall update XML file submission status in self service portal	TS-030-240	C	Tl cc di Tl cc
TS-151	File Status Error Codes	System shall display XML file validation error codes in self service portal	TS-030-240	C	Tl cc di Tl cc
TS-152	File Status Error Explanation	System shall display error explanation with error code in self service portal	TS-030-240	C	Tl cc di Tl cc
TS-153	XML Record Schema	System shall verify XML records in file transmission follow DOR production record schema (e.g. format, summing of form totals)	TS-030-170	C	Tl cc di Tl cc
TS-154	Record Parsing	System shall support validation of individual records in XML submission based on business	TS-030-170	C	Tl cc di Tl cc
TS-155	Record Flagging	System shall support flagging of individual records in XML submission based on business ru	TS-030-170	C	Tl cc di Tl cc
TS-156	Record Tracking	System shall support tracking of flagged record error codes in self service portal	TS-030-220	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
7	Record Error Codes	System shall support display of flagged record error codes in self service portal	TS-030-220	C	Tl cc di Tl cc
TS-158	Record Error Code Explanation	System shall support display of record error code explanation text in self service portal	TS-030-220	C	Tl cc di Tl cc
TS-159	Submissions--Duplicate	System shall recognize duplicate data during submission	TS-030-190	C	Tl cc di Tl cc
TS-160	Submissions--Informational	System shall designate duplicate data as informational based on business rules	TS-030-190	C	Tl cc di Tl cc
TS-161	Manual Entry Form	System shall provide a standard withholding web form for data entry by user	TS-030-190	F	Cl
TS-162	Manual Entry	System shall allow for the manual entry of withholding information (such as withholding total) in self service portal	TS-030-190	F	Cl
TS-163	Mapped Data Upload	System shall allow for a mapped data upload (flat file) of filing information in self service p	TS-030-190	C	Tl cc di Tl cc
TS-164	Uploads--Updated	System shall recognize updated data and amend based on business rules	TS-030-190	C	Tl cc di Tl cc
TS-165	Uploads--Updated Posting	System shall use amended data during calculations/posting	TS-030-190	C	Tl cc di Tl cc
TS-166	Bulk Reverse Upload	System shall provide capability to reverse bulk uploads (e.g. incorrect file upload)	TS-030-190	C	Tl cc di Tl cc
TS-167	Bulk Reverse Upload--Designation	System should allow manual designation for allowing user-initiated bulk upload backouts	TS-030-190	C	Tl cc di Tl cc
TS-168	Local Jurisdiction Total	System shall enforce manual entry of total county/local jurisdiction withholding totals	TS-030-190	F	Cl

#	Name	Description	Task Reference ID	Response Code	
TS-169	State Total	System shall provide capability to designate mandatory manually entered fields for comparison to data uploads (e.g. manually keyed WH3 vs. W2 data)	TS-030-190	F	C
TS-170	Return Filings Total	System shall enforce manual entry of total W2s being filed	TS-030-190	F	C
TS-171	Validate Local Withholding	System shall validate entry of total county/local jurisdiction withholding against calculated total from returns in submission	TS-030-190	F	C
TS-172	Validate State Withholding	System shall validate entry of total state withholding against calculated total from returns in submission	TS-030-190	F	C
TS-173	Errors--Identify	System shall identify submission discrepancies between manually entered and calculated data based on business rules	TS-030-250	F	C
TS-174	Errors--Report Error Code	System shall provide a display of submission error codes, specifying location of errors	TS-030-250	F	C
TS-175	Errors--Report Error Code Explanation	System shall provide a display of submission error code explanations	TS-030-250	F	C
TS-176	Errors--Report Error Code	System shall provide an exportable file of submission error codes, specifying location of err	TS-030-250	C	T
TS-177	Errors--Report Error Code Explanation	System shall provide an exportable file of submission error code explanations	TS-030-250	C	T
TS-178	Errors--Manual Override	System shall allow for entity to manually override error(s) to process submission based on	TS-030-250	C	T
TS-179	Errors--Acknowledgement	System shall provide acknowledgement process for manual override of submission error via preferred notification channel	TS-030-250	C	T
TS-180	Errors--DOR Override	System shall allow DOR to manually override submission errors	TS-030-250	C	T
TS-181	Display Balance	System shall display remittance balance against vouchers	TS-030-200	F	C
TS-182	Contest Balance	System shall allow for entity return to data entry screen following remittance balance displ	TS-030-200	F	C
TS-183	Confirmation--File Acceptance	System shall provide entity with confirmation of file submission by preferred corresponder	TS-030-180	C	T
TS-184	Confirmation--Printing	System shall allow entity to export file submission confirmation from self service portal	TS-030-180	C	T

#	Name	Description	Task Reference ID	Response Code	
		"Online Return, Abatement, Extension Filing" Functional Requirements			
TS-185	Functionality--Tax Type	System shall display selectable dropdown with allowable tax types based on registration, profile and historical filing data (e.g. sales tax filing, tobacco tax filing)	TS-040-080	F	C
TS-186	Functionality--Filing Period	System shall display selectable dropdown with allowable tax periods (as applicable)	TS-040-080	F	C
TS-187	Guided or Facsimile Form Entry	System shall prompt user to select guided or non-guided form entry	TS-040-080	F	C
TS-188	Form Entry--Guided	System shall support guided form entry (e.g. "interview" questions)	TS-040-090	F	C
TS-189	Form Entry--Form Facsimile	System shall support return facsimile form entry (e.g. "non-interview" questions)	TS-040-090	F	C
TS-190	Allowable Tax Type	System shall display selectable dropdown with tax forms (e.g. IT-40, IT-40X)	TS-040-090	F	C
TS-191	Miscellaneous Tax Documents	System shall display selectable dropdown with non-tax type documents (e.g. GA-110L, POA-1)	TS-040-090	F	C
TS-192	Pre-Populate Fields--Profile Info	System shall pre-populate form fields using entity profile information (e.g. address, business name)	TS-040-090	F	C
TS-193	Pre-Populate Fields--Historical Info	System shall pre-populate form fields using historical information (e.g. SSN, previous year's income)	TS-040-090	F	C
TS-194	Pre-Populate Fields--Manual Override	System shall support manual override of pre-populated form fields by user based on business rules	TS-040-090	F	C
TS-195	Manual Entry	System shall support data entry of tax form fields	TS-040-090	F	C
TS-196	Form Completion Status	System shall provide high-level form navigation status (i.e. "breadcrumbs")	TS-040-090	F	C
TS-197	Form Navigation	System shall provide high-level form completion status expressed as a percentage (i.e. progress meter)	TS-040-090	F	C
TS-198	Keyboard Tab Navigation	System shall support user navigating from field to field using keyboard (i.e. tabbing)	TS-040-090	F	C
TS-199	Mouse Select Navigation	System shall support user navigating from field to field using mouse and selecting	TS-040-090	F	C
TS-200	Real Time Field Calculation	System shall support real time calculation of certain fields based on the entry of other fields (i.e. adjusted gross income)	TS-040-090	F	C
TS-201	Character Validation	System shall provide real-time character validation (i.e. character limits or alpha/numeric-only fields)	TS-040-090	F	C
TS-202	Required Fields	System shall require completion of specific form fields based on business rules (mandatory fields)	TS-040-090	F	C
TS-203	Partial Completion	System shall support saving partially completed forms	TS-040-090	F	C
TS-204	Partial Completion--Resume	System shall support the user resuming partially completed forms	TS-040-090	F	C
TS-205	Partial Completion--Edit	System shall support manual editing of partially completed forms	TS-040-090	F	C
)6	Validation--Real Time	System shall provide real-time validation of field entries for certain business rules	TS-040-100	F	C
_07	Validation--Identifier	System shall validate form by entity identifier (i.e. FEIN, SSN, TID)	TS-040-100	F	C
TS-208	Validation--Attachments	System shall perform validation that tax documents requiring attachments have attachments in correct file format based on business rules	TS-040-100	F	C
TS-209	Validation--Interest Rate Matrix	System shall use current system interest rate to calculate tax fields	TS-040-100	F	C
TS-210	Validation--Tax Rate Matrix	System shall use current system tax rates to calculate tax fields	TS-040-100	F	C
TS-211	Calculate Results	System shall calculate results of amended returns in real time	TS-040-110	F	C
TS-212	Calculate Results--Display	System shall display calculated results of amended returns	TS-040-110	F	C
TS-213	Amended Return Form Pre-population	System shall support automated pre-population of amended form with original filing values	TS-040-110	F	C
TS-214	Extension Filings	System shall allow for multiple extension filings in a given time period	TS-040-110	C	Tl cc di Tl cc
TS-215	Errors--Call Out (In-Text)	System shall highlight form errors	TS-040-110	F	C
TS-216	Errors--Call Out Descriptions (In-Text)	System shall display form error explanation for a given highlighted error field	TS-040-110	F	C

#	Name	Description	Task Reference ID	Response Code	
TS-217	Errors--Descriptions (In-Text)	System shall provide error code descriptions for in-text form errors	TS-040-110	F	Cu
TS-218	Errors--Error Summary	System shall collate identified errors into error summary	TS-040-110	C	Th co di Th co
TS-219	Errors--Descriptions (Error Summary)	System shall provide error code descriptions for error summary	TS-040-110	C	Th co di Th co
TS-220	Errors--Real Time Processing	System shall process corrected errors in real time	TS-040-110	F	Cu
TS-221	Corrected Form--Submission	System shall allow for resubmission of corrected form	TS-040-110	F	Cu
TS-222	Multiple Amended Returns	System shall allow for processing of multiple amended returns for an entity in a given time period	TS-040-110	F	Cu
TS-223	Same Rules Validation	System shall enforce same validation rules against forms submitted online as forms submitted through other channels	TS-040-110	F	Cu
TS-224	Display--Paper Form Resemblance	System shall display processed form that mimics paper form	TS-040-160	F	Cu
TS-225	Display--Watermark	System shall include watermark on processed form (e.g. "CREATED ONLINE - NOT FOR SUBMISSION")	TS-040-160	F	Cu
TS-226	Display--Document Locator Number	System shall support automated labeling of document locator numbers on forms	TS-040-160	F	Cu
TS-227	Display--Save (Personal)	System shall allow entity to export form in readable format from self service portal	TS-040-160	F	Cu
TS-228	Submission--Review	System shall require form details to be reviewed prior to submission (e.g. scroll to bottom, click through pages)	TS-040-160	F	Cu
TS-229	Submission--Acknowledgement	System shall prompt user to electronically indicate acknowledgement for form submission	TS-040-160	F	Cu
TS-230	Submission	System shall allow for submission of completed form	TS-040-160	F	Cu
TS-231	Submission--Confirmation	System shall display submission confirmation	TS-040-160	F	Cu
TS-232	Notification	System shall generate notification of submission via taxpayer's preferred channel	TS-040-160	C	Th co di Th co
		"Online Payments" Functional Requirements			
TS-233	EFT Payment	System shall provide for payment by Electronic Funds Transfer (EFT)	TS-050-210	C	Th co di Th co
TS-234	ACH Credit	System shall provide for payment by Automated Clearing House (ACH) credit	TS-050-210	C	Th co di Th co
TS-235	ACH Debit	System shall provide for payment by Automated Clearing House (ACH) debit	TS-050-210	F	Cu

#	Name	Description	Task Reference ID	Response Code	
16	EFT Account Information	System shall require user to key in relevant payment information for EFT payment (e.g., account number, routing number, name on the account)	TS-050-210	C	Tl cc di Tl cc
TS-237	ACH Credit Account Information	System shall require user to key in relevant payment information for ACH credit payment (e.g., account number, routing number, name on the account)	TS-050-210	C	Tl cc di Tl cc
TS-238	ACH Debit Account Information	System shall require user to key in relevant payment information for ACH debit payment (e.g., account number, routing number, name on the account)	TS-050-210	F	Cı
TS-239	EFT Validation	System shall support automated validation of direct deposit EFT account information	TS-050-210	C	Tl cc di Tl cc
TS-240	ACH Credit Validation	System shall support automated validation of direct deposit ACH credit account information	TS-050-210	C	Tl cc di Tl cc
TS-241	ACH Debit Validation	System shall support automated validation of direct deposit ACH debit account information	TS-050-210	F	Cı
TS-242	EFT Confirm	System shall require user to confirm account information fields for EFT payments through double entry (e.g. account number, routing number)	TS-050-210	C	Tl cc di Tl cc
TS-243	ACH Credit Confirm	System shall require user to confirm account information fields for ACH credit payments through double entry (e.g. account number, routing number)	TS-050-210	C	Tl cc di Tl cc
TS-244	ACH Debit Confirm	System shall require user to confirm account information fields for ACH debit payments through double entry (e.g. account number, routing number)	TS-050-210	C	Cı
TS-245	Disabled Copy and Paste	System shall not enable copy and paste functionality in fields	TS-050-210	F	Cı
TS-246	Credit Card	System shall interface with point of sale (POS) vendor for the purpose of processing payments by credit card	TS-050-210	P	G in cz ve
TS-247	Credit Card Account Information	System shall require user to key in relevant account information for credit card (e.g. card number, expiration, CVV code)	TS-050-210	X	O tr Se us
TS-248	Credit Card Validation	System shall support automated validation of credit card account information (e.g. correct account number format, validate expiration)	TS-050-210	X	O tr Se us

#	Name	Description	Task Reference ID	Response Code	
TS-249	Credit Card VISA PABP	System shall comply with VISA Payment Application Best Practices (PABP)	TS-050-210	X	O tr Se us
TS-250	Credit Card PCI Security Standards	System shall comply with Payment Card Industry (PCI) Data Security Standards	TS-050-210	P	G in lii ve aj ca
TS-251	Debit Card	System shall provide payment by debit card	TS-050-210	P	Cı A ve
TS-252	Debit Card Account Information	System shall require entering relevant account information for debit card (e.g. card number, expiration, CVV code)	TS-050-210	X	O
TS-253	Debit Card Validation	System shall support automated validation of debit card account information (e.g. correct account number format, validate expiration)	TS-050-210	X	O
TS-254	Bank Lockbox	System shall allow payments by bank lockbox	TS-050-210	F	Cı
TS-255	Foreign Bank	System shall provide checkbox to indicate if payment originates from a foreign bank	TS-050-210	F	Cı
TS-256	Pre-Population	System shall support automated pre-population of profile information, where applicable (e.g. stored contact information-address, email address)	TS-050-210	F	Cı
TS-257	Account Registration	System shall enable the manual registration of a new user account using the payment method information to pre-populate fields (e.g. address, email)	TS-050-210	X	O
TS-258	Payment Storage--Credit Card	System shall provide for the capability to store credit card numbers captured from credit card payments, if logged into self service portal	TS-050-210	X	O tr Se us
TS-259	Payment Storage--Usage	System shall provide for use of stored payment methods through a drop-down menu, if logged in to self service portal	TS-050-210	F	Cı
TS-260	Payment Storage--Select	System shall provide for selecting of stored payment methods for payment(s), if logged in to self service portal	TS-050-210	F	Cı
TS-261	Payment Storage--Select (Future)	System shall provide for selecting of stored payment methods for scheduled payment(s), if	TS-050-210	F	Cı
TS-262	Payment Storage--Rename	System shall provide for naming of stored payment method information (e.g. "John Smith's Checking Account" as a nickname for the payment method), if logged into self service portal	TS-050-210	I	Cı
TS-263	Payment--Restrictions	System shall restrict payment method options based on business rules (e.g. user payment history, type of payment)	TS-050-210	F	Cı
TS-264	Debit Block	System shall process ACH debit block payments using authorized debit block code	TS-050-210	X	O
TS-265	Bulk Payments	System shall process bulk payments	TS-050-210	C	Tl cc di Tl cc
TS-266	Bulk Payments--Identify Duplicates	System shall support automated identification of duplicate bulk payment records	TS-050-210	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
67	Bulk Payments--Remove Duplicates	System shall support automated removal of duplicate bulk payment records	TS-050-210	C	Th co di Th co
TS-268	Bulk Payments--Processing Status	System shall display bulk payment processing status (e.g., progress bar, percentage completed)	TS-050-210	C	Th co di Th co
TS-269	Exceptions--Identify	System shall support automated identification of payment exceptions based on business rules (e.g., unable to make payment using certain payment methods based on liability type, license)	TS-050-330	C	Th co di Th co
TS-270	Exceptions--Correct	System shall support automated determination of disposition for payment (e.g., sent to problem resolution, set flags, and/or generated automatic correspondence/notices) based on business rules	TS-050-330	C	Th co di Th co
TS-271	Notification of Exception	System shall support automated notification of identified payment exceptions	TS-050-330	C	Th co di Th co
TS-272	Exceptions--Call Out (In-Text)	System shall highlight payment exceptions	TS-050-330	C	Th co di Th co
TS-273	Exceptions--Call Out Descriptions (In-Text)	System shall display form of payment exception explanation for highlighted exception fields	TS-050-330	C	Th co di Th co
TS-274	Exceptions--Descriptions (In-Text)	System shall provide exception code descriptions for in-text payment exceptions	TS-050-330	C	Th co di Th co
TS-275	Exceptions--Error Summary	System shall collate identified payment exceptions into a summary	TS-050-330	C	Th co di Th co

#	Name	Description	Task Reference ID	Response Code	
TS-276	Exceptions--Descriptions (Error Summary)	System shall provide error code descriptions for payment exception summary	TS-050-330	C	Tl cc di Tl cc
TS-277	Exceptions--Real Time Processing	System shall process corrected payment exceptions in real time	TS-050-330	C	Tl cc di Tl cc
TS-278	Corrected Payment Plan--Re-submission Payment Method	System shall provide for resubmission of corrected payment method	TS-050-330	C	Tl cc di Tl cc
TS-279	Corrected Payment Plan--Re-submission Payment Details	System shall provide for resubmission of corrected payment details	TS-050-330	C	Tl cc di Tl cc
TS-280	Exceptions--Report Error Code	System shall provide an exportable file of submission exception codes, specifying location of payment exceptions	TS-050-330	C	Tl cc di Tl cc
TS-281	Exceptions--Report Error Code Explanation	System shall provide an exportable file of payment exception code explanations	TS-050-330	C	Tl cc di Tl cc
TS-282	Exceptions--Manual Override	System shall provide for entity to manually override exceptions to process payment based on business rules	TS-050-330	C	Tl cc di Tl cc
TS-283	Exceptions--Acknowledgement	System shall provide acknowledgement process for manual override of payment exceptions by preferred correspondence channel	TS-050-330	C	Tl cc di Tl cc
TS-284	Exceptions--DOR Override	System shall provide for DOR to manually override payment exceptions	TS-050-330	C	Tl cc di Tl cc
TS-285	Payment--Multiple Liabilities	System shall provide for a single payment to apply to multiple outstanding liabilities	TS-050-250	F	Cl
TS-286	Liability--Multiple Payments	System shall provide for a single outstanding liability to be paid by multiple payments	TS-050-250	F	Cl
TS-287	Liability--Multiple Payment Methods	System shall provide for a single outstanding liability to be paid by multiple payment methods	TS-050-250	F	Cl

#	Name	Description	Task Reference ID	Response Code	
TS-288	Payment--Tax Type	System shall provide for a single payment to be applied to outstanding liabilities owed across multiple tax types	TS-050-250	F	C
TS-289	Payment--Tax Period	System shall provide for a single payment to be applied to outstanding liabilities owed across multiple tax periods	TS-050-250	F	C
TS-290	Payment--Specify Payment	System shall allocate a payments received to tax, penalties and interest based on business rules	TS-050-250	F	C
TS-291	Payment Storage--EFT/ACH	System shall provide for the capability to store bank routing and account numbers captured from EFT or ACH payments	TS-050-250	P	A > cu
TS-292	Payment Storage--Restrictions	System shall limit warehousing of payments based on business rules (e.g., payment history, type of liability)	TS-050-250	F	C
TS-293	Payment--Void	System shall provide DOR with the ability to manually void payments (e.g. void electronic payments) based on business rules	TS-050-250	F	C
TS-294	Payment--Reversal	System shall reverse all transactions made when a payment is not honored by a financial institution (e.g., insufficient funds, outdated account information)	TS-050-250	F	C
TS-295	Credit Card Threshold	System shall enforce a credit card maximum transaction amount	TS-050-250	X	G in ca ve
TS-296	Payment--Selection	System shall provide for selection of payment method for different liabilities (e.g., ability to select credit card for liability #1 and EFT for liability #2)	TS-050-250	F	C
TS-297	Partial Payments	System shall provide for ability to make partial payments	TS-050-250	F	C
TS-298	Warehouse Payment--Date	System shall support automated processing of payments on a date entered by the user	TS-050-250	F	C
TS-299	Warehouse Payment--Recurring	System shall support automated processing of payments on a recurring schedule	TS-050-250	C	Tl co di Tl co
TS-300	Warehouse Payment--Expiry	System shall provide payment schedule expiry date	TS-050-250	C	Tl co di Tl co
TS-301	Warehouse Payment--Amount	System shall provide future payment amounts to be specified by payment date	TS-050-250	F	C
TS-302	Display--Processing Fees	System shall display relevant payment processing fees (when applicable)	TS-050-250	F	C
TS-303	Notification--Post-Due	System shall support automated generation of alerts if a scheduled payment is to be processed after due date (e.g., pop-up notification)	TS-050-250	F	C
TS-304	Notification--Expired Stored Payment	System shall support automated generation of notifications of expired stored payment methods (e.g., credit card expiration date)	TS-050-250	C	Tl co di Tl co
TS-305	Notification--Pre-Payment Processing	System shall support automated generation of notifications of scheduled payment processing date (e.g., scheduled payment to be processed in next business day)	TS-050-250	F	C
TS-306	Notification--Post-Payment Processed	System shall support automated generation of notifications of processed payments	TS-050-250	F	C
TS-307	Acknowledgement--Submitting Payment	System shall provide acknowledgement of payment terms prior to submitting payments	TS-050-250	F	C
TS-308	Acknowledgement--Scheduling Payment	System shall provide acknowledgement of payment terms prior to scheduling payments	TS-050-250	F	C

#	Name	Description	Task Reference ID	Response Code	
TS-309	Protest Payments	System shall provide for payments made under protest, accounting for protest payments separately from other payments based on business rules	TS-050-250	F	Tl cc fu
TS-310	Real-Time Payment Calculations	System shall provide for real-time payments on the adjusted amount (i.e. the adjustment does not have to process overnight before a payment can be applied to the new balance)	TS-050-250	F	Cl
TS-311	Payment Storage--Expiry	System shall provide payment method storage expiry date based on business rules (e.g. tax type, taxpayer risk profile)	TS-050-250	C	Tl cc di Tl cc
TS-312	Warehouse Payment--Restrictions	System shall process scheduled payments for users logged in to the self service portal based on business rules	TS-050-250	F	Cl
TS-313	Past Due Payment	System shall support automated generation of alerts if liability are past due (e.g. pop-up notification)	TS-050-250	F	Cl
TS-314	PLN--Payment	System shall support automated generation of Payment Locator Number (PLN) for immediate payments	TS-050-270	F	Cl
TS-315	PLN--Scheduled Payment	System shall support automated generation of Payment Locator Number (PLN) per scheduled payment	TS-050-270	F	Cl
TS-316	Confirmation Number--Payment	System shall support automated generation of confirmation number per immediate payment	TS-050-270	F	Cl
TS-317	Display--Tax Type	System shall display amount paid per tax type on confirmation	TS-050-270	F	Cl
TS-318	Display--Charge Fees	System shall display amount paid in charge fees on confirmation	TS-050-270	F	Cl
TS-319	Display--Tax Period	System shall display amount paid per tax period on confirmation	TS-050-270	F	Cl
TS-320	Display--Enter Name	System shall provide unauthenticated user ability to enter name to display on confirmation	TS-050-270	C	Tl cc di Tl cc
TS-321	Display--Payment Submitter	System shall display the user's name on confirmation	TS-050-270	F	Cl
TS-322	Display--Processing Timeline	System shall support automated calculation of processing times (e.g. initiation date, withdrawal date, modification date)	TS-050-270	F	Cl
TS-323	Display--Initiation Date	System shall display processing time for initiation date	TS-050-270	F	Cl
TS-324	Display--Withdrawal Date	System shall display processing time for withdrawal of payment date	TS-050-270	F	Cl
TS-325	Display--Modification Date	System shall display processing time for modification of payment date	TS-050-270	F	Cl
TS-326	Display--Payment Voucher	System shall display payment voucher	TS-050-270	F	Cl
TS-327	Print--Payment Confirmation	System shall provide for printing of payment submission confirmation (including PLN and confirmation number)	TS-050-270	F	Cl
TS-328	Print--Payment Notification	System shall provide printing of notice of payment	TS-050-270	F	Cl
TS-329	Print--Payment Voucher	System shall provide for printing of payment voucher	TS-050-270	F	Cl
TS-330	Save--Payment Confirmation	System shall provide for saving of payment submission confirmation to profile (if applicable)	TS-050-270	F	Cl
TS-331	Save--Payment Notification	System shall provide for saving of notice of payment to profile (if applicable)	TS-050-270	F	Cl
TS-332	Save--Payment Voucher	System shall provide for saving of payment voucher to profile (if applicable)	TS-050-270	F	Cl
TS-333	Export--Payment Confirmation	System shall provide for exporting of payment confirmation based on business rules	TS-050-270	F	Cl
TS-334	Export--Payment Notification	System shall provide for exporting of notice of payment based on business rules	TS-050-270	F	Cl
TS-335	Export--Payment Voucher	System shall provide for exporting of payment voucher based on business rules	TS-050-270	F	Cl

#	Name	Description	Task Reference ID	Response Code	
TS-336	Send--Payment Notification	System shall provide notice of payment to be sent by preferred correspondence channel	TS-050-270	C	Tl cc di Tl cc
TS-337	Send--Payment Voucher	System shall provide payment voucher to be sent by preferred correspondence channel	TS-050-270	C	Tl cc di Tl cc
TS-338	Notification--Payment Confirmation	System shall support automated generation of notification of payment confirmation by preferred correspondence channel based on business rules	TS-050-270	C	Tl cc di Tl cc
TS-339	Exceptions--Identify	System shall support automated identification of payment plan exceptions based on business rules (e.g. unable to create payment plan based on liability type, license)	TS-050-240	C	Tl cc di Tl cc
TS-340	Exceptions--Correct	System shall support automated determination of correction steps for a payment plan (e.g. sent to problem resolution, set flags, and/or generated automatic correspondence/notices) based on business rules	TS-050-240	C	Tl cc di Tl cc
TS-341	Notification of Exception	System shall support automated notification of identified payment plan exceptions	TS-050-240	C	Tl cc di Tl cc
TS-342	Exceptions--Call Out (In-Text)	System shall highlight payment plan exceptions	TS-050-240	C	Tl cc di Tl cc
TS-343	Exceptions--Call Out Descriptions (In-Text)	System shall display payment plan exception explanation for a given highlighted exception field	TS-050-240	C	Tl cc di Tl cc
TS-344	Exceptions--Descriptions (In-Text)	System shall provide exception code descriptions for in-text payment plan exceptions	TS-050-240	C	Tl cc di Tl cc

#	Name	Description	Task Reference ID	Response Code	
TS-345	Exceptions--Error Summary	System shall collate identified payment plan exceptions into a summary	TS-050-240	C	Th co di Th co
TS-346	Exceptions--Descriptions (Error Summary)	System shall provide error code descriptions for payment plan exception summary	TS-050-240	C	Th co di Th co
TS-347	Exceptions--Real Time Processing	System shall process corrected payment plan exceptions in real time	TS-050-240	C	Th co di Th co
TS-348	Corrected Payment Plan--Submission	System shall provide for resubmission of a corrected payment plan (e.g. change duration of agreed upon payment plan, add additional liabilities)	TS-050-240	C	Th co di Th co
TS-349	Exceptions--Report Error Code	System shall provide an exportable file of submission exception codes, specifying location of payment plan exceptions	TS-050-240	F	In
TS-350	Exceptions--Report Error Code Explanation	System shall provide an exportable file of payment plan exception code explanations	TS-050-240	F	In
TS-351	Exceptions--Manual Correction	System shall provide for entity to manually correct exceptions to process payment plans based on business rules	TS-050-240	C	Th co di Th co
TS-352	Exceptions--Acknowledgement	System shall provide acknowledgement process for manual correction of payment plan exceptions by preferred notification channel	TS-050-240	C	Th co di Th co
TS-353	Exceptions--DOR Override	System shall provide for DOR to manually override payment plan exceptions	TS-050-240	F	Th
TS-354	Payment Plan--Display	System shall display payment plan details based on business rules (e.g. statutory requirements)	TS-050-230	C	Th co di Th co
TS-355	Payment Plan--Auto-Populate	System shall support automated generation of payment plan details (e.g. timeline, payment amounts per payment)	TS-050-230	C	Th co di Th co
TS-356	Payment Plan--Scroll	System shall enforce scrolling to bottom of each page in the payment plan details prior to progressing in the details	TS-050-230	F	"I sc

#	Name	Description	Task Reference ID	Response Code	
57	Acknowledgement	System shall prompt user to electronically indicate acknowledgement for payment plan submission	TS-050-230	C	Tl cc di Tl cc
TS-358	Payment Plan--Processing Timeline	System shall display payment plan processing timeline (e.g. initiation date, withdrawal date, modification dates)	TS-050-230	C	Tl cc di Tl cc
TS-359	Print--Payment Plan Confirmation	System shall provide for printing of payment submission confirmation (including PLN and confirmation number)	TS-050-230	C	Tl cc di Tl cc
TS-360	Print--Payment Plan Details	System shall provide for exporting of a displayed payment agreement information to printable format	TS-050-230	C	Tl cc di Tl cc
TS-361	Save--Payment Plan Confirmation	System shall provide for saving of payment plan enrollment confirmation to profile	TS-050-230	C	Tl cc di Tl cc
TS-362	Save--Payment Plan Details	System shall provide for saving of payment plan enrollment details to profile	TS-050-230	C	Tl cc di Tl cc
TS-363	Export--Payment Plan Details	System shall provide for exporting of a payment plan based on business rules	TS-050-230	C	Tl cc di Tl cc
TS-364	Send--Payment Plan Confirmation	System shall provide for payment plan enrollment confirmation to be sent by preferred correspondence channel	TS-050-230	C	Tl cc di Tl cc
TS-365	Send--Payment Plan Details	System shall provide for payment plan details to be sent by preferred correspondence channel	TS-050-230	C	Tl cc di Tl cc
TS-366	Display--Active Payment(s)	System shall display a list of active payment(s) based on business rules (e.g. authorization date, payment date, tax period)	TS-050-200	F	Cl
TS-367	Display--Active Payments to Be Processed	System shall display active payments that have not been processed in a list format	TS-050-200	F	Cl

#	Name	Description	Task Reference ID	Response Code	
TS-368	Display--Notification of Active Payment Processing	System shall display alert of DOR business processing hours (e.g. payments made after 5:00pm will be processed the next business day)	TS-050-200	F	C
TS-369	Search List--Filter	System shall provide for filtering scheduled payments on displayed fields (e.g. tax types, dates, amounts)	TS-050-200	F	C
TS-370	Create Reports	System shall provide for creation of active payment reports based on filtered search	TS-050-200	C	T c d T c
TS-371	Export Reports	System shall provide for exporting of scheduled payments reports to common formats	TS-050-200	C	T c d T c
TS-372	Print Reports	System shall provide for an entity to manually export active payments information to a printable format	TS-050-200	C	T c d T c
TS-373	Display History	System shall display list of processed payments and pertinent payment information in a viewable list based on business rules (e.g. authorization date, payment date, location)	TS-050-350	F	C
TS-374	Display History--Payment Credit by Tax Type	System shall display processed payments made against a liability by tax type	TS-050-350	F	C
TS-375	Display History--Payment Credit by Tax Period	System shall display processed payments made against a liability by tax period	TS-050-350	F	C
TS-376	Display History--Payment Allocation	System shall display history of processed payments with liabilities detailed (e.g. application of payment toward balance, penalty, interest)	TS-050-350	F	C
TS-377	Search History--Filter	System shall provide for filtering payment history on displayed fields (e.g. tax types, dates, amounts)	TS-050-350	F	C
TS-378	Create Reports	System shall provide creation of processed payment reports based on filtered search	TS-050-350	C	T c d T c
TS-379	Export Reports	System shall provide for exporting processed payments reports to common formats	TS-050-350	C	T c d T c
TS-380	Print Reports	System shall provide for an entity to manually export history of processed payment information	TS-050-350	C	T c d T c
TS-381	Authorized Payment Changes	System shall provide the capability for authorized users to alter scheduled payments	TS-050-280	F	C
TS-382	Edit--Payment Occurrence	System shall provide for editing of payment occurrence	TS-050-280	F	C
TS-383	Edit--Payment Series	System shall provide for editing of payment series	TS-050-280	F	C
TS-384	Cancel--Payment Occurrence	System shall provide the capability to cancel a payment occurrence	TS-050-280	F	C
TS-385	Cancel--Payment Series	System shall provide the capability to cancel a payment series	TS-050-280	F	C

#	Name	Description	Task Reference ID	Response Code	
386	Validation	System shall support automated updates to a payment plan liability amount and due date based on under/overpayment	TS-050-280	C	Tl cc di Tl cc
TS-387	Notification--Change of Payment Status	System shall support automated notifications to taxpayer by preferred correspondence channel if editing payment changes the payment status	TS-050-280	C	Tl cc di Tl cc
TS-388	Notification--Change of Scheduled Payment Status	System shall support automated notifications if changes to the payment method impact the status of scheduled payments (e.g. credit card number change should be reflected on future/scheduled payments)	TS-050-280	C	Tl cc di Tl cc
TS-389	Display--Proposed Changes to Payment	System shall provide a side-by-side view of payment line items if payments are altered, providing an 'as is and 'as proposed' view	TS-050-280	C	Tl cc di Tl cc
TS-390	No Login--Payment	System shall provide for submission of payments without online registration	TS-050-310	F	Cl
TS-391	No Login--DLN	System shall provide for users not logged in to the self service portal to submit payments using identifying information based on business rules (e.g., Social Security Number (SSN), last years' payment, Document Locator Number (DLN))	TS-050-310	F	Cl
TS-392	Identification--Drop Down	System shall provide for users not logged in to the self service portal to select identifying information fields through a drop-down selection list	TS-050-310	F	Cl
TS-393	Identification--Two Forms	System shall provide for users not logged in to the self service portal to provide two forms of identifying information for making payments	TS-050-310	F	Cl
TS-394	Identification--Confirmation	System shall provide for users not logged in o the self service portal to confirm identifying information through double entry	TS-050-310	F	Cl
TS-395	Identification--Automated Confirmation	System shall provide for users not logged in to the self service portal to match taxpayer liability to identify information (e.g., Social Security Number (SSN), last years' payment, Document Locator Number (DLN))	TS-050-310	F	Cl
TS-396	IP Tracking	System shall provide a log of IP addresses for payments made by users not logged in to the self service portal	TS-050-310	F	Cl

CS - Customer Service

Defines the activities to process customer correspondence in the form of fax, email, text (SMS), or mail, to manage customer calls, and to manage follow-up activities, the call center workforce, and the service desk.
- Process Real Time Interaction: Defines activities to receive and route inbound calls to appropriate queue based on business rules, and to allow CSRs to confirm caller identities, perform different activities to complete taxpayer inquiries during the call, or transfer the call to another CSR, if necessary.
- Process Customer Correspondence: Defines activities to allow DOR to accept in-bound taxpayer correspondence through channels including paper mail, fax, e-mail, SMS and chat function, and to process correspondence activities by tracking status and allowing CSRs to evaluate and respond to correspondence.
- Manage Activities: Defines the activities to allow CSRs to create and process follow-up activities to provide a solution to the taxpayer's inquiry.
- Knowledge Resources: Defines the activities to allow CSRs and other DOR employees to access and use the Knowledge Base for research while processing taxpayer inquiries and executing activities and financial transactions for the taxpayer's account.
- Service Desk: Defines the activities to accept walk-in requests for help and the process to resolve and close work items.
- Customer Interaction Center: Determines activities to allow CIC administrator to manage CIC's daily operations including creation of work-shift scheduling based on incoming contact volume, manage CIC business rules related to routing, scripts, and alerts/messages, and monitor CIC's quality of customer service and performance.

#	Name	Description	Task Reference ID	Response Code	
		"Process Real Time Interaction" Functional Requirements			
CS-1	IP Address Access	System shall include capability to access IP addresses logged during user chat sessions	CS-010-150	F	eS ad
CS-2	IP Address Storing	System shall include capability to store IP addresses logged during user chat sessions against user account	CS-010-150	F	eS ad
CS-3	Relevant Caller Information Population	System shall automatically populate relevant caller information for employee (e.g. all returns and filings associated with SSN, outstanding liabilities and status, missing returns)	CS-010-070	C	Th ty co re
CS-4	Taxpayer Category Flagging	System shall automatically include an alert on taxpayer's profile based on business rules (e.g. excessive agency contact, behind on payment plan)	CS-010-070	F	Ge fu
CS-5	Proactive Issue Spotting	System shall automatically highlight certain fields on screen based on business rules (e.g. overdue bills, missing returns)	CS-010-070	F	Ge fu im pa
CS-6	Correspondence Pre-Fetch	System should automatically provide links to view recent correspondence sent and received	CS-010-070	F	Cu
CS-7	Contact History Display	System shall support contact history with relevant data (e.g. date of contact, owner, resolution, notes)	CS-010-100	F	Cu
CS-8	Multi-channel History Population	System shall support populating contact history for all channels of taxpayer contact	CS-010-100	F	Cu
CS-9	Contact History Pre-population	System shall pre-populate contact history if possible	CS-010-100	F	Ge fu co
CS-10	Reason Code Selection	System shall provide employee with drop down list to select reason code for entity contact	CS-010-110	F	Cu
CS-11	Intelligent Drop Downs	System shall provide employee with intelligent drop down lists	CS-010-110	P	Dr In re
CS-12	Free Text Notes	System shall provide ability to document free-form text notes while working call	CS-010-110	F	Cu

#	Name	Description	Task Reference ID	Response Code	
3	Reference Number	System shall automatically create reference number related to contact (i.e. transaction number of record that employee can give to caller)	CS-010-110	F	Cu
CS-14	Call Reason Code	System shall allow employee to assign reason code to call in contact log	CS-010-140	F	Cu
CS-15	Correspondence Follow Up	System should automatically suggest potential correspondence for caller based on business rules (e.g. resolution codes, taxpayer demographics)	CS-010-140	C	Th ty co re
CS-16	Create Work Items	System shall provide employee ability to create work items for issue resolution	CS-010-140	F	W
CS-17	Action Item Assignment --Queue	System shall provide employee ability to assign work items to work queues for issue resolution	CS-010-140	F	W
CS-18	Action Item Assignment – Supervisor	System shall provide employee ability to assign work items to supervisor for issue resolution	CS-010-140	F	W
CS-19	Action Item Assignment -- Employee	System shall provide employee ability to assign work items to employees for issue resolution	CS-010-140	F	W
CS-20	Call Issue Dashboard -- Work Items	System shall provide employee with dashboard to track outstanding work items by caller contact	CS-010-140	F	Inf
CS-21	Call Issue Dashboard -- Correspondence	System shall provide employee with dashboard to track issued correspondence by caller contact	CS-010-140	F	Inf
CS-22	Call Issue Dashboard -- Issues	System shall provide employee with dashboard to track outstanding issue resolution by caller contact	CS-010-140	F	Inf
		"Process Customer Correspondence" Functional Requirements			
CS-23	Unique Identification Assignment	System shall automatically assign a unique identification number to each scanned image	CS-020-010	F	Sp
CS-24	Store Image	System shall store images from all correspondence channels (e.g. scanning, e-mail, fax)	CS-020-010	F	Sp At
CS-25	Unique Identification Creation	System shall create unique identification number based on scan data including, but not limited to: batch number, image number, page number, date postmarked, and date scanned	CS-020-010	F	Sp
CS-26	Contact Record Creation	System shall automatically create contact record in entity contact history using unique identification number	CS-020-010	F	Sp
CS-27	Re-scan Submission	System shall allow employee to submit scanned image for re-scan	CS-020-010	F	Sp
CS-28	Attachment Linking	System shall provide ability include attachments (e.g. files, images) with incoming correspondence to contact record	CS-020-020	F	Sp At
9	Multi Tier Classification	System shall support classification of correspondence using intelligent drop downs	CS-020-020	X	Ou su
CS-30	One Way Work Flow	System shall support reclassification of correspondence using intelligent drop downs	CS-020-020	X	Ou su
CS-31	Correspondence Assignment	System shall automatically assign correspondence work item to employee based on business rules (e.g. correspondence received from entity in audit case assigned to auditor)	CS-020-020	F	W
CS-32	Priority Status - Automated	System shall support automated assignment of priority status to correspondence work item based on business rules (e.g. correspondence received related to SIU case)	CS-020-020	F	W
CS-33	Account Hold - Collections	System shall support automated hold indicators (such as billing and collections) based on correspondence classification per DOR business rules	CS-020-020	F	Ge fu
CS-34	Joint Filer Correspondence	System shall automatically allocate correspondence to contact history for multiple entities based on business rules (e.g. joint filers)	CS-020-020	C	Th ty co re

#	Name	Description	Task Reference ID	Response Code	
CS-35	Anticipated Correspondence - Indexed	System should automatically link correspondence to entity contact history with OCR if possible	CS-020-020	C	Th yi co re
CS-36	Illegible Correspondence	System shall record and track correspondences received that cannot be linked to an existing entity	CS-020-020	F	W
CS-37	Self Route Correspondence	System shall support the ability for employees to assign open work items themselves	CS-020-030	F	W
CS-38	Contact History - Routing Record	System shall maintain record of all employees that have interacted with the correspondence as part of the correspondence contact history	CS-020-030	F	Ge fu
CS-39	Work Item Owner Search	System shall provide a work item owner search function within contact history	CS-020-030	F	W
CS-40	Print Correspondence Cover Page	System shall allow employee to print a correspondence cover page to support the back scan process (date, name, classification, entity)	CS-020-040	F	Th
CS-41	Priority Status - Manual	System shall support manual assignment of priority status to correspondence work item based on business rules (e.g. correspondence received related to SIU case)	CS-020-040	F	W
CS-42	Copy and Paste Electronic Correspondence	System shall allow employee to attach electronically received documents to contact history via "cut and paste"	CS-020-040	P	Ou sa to
CS-43	Automated Route Correspondence	System shall automatically assign correspondence to employee that created contact history	CS-020-040	F	W
CS-44	Closure Code Drop Down	System shall provide intelligent drop downs with closure codes	CS-020-040	X	Ou su
CS-45	Contact History - Closure Data	System shall automatically update contact history with closure data (e.g. closure code, employee name, and closure date)	CS-020-040	F	W
CS-46	Correspondence Work Item Status	System shall display status of correspondence work item (e.g. resolved, entity response required)	CS-020-040	F	W
CS-47	Adjustment of Dates	System shall provide ability for employee to manually adjust resolution or follow up date	CS-020-040	F	W
CS-48	Supervisor Assistance	System shall allow employee to request supervisor assistance for correspondence work item	CS-020-040	F	W
CS-49	Physical Location ID	System shall automatically assign a location number to unscanned correspondence	CS-020-050	C	Th ty co re
CS-50	Reason Code for Unscanned	System shall provide reason code detailing why correspondence was not scanned for employee	CS-020-050	F	W Nc
CS-51	Physical Copy of Unscanned	System shall provide employee ability to request physical copy of unscanned correspondence	CS-020-050	F	W
CS-52	Physical Copy Available	System shall indicate when physical copy of unscanned correspondence is unavailable for request	CS-020-050	F	W
		"Service Desk/Manage Contact/Knowledge Resources" Functional Requirements			
CS-53	Service Desk Contact History	System shall support contact history updates when entities use the service desk at DOR offices	CS-030	F	Cu
CS-54	Visit Reason Code	System shall enable employee conducting service desk support to log entity reason code for visiting	CS-030	F	Cu
CS-55	Entity Search	System shall support service desk employee searching for entity using unique entity information (e.g. SSN, address, TID)	CS-030	F	Ge fu

#	Name	Description	Task Reference ID	Response Code	
6	Entity Profile Display	System shall display entity profile information to employee following identity authentication	CS-030	F	Ge fu in cu el
CS-57	Service Desk Transcript	System should generate a transcript of an entity's service desk visit to be delivered via entity's preferred medium (e.g., printed out, emailed)	CS-030	C	Th ty co re
CS-58	Service Desk Interaction	System should provide a record of in-person interactions and retain ID number to retrieve interaction from database	CS-030	F	Cu
CS-59	Phone Interaction	System should provide a record of phone interactions and retain ID number to retrieve interaction from database	CS-030	F	Cu
CS-60	Chat Interaction	System should provide a record of chat interactions and retain ID number to retrieve interaction from database	CS-030	F	eS Ge
CS-61	Primary Item Ownership	System shall assign primary owner to work items generated from entity contact based on business rules (e.g., queue assignment, worker availability)	CS-030	F	W
CS-62	Secondary Item Ownership	System shall assign secondary owners as necessary to work items generated from entity contact based on business rules (e.g., queue assignment, worker availability)	CS-030	X	Ou ow
CS-63	Work Item Reminders	System shall generate work item call back reminders for call center employees who created work items	CS-030	F	Th
CS-64	Automatic Generation	System shall generate notification to entities following work item resolution if possible based on business rules (e.g., type of work item, preferred method of contact)	CS-030	C	Th ty co re
CS-65	Dynamic Scripting	System shall support use of dynamic scripts by employees	CS-030	C	Th ty co re
		"Customer Interaction Center" Functional and Integration Requirements			
56	Screen Recording -- Telephone	System shall provide capability to access log of agent screen navigation from telephone session	CS-040	F	M
CS-67	Screen Recording -- Chat	System shall provide capability to access log of agent screen navigation from chat session	CS-040	F	Ac
CS-68	Warehouse Interactions	System should warehouse recorded interactions per business rules (e.g., type of call, work item creation)	CS-040	F	Cu
CS-69	Interaction Searching	System shall support search capability on warehoused interactions using meta-data (e.g., date, employee, phone number of caller)	CS-040	F	Cu
CS-70	Interaction Retrieval	System shall support the retrieval of warehoused interactions by authorized employees	CS-040	F	Cu
CS-71	Script Searching	System shall allow employees to search for scripts during interaction	CS-040	C	Th ty co re

#	Name	Description	Task Reference ID	Response Code	
CS-72	Script Retrieval	System shall allow employees to select scripts for retrieval during interaction	CS-040	C	Th /I co re
CS-73	Script Selection	System shall display selected scripts during interaction	CS-040	C	Th ty co re
CS-74	IVR Authentication Answers	Integration will provide capability to access user-keyed information in CTI system in real time	CS-040 Integration	C	Th ty co re
CS-75	Breadcrumbs -- IVR	System shall display caller's IVR choices to employee	CS-040 Integration	C	Th ty co re
CS-76	Breadcrumbs -- CSR	System shall display history of transfers within call to employee	CS-040 Integration	C	Th ty co re
CS-77	Telephone Self Service	System shall support self service functionality for callers via telephone (e.g. account balance, payment due dates)	CS-040 Integration	C	Th ty co re
CS-78	Demographic Information Viewing	System shall include capability to accept data transfers from CTI system in real time	CS-040 Integration	C	Th ty co a

#	Name	Description	Task Reference ID	Response Code	
79	Call Type Information Viewing	System shall include capability to accept contact data from IVR system in real time	CS-040 Integration	C	Th ty co re Ge ju ab m an m ar int th m in in ta
CS-80	Wrap-up Time Limit	System shall include capability to receive end of call information from CTI system in real time	CS-040 Integration	C	Th ty co re
CS-81	Pre Populated Information Transfer	System shall automatically transfer all caller information when caller is transferred	CS-040 Integration	C	Th ty co re
CS-82	Telephone Number Capture	System shall provide CTI system with dynamic messaging information based on CTI data request	CS-040 Integration	C	Th ty co re
CS-83	Offering Surveys	System shall automatically send a survey invitation via the customer's medium of choice immediately following an interaction	CS-040 Integration	C	Th ty co re
CS-84	Dynamic Survey Questions	System shall select survey question(s) based on business rules (e.g., IVR queue selected, length of interaction)	CS-040 Integration	C	Th ty co re
CS-85	Survey Administration	System shall allow responses from surveys administered via phone and collected through the phone system to the ITS survey solution	CS-040 Integration	C	Th ty co re

#	Name	Description	Task Reference ID	Response Code	
CS-86	Individual Survey Result Escalation	System shall automatically send survey results to an employee's supervisor based on business rules (e.g., employee average far above or below DOR average)	CS-040 Integration	C	Th ty co re
CS-87	Trend Survey Result Escalation	System shall automatically send aggregated survey results to an employee's supervisor based on business rules (e.g., employee average trending negative over time)	CS-040 Integration	C	Th ty co re
CS-88	Survey Dashboard	System shall provide a dashboard for customer interaction center supervisors to view grouped survey results (e.g., by date, issue type) from all channels	CS-040 Integration	C	Th ty co re
CS-89	Call Handling Alerts	System should generate automated alerts of employee call handling statistics (e.g., calls/chats answered, average time in call/chat)	CS-040 Integration	C	Th ty co re
CS-90	Trend Survey Result Escalation	System shall automatically send aggregated survey results to an employee's supervisor based on business rules (e.g., employee average trending negative over time)	CS-040 Integration	C	Th ty co re
CS-91	Reason Code Integration	System shall collect and log call disposition codes produced by the CIC system.	CS-040 Integration	C	Th ty co re

CA - Collections Activities

Defines the activities to capture debts owed to DOR, through outstanding tax payments and license/bond fees. This includes activities that are both automated and outsourced from discovery to taxpayer contact and enforcement.
- Perform Automated Collection: Defines the activities to automatically execute collections activities, through estimated assessments and demand notices.
- Third Party Collection Agency: Defines the activities to automatically release taxpayer account master and transactional data to a third party collection agency, to receive inbound updates from the collection agency (including updates on collection status, address data, and banking data), to update the collection agency with DOR updates to taxpayer accounts, and to manually and automatically recall accounts from the collection agency.
- Enforcement Actions: Defines the activities to automatically release taxpayer account master and transactional data to a third party collection agency, to receive inbound updates from the collection agency (including updates on collection status, address data, and banking data), to update the collection agency with DOR updates to taxpayer accounts, and to manually and automatically recall accounts from the collection agency.
- Process Payment Agreements: Defines the activities to check items for payment agreement eligibility and initiate payment agreements.
- Non-deficient Dunning: Defines the activities to dun non-deficient items that are subject to collections activities.

#	Name	Description	Task Reference ID	Response Code	
		"Perform Automated Collection" Functional Requirements			
CA-1	Proposed Assessment	System shall support automated generation of notice of proposed assessment based on business rules	CA-010-160	F	Re
CA-2	Proposed Assessment–Reason Codes	System shall support automated generation of notice of proposed assessment based on reason code(s)	CA-010-160	F	Re
CA-3	Proposed Assessment--Correspondence	System shall support automated generation of notice of proposed assessment by preferred correspondence channel(s) (e.g., mail, email, self-service portal) based on business rules	CA-010-160	C	Th ty co re
CA-4	Proposed Assessment--Recipient	System shall provide notice of proposed assessment to designated recipient (e.g., responsible officer, power of attorney) based on business rules	CA-010-160	F	Re
CA-5	Bill Staging	System shall support the staging of bills through collections lifecycle based on business rules	CA-010-160	F	Co
CA-6	Collections Segmentation	System shall support variation of correspondence for population segments based on business rules	CA-010-160	F	Co
7	Demand Notice	System shall support automated generation of demand notice based on business rules	CA-010-130	F	Co
CA-8	Demand Notice--Correspondence	System shall support automated generation of demand notice based on payment status (e.g., no payment, partial payment) by payment due date	CA-010-130	F	Co
CA-9	Demand Notice–Hold	System shall allow for the hold of demand notice issuance based on business rules	CA-010-170	F	Co
CA-10	Outbound Calling	System shall integrate with a CTI solution for automated outbound calling	CA-010-150	C	Th ty co re
CA-11	Additional Outreach	System shall identify entities eligible for additional outreach based on defined criteria (e.g. liability amount, number of liabilities, tax type, risk level)	CA-010-150	F	Co
		"Third Party Collection Agency" Functional Requirements			
CA-12	Multiple Collection Agencies	System shall support interfaces with multiple third party collection agencies	CA-020-230	C	Th ty co co in

#	Name	Description	Task Reference ID	Response Code	
CA-13	TPCA Distribution	System shall support automated distribution of eligible liabilities to third party collection agency(ies) based on business rules	CA-020-230	C	Th ty co co in
CA-14	TPCA Performance	System shall support the variation of liability distribution to third party collection agencies based on collection agency performance (e.g., payments made, payment plans created)	CA-020-230	C	Th ty co co in
CA-15	TPCA Optimization	System shall provide optimization modelling of liability distribution to third party collection agencies based on liability details (e.g., tax type, amount, age)	CA-020-230	C	Th ty co co in
CA-16	TPCA Manual Allocation of Liabilities	System shall allow for the manual allocation of eligible liabilities to third party collection agency(ies) based on business rules	CA-020-230	C	Th ty co co in
CA-17	TPCA Search Capabilities	System shall provide search capabilities across liabilities allocated to third party collection agency(ies) based on entity characteristics	CA-020-230	C	Th ty co co in
CA-18	New Liabilities	System shall support automated transmission of new liabilities to designated third party collection agency, including; warrant information, contact information, SSN, FEIN, liability details	CA-020-210	C	Th ty co co in
CA-19	Updated Liabilities	System shall support automated update to entity account information to third party collection agency based on business rules (e.g., liability amounts, changes in contact information, Responsible Officer(s), death, or holds)	CA-020-190	C	Th ty co co in
CA-20	Liability Recall Request--Automatic	System shall support automated recall of liability(ies) from third party collection agency(ies) based on business rules (e.g., legal, audit, bankruptcy, account errors, payment, age of liability, inactivity of collections agency)	CA-020-170	C	Th ty co co in
CA-21	Liability Recall Request--Manual	System shall allow for the manual selection of liability(ies) for recall from third party collection agency(ies) based on business rules	CA-020-170	C	Th ty co co in
CA-22	Liability Recall Reason Code	System shall assign reason codes to liability recall requests based on request trigger	CA-020-170	C	Th ty co co in

#	Name	Description	Task Reference ID	Response Code	
3	Record Data Source	System shall record source of data provided by third party collection agency	CA-020-180	C	Th ty co co in
CA-24	Record Entity Account Updates	System shall record updates to entity account information from third party collection agency based on business rules	CA-020-180	C	Th ty co co in
CA-25	Record Bank Information	System shall record entity bank information provided by third party collection agency (e.g., bank, account number(s), routing number(s))	CA-020-180	C	Th ty co co in
CA-26	Record Employer Information	System shall record employment information provided by third party collection agency (e.g., employer contact, employment history, salary information)	CA-020-180	C	Th ty co co in
CA-27	Reconciliation--Balance	System shall support automated reconciliation of third party collection agency and DOR data at the balance level based on business rules	CA-020-200	C	Th ty co co in
CA-28	Reconciliation--Transaction	System shall support automated reconciliation of third party collection agency and DOR data at the transaction level based on business rules	CA-020-200	C	Th ty co co in
		"Enforcement Actions" Functional Requirements			
CA-29	Identify Eligible Liabilities	System shall support automated identification of eligible liabilities for enforcement activities based on business rules	CA-030-060	F	Co
0	File Warrant	System shall support automated filing of warrant(s) for responsible parties (e.g., individual, joint filers, Responsible Officers) of an eligible liability	CA-030-060	F	Co
CA-31	Record Warrant Details	System shall support automated update of entity account(s) with warrant filing information, including: warrant status, expiration date, county of issuance, and liability on record	CA-030-060	F	Co
CA-32	Manual Warrant Details	System shall allow for the manual update of entity account(s) with warrant filing information, including: warrant status, expiration date, county of issuance, and liability on record	CA-030-060	F	Co
CA-33	Warrant Renewal	System shall support automated renewal of warrant based on business rules	CA-030-060	F	Co
CA-34	Warrant Renewal--Manual	System shall allow for manual renewal of selected warrant(s) based on business rules	CA-030-060	F	Co
CA-35	Update Warrant(s)	System shall provide the ability to update warrant(s) based on updates to liability(ies), including; partial payment, additional liability(ies)	CA-030-060	F	Co
CA-36	Warrant Expiration	System shall allow for the manual selection of warrant(s) to expire based on business rules	CA-030-010	F	Co
CA-37	Select Enforcement Approach	System shall support automated selection of enforcement activity(ies) based on business rules	CA-030-010	F	Co

#	Name	Description	Task Reference ID	Response Code	
CA-38	Optimize Enforcement Approach	System shall provide optimization modelling of enforcement activities based on defined criteria, including; entity risk profile, liability details (e.g., tax type, amount, age), existing enforcement approach (if applicable), and enforcement activity performance	CA-030-010	F	Ini
CA-39	Manual Override of Enforcement Approach	System shall allow for the manual selection of enforcement activities based on access controls	CA-030-010	F	Co
CA-40	Notification of Enforcement Action(s)	System shall support automated generation of notification of pending enforcement action(s) based on business rules	CA-010-100	F	Co
CA-41	Identify Employers--DOR	System shall support automated identification of taxpayer employers from DOR data	CA-030-020	F	Cu
CA-42	Identify Employers--Third Party	System shall support automated identification of employers of taxpayers from third party employment data	CA-030-020	C	Th ty co co in
CA-43	Request Wage Garnishment	System shall support automated generation of wage garnishment requests to employer(s) based on business rules	CA-030-020	C	Th ty co re
CA-44	Track Wage Garnishment	System shall track wage garnishment compliance to liability based on business rules	CA-030-020	F	Co
CA-45	Request Bank Information	System shall support automated generation of requests for identification of assets from bank(s) for bank levies	CA-030-030	F	Co
CA-46	Request Account Freeze	System shall support automated generation of request to freeze eligible funds based on business rules	CA-030-030	F	Co
CA-47	Notification of Bank Levy	System shall supported automated generation of notification of proposed bank levy based on business rules	CA-030-030	F	Co
CA-48	Request for Asset Seizure	System shall support automated generation of request to seize eligible funds from identified bank account(s) based on business rules	CA-030-030	F	Co
CA-49	Lien Request	System shall support automated generation of lien request to BMV based on business rules	CA-030-040	F	Co
CA-50	Load Title Data	System shall record entity title information provided for lien (e.g., make, model, VIN number, date issued)	CA-030-040	C	Th ty co re
CA-51	Partial Tax Lien Release	System shall allow for partial lien release based on business rules	CA-030-040	F	Co
CA-52	Identify External License(s)	System shall support automated identification of entity license registration(s) eligible for revocation based on business rules	CA-030-080	C	Th ty co re
CA-53	Request Revocation of External Licenses	System shall support automated generation of requests for license revocation to relevant external agencies based on business rules	CA-030-080	C	Th ty co re
CA-54	Notify Sheriff	System shall support automated generation of notification to a sheriff of newly assigned liability(ies) on business rules	CA-030-070	F	Co

#	Name	Description	Task Reference ID	Response Code	
[illegible]5	Sherriff User Access	System shall provide user access to sheriff's to manage collections activities based on business rules	CA-030-070	C	Th ty co re
CA-56	Allocation to Field Agent(s)	System shall support automated distribution of field collection liabilities to field agents through a worklist based on defined criteria, including; geography, workload	CA-030-090	F	Co
CA-57	Suspend Enforcement Action(s)	System shall support automated suspension of enforcement activities based on business rules	CA-030-110	F	Co
CA-58	Suspend Enforcement Action(s)--Manual	System shall allow for the manual suspension of enforcement activities based on business rules	CA-030-110	F	Co
CA-59	Clear Warrant(s)	System shall support automated generation of warrant dissolution requests to county clerk(s) based on business rules	CA-030-120	F	Co
		"Process Payment Agreements" Functional Requirements			
CA-60	Determination of Eligibility--Entity	System shall support automated determination of payment plan eligibility based on entity data (e.g., filing history, billing history, payment agreement history, ability to pay, etc.)	CA-040-100	C	Th ty co re
CA-61	Determination of Eligibility--Liability	System shall support automated determination of payment plan eligibility based on liability data (e.g., number of liabilities, tax type, stage of bill, etc.)	CA-040-100	C	Th ty co re
CA-62	Prepopulated Payment Scenario	System shall provide a pre-populated payment agreement option based on business rules (e.g., initial payment, payment amount, duration, interest, etc.)	CA-040-110	C	Th ty co re
CA-63	Establish Terms	System shall support automated determination of payment agreement parameters for selection based on business rules (e.g., initial payment, payment amount, duration, interest, etc.)	CA-040-110	F	Co
[illegible]4	Payment Scenario View	System shall support automated determination of payment schedule based on selected payment agreement parameters (i.e., initial payment, payment amount, duration, interest, etc.)	CA-040-110	F	Co
CA-65	Varying Interest Rate	System shall support automated determination of interest rates for liabilities based on business rules	CA-040-110	F	Co
CA-66	Manual Terms	System shall allow for the manual entry of proposed payment agreement terms (e.g., initial payment, payment amount, duration, etc.) based on business rules	CA-040-110	F	Co
CA-67	Consolidating Payment Agreements	System shall allow for the merger of existing payment agreements based on business rules	CA-040-110	P	Co ma
CA-68	Amending Active Payment Agreement	System shall allow for the manual update of active payment agreements based on business rules	CA-040-110	F	Co
CA-69	Recalculating Payments	System shall support automated recalculation of payment due against the payment schedule based on business rules	CA-040-110	F	Co
CA-70	Allowing Multiple Payment Agreements	System shall allow multiple payment agreements per entity based on business rules	CA-040-110	F	Co
CA-71	Automated Payments	System shall provide options for automated scheduled payments (e.g., electronic funds transfer, auto debit of checking account, etc.)	CA-040-110	F	Co
CA-72	Payment Reminders	System shall provide options for proactive payment agreement notifications for selection based on business rules (e.g., reminder payment is due)	CA-040-110	F	Co

#	Name	Description	Task Reference ID	Response Code	
CA-73	Payment Confirmations	System shall provide options for reactive payment agreement notifications for selection based on business rules (e.g., verification of payment)	CA-040-110	F	Co
CA-74	Payment Agreement Balance Statements	System shall generate payment agreement balance statements based on business rules	CA-040-110	F	Co
CA-75	Selection of Payment Agreement Schedule	System shall provide payment scheduling options (i.e., initial payment date, payment frequency, recurring payment date, etc.) for selection based on business rules	CA-040-120	F	Co
CA-76	Supervisor Review	System shall support automated push of payment agreement terms for supervisor review based on business rules	CA-040-130	F	Co
CA-77	Reinstate Payment Plan	System shall provide for reinstatement of a payment plan based on business rules	CA-040-130	F	Co
CA-78	Monitor Compliance	System shall support automated tracking of payment agreement compliance based on business rules	CA-040-240	F	Co
CA-79	Suspending Payment Agreement	System shall allow for the suspension of payment agreements based on business rules	CA-040-240	F	Co
		"Non-deficient Dunning" Functional Requirements			
CA-80	Identify Entities for Proactive Outreach	System shall identify entities eligible for proactive outreach based on defined criteria (e.g. tax type, filing type, entity type, payment history, case management, etc.)	CA-050-010	F	Co
CA-81	Outreach Selection Criteria	System shall provide ability to change proactive outreach eligibility criteria thresholds	CA-050-010	F	Co
CA-82	Monitoring of Expected Payments	System shall support automated monitoring of expected payments	CA-050-010	F	Co
CA-83	Filing Due Date	System shall support automated monitoring of filing due dates	CA-050-040	F	Co
CA-84	Estimated Payment Due Date	System shall support automated monitoring of estimated payment due dates	CA-050-040	F	Co
CA-85	Identify Delinquency(ies)	System shall identify delinquent entities eligible for notification based on defined criteria (e.g. entity status, tax type, filing type, entity type, etc.)	CA-050-040	F	Co
CA-86	Delinquency	System shall provide ability to change criteria to identify target entities for delinquency notifications based on business rules	CA-050-040	F	Co
CA-87	Determine Contact Type(s)	System shall support automated selection of contact channel(s) based on business rules	CA-050-060	F	Co
CA-88	Determine Contact Channel(s)--Manual	System shall allow for the manual selection of contact channel based on business rules	CA-050-060	F	Co
CA-89	Contact Optimization	System shall provide optimization modelling of contact activities based on historical data	CA-050-060	F	Ini
CA-90	Determine Treatment Strategy	System shall support automated selection of entity treatment strategy based on business rules (e.g., tax type, liability type, total liabilities, entity type, entity status, and compliance history)	CA-050-080	F	Ini

PD - Process Distributions

Defines the activities to process refunds, disbursements, check management, and exceptions.
- Process Refunds and Disbursements: Defines the activities to direct check refunds and disburse ACH direct deposits, bank transfers, and checks.
- Process Failed Refunds and Disbursements: Defines the activities to automatically post failed electronic disbursement items sent back to DOR from the bank or other sources.

#	Name	Description	Task Reference ID	Response Code	
		"Process Refunds and Disbursements" Functional Requirements			
PD-1	Refund Payment Channel	System shall support automated payment of refund to the taxpayer via taxpayer's desired channel (e.g., check, ACH)	PD-010-060	F	Re
PD-2	Refund Distribution - Summary View	System shall generate summary view of refund disbursements, including: total disbursements and disbursements by tax type and fund	PD-010-060	F	Re
PD-3	Refund Distribution - Transaction-level	System shall generate transaction-level data of refund disbursements (e.g., entity details, dollar amount, address, etc.)	PD-010-060	F	Re
PD-4	Refund Distribution - Throttling	System shall allow for limiting the number of disbursements by period	PD-010-060	F	Re
PD-5	Refund Distribution - Check Code	System shall support generation of distribution code for refund checks being claimed by DOR	PD-010-060	F	Re
PD-6	Refund Hold	System shall allow for manual refund holds based on business rules	PD-010-060	F	Re
PD-7	Refund Distribution - File Update	System shall allow for refund distribution file update based on business rules	PD-010-070	C	Th ty co
PD-8	ACH File	System shall send a detailed transaction file for ACH disbursements to the bank	PD-010-040	C	Th ty co
PD-9	Account Update	System shall load disbursement report details from Auditor of State including: status, check number, check warrant number, and distribution date	PD-010-040	C	Th ty co
		"Process Failed Refunds and Disbursements" Functional Requirements			
PD-10	Failed delivery reason codes	System shall support automated assignment of reason codes for failed refunds	PD-020-010	F	Re
PD-11	Update taxpayer account--returned check	System shall support automated refund status updates to taxpayer accounts based on failed refunds checks	PD-020-010	F	Re
2	Identify multiple attempts	System shall support automated flagging of taxpayer account due to multiple failed refunds based on business rules	PD-020-010	F	Re
PD-13	Load bank file	System shall support automated load of file from bank with failed refunds, including; name, account number, amount, transaction date	PD-020-020	C	Th ty co
PD-14	Bank reason codes	System shall support automated assignment of reason codes for failed refunds from bank	PD-020-020	F	Re
PD-15	Reconcile failed payments	System shall support automated update of taxpayer account with failed refund data	PD-020-020	F	Re
PD-16	Update taxpayer account--bank file	System shall allow manual updates to taxpayer accounts based on failed refunds using bank file reason codes	PD-020-020	F	Re
PD-17	Notification of check issuance	System shall generate automated notification that physical check rather than electronic payment was made	PD-020-020	F	Re
PD-18	Address verification	System shall display potential addresses for entity using external address databases (e.g., USPS, state agencies)	PD-020-030	F	Cu Ad Ge
PD-19	Quietus check status	System shall support automated indication if a disbursement check in quietus (pre-void) status	PD-020-060	F	Re

#	Name	Description	Task Reference ID	Response Code	
PD-20	Quietus check status--manual	System shall allow worker to manually indicate a disbursement check is in a quietus (pre-void) status	PD-020-060	F	Re
PD-21	Quietus check reason code	System shall allow worker to manually indicate a quietus check's reason code	PD-020-060	F	Re
PD-22	Verify quietus check	System shall update the status of a refund check from "quietus" to "void" based on external data (from Auditor of State)	PD-020-070	C	Th ty co
PD-23	Supervisor review	System shall support supervisor review for authorization to re-issue refund or disbursement	PD-020-070	F	Re
PD-24	Unclaimed fund status	System shall support unclaimed check status for failed refunds and disbursements based on business rules	PD-020-050	F	Re
PD-25	Notify Attorney General	System shall support automated notification of unclaimed check status to the Attorney General based on business rules	PD-020-050	F	Th co
PD-26	Update taxpayer account--entity response	System shall support manual updates to taxpayer accounts due to failed refunds	PD-020-080	F	Re

PP - Process Payments

Defines the activities to post payments by using payment lots, identify and process taxpayer payments returned by bank, clear open items against corresponding payments, and calculate appropriate penalty and interest on delinquent open items.
- Process and Post Authorized Payments: Defines the activities to process authorized ACH Debit and Credit Card Payments. Defines the activities to post taxpayer-initiated payments, including but not limited to wire transfers, checks, ACH debits, and credit card payments.
- Process Payment Exceptions: Defines the activities to route failed payments to a clarification worker for processing, for reasons such as a missing taxpayer account for the payment, insufficient taxpayer information (e.g. missing tax type, period, etc.), data inconsistency (e.g. having multiple taxpayers for single FID or SSN), or another reason (e.g. closed period).

#	Name	Description	Task Reference ID	Response Code	Des
		"Process and Post Authorized Payments" Functional Requirements			
PP-1	Allocate Payment	System shall allow for payments to be allocated across liabilities, tax types, and periods	PP-010-040	F	Revenue > F The Paymer information transaction received fro systems, loc are applied instructions The Paymer accept payn with electro processing, payment inf and apply p Payments a information reconciliatic
2	Notification of Payment	System shall support automated notification of payment posting by self service portal message/SMS/email (if applicable)	PP-010-040	P	The paymer Services wh be leverage this require
PP-3	Display Allocation	System shall display payment allocation in taxpayer profile (e.g. across liabilities, periods)	PP-010-040	F	Revenue > F
PP-4	Cash Receipt	System shall support automated generation of receipt of a payment	PP-010-040	F	Revenue > F
PP-5	ACH Method	System shall capture payment details of ACH payment (e.g. amount, date, DOR system of d	PP-010-040	F	Revenue > F
PP-6	ACH Vendors	System shall capture source of vendor for ACH payments	PP-010-040	F	Revenue > F
PP-7	Credit Card Fees	System shall display associated fees for payments by credit cards on entity account	PP-010-040	X	Out of Scop transmit cre
PP-8	Manual Cash Entry	System shall allow for the manual entry of payments (e.g. cash, check)	PP-010-040	F	Revenue > F
PP-9	Deposit File	System shall support automated creation of bank deposit files based on business rules	PP-010-080	F	Special Fun
PP-10	Deposit Slip	System shall support automated generation of daily cash summary based on business rules	PP-010-080	F	Special Fun
PP-11	Deposit Identification Number	System shall support automated generation of deposit identification number for deposits	PP-010-080	F	Special Fun
PP-12	Load High Volume File	System shall support automated loading of payment file from high volume processor (e.g.	PP-010-080	F	Revenue > F
PP-13	Post High Volume File Information	System shall support automated posting of payment details in high volume file to entity ac	PP-010-080	F	Revenue > F

#	Name	Description	Task Reference ID	Response Code	De
PP-14	Reconciliation--High Volume	System shall support automated reconciliation of high volume processor bank deposit info	PP-010-080	C	These requi cor tic driv a
PP-15	Capture Payment	System shall support automated receipt of new payments from designated third party credit card processors	PP-010-050	C	These requi configuratic driven by a This type of configuratic
PP-16	Pending Card Payment	System shall indicate payments made with credit card as pending in entity account prior to payment processing completion	PP-010-050	X	Out of Scop transmit cre
PP-17	Updated Payments	System shall support automated update to pending payment in entity account information following payment processing completion	PP-010-050	F	Revenue > F
PP-18	Payment Tracking	System shall support automated assignment of payment locator number to third party credit card payment	PP-010-050	C	These requi configuratic driven by a This type of configuratic
PP-19	Reconciliation - Balance	System shall support automated reconciliation of third party credit card and DOR data at the balance level based on business rules	PP-010-050	C	These requi configuratic driven by a This type of configuratic
PP-20	Reconciliation - Transaction	System shall support automated reconciliation of third party credit card and DOR data at the transaction level based on business rules	PP-010-050	C	These requi configuratic driven by a This type of configuratic
PP-21	Confirm Payment	System shall support automated notification of file receipt from third party credit card processor for errors	PP-010-050	C	These requi configuratic driven by a This type of configuratic
		"Process Payment Exceptions" Functional Requirements			
PP-22	Payment Allocation	System shall support the allocation of payments through DOR defined hierarchy based on business rules	PP-020-020	F	Revenue > F
PP-23	Search Unidentified Funds	System shall allow searching for unallocated funds by key data (e.g. date, amount, bank account number)	PP-020-070	F	Rev F
PP-24	Receive Exceptions	System shall support automated receipt of payment exception data from internal agencies (e.g., Treasurer of State, Office of Information Technology)	PP-020-080	C	These requi configuratic driven by a
PP-25	Load Exceptions	System shall support automated loading of payment exception data from internal agencies against entity data	PP-020-080	C	These requi configuratic driven by a
PP-26	Exception Reason Code	System shall assign return reason code in file to ITS reason for return	PP-020-080	C	These requi configuratic driven by a

MC - Manage Case Activities

Defines the activities to initiate, execute, and close cases escalated within DOR, including but not limited to appeals, audit, bankruptcy, collections, fraud, internal affairs, investigations, and taxpayer advocate.
- Select, Create, and Assign Case: Defines the activities to evaluate, select, create, and assign DOR cases for further investigation.
- Execute Case: Defines the activities to prepare, plan, and execute DOR cases.
- Close Case: Defines the activities to formally close a case after execution.

#	Name	Description	Task Reference ID	Response Code	
		"Select, Create, and Assign Case" Functional Requirements			
MC-1	Account Status	System shall allow employee to update account status for potential case review by a specific DOR business unit	MC-010-010	F	M M
MC-2	Case Criteria	System shall allow employee to generate potential case list based on criteria, including: program type, issue type, geography, dollar amount, entity type	MC-010-010	F	M M
MC-3	Manual Review of Potential Cases	System shall allow for the manual review of potential cases	MC-010-010	F	M M
MC-4	Manual Case Selection	System shall allow for the manual selection of a potential case	MC-010-010	F	M M
MC-5	Automated Case Selection	System shall support automated selection of a potential case based on business rules	MC-010-010	F	M M
MC-6	Potential Case Prioritization	System shall display potential cases by priority based on business rules	MC-010-010	F	M M
MC-7	Filtered Case List	System shall allow employee to filter case data based on fields, including: date, type, and age	MC-010-010	F	M M
MC-8	Historical Cases	System shall support automated checks for historical cases related to potential case data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address, established relationships	MC-010-020	F	M M
MC-9	Duplicative Cases	System shall support automated checks for duplicative cases via data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address	MC-010-020	F	M M
MC-10	Conflicting Cases	System shall support automated checks for conflicting cases via data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address	MC-010-020	F	M M
11	List Case History	System shall support automated, prioritized listing of potential related cases for review based on business rules	MC-010-020	F	M M
MC-12	Manual Case Update	System shall allow for the manual update of existing case file based on business rules	MC-010-030	F	M M
MC-13	Case Updates	System shall allow authorized users to update existing case criteria, including: extension of the case time period, addition of new liabilities	MC-010-030	F	M M
MC-14	Case Update Notifications	System shall notify existing case owners of updates to existing case criteria	MC-010-030	C	Th ty co re
MC-15	Automatic Case Creation	System shall support automated case creation based on business rules	MC-010-040	F	M M
MC-16	Manual Case Creation	System shall allow for the manual case creation based on business rules	MC-010-040	F	M M
MC-17	New Case Generation	System shall allow for the manual generation of a new case based on an existing case	MC-010-040	F	M M

#	Name	Description	Task Reference ID	Response Code	
MC-18	New Case Detail Inheritance	System shall allow for new case to inherit select case details from prior case based on business rules	MC-010-040	C	Th ty co re
MC-19	New Case Linking	System shall support automated linking of a new case to prior case	MC-010-040	P	Th
MC-20	Additional Case–Types	System shall allow additional case types to be defined	MC-010-040	F	M M
MC-21	Additional Case–Sub-Type	System shall allow additional case sub-types to be defined	MC-010-040	F	M M
MC-22	Case Creation--Ad Hoc	System shall allow for the manual creation of cases on an ad hoc basis	MC-010-040	F	M M
MC-23	Case Creation--Non-entity	System shall allow for the manual creation of cases not tied to an entity	MC-010-040	F	W
MC-24	Case Creation--Transaction	System shall allow for the manual creation of cases not tied to a transaction	MC-010-040	F	M M
MC-25	Case Creation--Filing Obligation	System shall allow for the manual creation of cases not tied to a filing obligation	MC-010-040	F	M M
MC-26	Case ID Creation	System shall support automated creation of a unique identification number upon creation of a case	MC-010-040	F	M M
MC-27	Case Attachments	System shall allow attachments to case files, including: documents, correspondence, and emails	MC-010-040	F	M M
MC-28	Link Cases	System shall allow employees to link cases with existing cases	MC-010-040	P	Th
MC-29	Case Type Identification	System shall allow for the manual addition of case type identifications	MC-010-040	F	M M
MC-30	Case Status Duration	System shall support automated tracking of case status duration	MC-010-040	F	M M
MC-31	Flagged Case Notifications	System shall support automated account flagging based on criteria, including: new case creation, outstanding liabilities, open audit, collections, account activity	MC-010-060	F	Cu In
MC-32	Automatic Account Flagging	System shall allow for manual account flagging based on criteria, including: new case creation, outstanding liabilities, open audit, collections, and account activity	MC-010-060	F	Cu In
MC-33	Business Event Notifications	System shall support automated push notifications to case owners for related business events based on business rules	MC-010-060	C	Th yi co re
MC-34	Correspondence Holds	System shall support automated account holds on entity correspondence based on business rules	MC-010-060	F	Cu In
MC-35	Collections Holds	System shall support automated account holds on collection activities based on business rules	MC-010-060	F	Cu In
MC-36	Offsets Holds	System shall support automated account holds on offsets based on business rules	MC-010-060	F	Cu In
MC-37	Penalty / Interest Holds	System shall support automated account holds on accumulation of penalty / interest based on business rules	MC-010-060	F	Cu In
MC-38	Case Update Holds	System shall support automated account holds on certain updates based on business rules	MC-010-060	F	Cu In
MC-39	Manual Account Holds	System shall allow for manual account holds based on user access rules	MC-010-060	F	Cu In
MC-40	Automatic Case Assignment	System shall support automated case assignment based on business rules	MC-010-070	F	W

#	Name	Description	Task Reference ID	Response Code	
[illegible]41	Manual Case Assignment	System shall allow for manual case assignment based on business rules	MC-010-070	F	M M:
MC-42	Request Case Assignment	System shall allow authorized users to request case assignments from case inventory	MC-010-070	F	W-
MC-43	Case Assignment Search	System shall allow authorized users to search assigned cases by predefined case elements	MC-010-070	F	M M:
MC-44	Priority Assignment	System shall support automated case assignment based on case priority business rules	MC-010-070	F	W-
MC-45	Capacity Assignment	System shall support automated case assignment based on capacity business rules	MC-010-070	F	W-
MC-46	Case Assignment--Experience Assignment	System shall support automated case assignment based on skills based business rules	MC-010-070	F	W-
MC-47	Case Assignment--Analyst Tracking	System shall support automated case assignment based on end-user availability by date (i.e. leave tracking)	MC-010-070	F	W-
MC-48	Case Assignment--Availability Assignment	System shall support automated case assignment based on analyst availability	MC-010-070	F	W-
		"Execute Case" Functional Requirements			
MC-49	Manual Case Review	System shall allow for manual review of case elements, including: case notes, case history, account history, financials	MC-020-010	F	M M:
MC-50	Manual Notes	System shall support the ability for employee to manually enter notes against a case	MC-020-010	F	M M:
MC-51	Case Status Designation	System shall support automated designation of case status (e.g., open, pending closure, pending reassignment)	MC-020-010	F	M M:
MC-52	Manual Case Status Change	System shall allow for manual status changes of case based on business rules	MC-020-010	F	M M.
MC-53	Push Notifications	System shall support automated push notifications to supervisor after case status change based on business rules	MC-020-010	C	Th ty co re
MC-54	Manual Reassignment	System shall allow for the manual reassignment of a case	MC-020-020	F	M M:
MC-55	Manual Closure	System shall allow for the manual closure of a case based on business rules	MC-020-020	F	M M:
MC-56	Prepopulated Execution Activities	System shall support automated generation of case execution activities based on business rules	MC-020-030	F	M M:
MC-57	Manual Execution Activities	System shall allow for the manual creation of case execution activities	MC-020-030	F	M M:
[illegible]58	Manual Case Updates	System shall allow for the manual updates to case execution activities	MC-020-030	F	M M:
MC-59	Activity Assignment	System shall allow for the manual assignment of selected case activities to another employee based on business rules	MC-020-030	F	M M:
MC-60	Posting Financials	System shall allow for employee to post financials based on business rules	MC-020-030	F	M M:
MC-61	Attachments	System shall allow for attachments to case files, including: filings, correspondence, agreements	MC-020-030	F	M M:
MC-62	Automated Case Updates	System shall support automated case updates from external systems, including: IPAC, PACER, and Protest Tracking	MC-020-030	C	Th ty co re Ge
MC-63	Automated Event Tracking	System shall support automated tracking of appeals events, including: conferences, hearings, filings, settlement requests	MC-020-030	F	Ge fu

#	Name	Description	Task Reference ID	Response Code	
MC-64	Scheduling	System shall support automated Outlook calendar invites for scheduled execution activities	MC-020-030	X	Ou ini
MC-65	Internal Report Generation	System shall support automated generation of internal reports, including: audit workpapers, collections workpapers	MC-020-030	F	Inf
MC-66	Workpaper Download	System shall allow for the manual download of case documentation, including: workpapers	MC-020-030	F	Th ar M ut Au ad
MC-67	Workpaper Upload	System shall allow for the manual upload of workpapers	MC-020-030	F	Th ar M ut Au ad
MC-68	Disconnected Mode - Case Profiles	System shall allow employees to operate in disconnected mode to update case profiles	MC-020-030	F	Th ar M ut Au ad
MC-69	Disconnected Mode - Execution	System shall allow employees to operate in disconnected mode to update execution activities	MC-020-030	F	Th ar M uti Au ad
MC-70	Disconnected Mode - Workpapers	System shall allow employees to operate in disconnected mode to update workpapers	MC-020-030	F	Th ar M uti Au id
MC-71	Financial Simulations	System shall support financial simulation of case execution to determine potential outcomes of actions	MC-020-030	P	Sir th ac de
MC-72	Updating Financial Simulations	System shall support automated update of financials based on uploaded workpapers	MC-020-030	F	Th ar M uti Au ad
MC-73	Disconnected Case Limitation	System shall have the ability to limit the number of disconnected cases based on performance metrics	MC-020-030	C	Th ar M ut Au ad

#	Name	Description	Task Reference ID	Response Code	
	74 Failed Document Upload	System shall support automated notifications for conflicts when disconnected case is synchronized with the system	MC-020-030	F	Th ar M uti Au ad
MC-75	Conflict Identification	System shall support automated conflict identification and resolution when documents fail to upload to the system	MC-020-030	F	Th ar M uti Au ad
MC-76	Tracking Execution Duration	System shall support automated duration tracking of collective case execution activities	MC-020-030	F	M M
MC-77	Tracking Activity Duration	System shall support automated duration tracking of each case execution activity	MC-020-030	F	M M
MC-78	Activity Status Update--Automated	System shall support automated status updates of case execution activities	MC-020-030	F	M M
MC-79	Activity Status Update--Manual	System shall allow for manual status updates of case execution activities based on business rules	MC-020-030	F	M M
MC-80	Case Activity Status Duration	System shall support automated tracking of case activity status duration	MC-020-030	F	M M
MC-81	Manual Time Tracking	System shall allow employees to manually track hours to a specific case	MC-020-030	F	Co
MC-82	Audit Logging	System shall support automated audit logging of cases	MC-020-030	F	Ge fu
MC-83	View Logging	System shall support automated view logging of cases	MC-020-030	F	Ge fu
MC-84	Time Stamp Access	System should support automated timestamping of cases once accessed	MC-020-030	F	Ge fu da m
MC-85	Time Stamp Departure	System should support automated timestamping of cases once exited	MC-020-030	F	Ge fu da m
MC-86	Expense Tracking	System shall allow employees to manually track expense details by case, including: expense type and amount	MC-020-030	F	Co
MC-87	Time Variance	System shall support automated report generation from budgeted time v. actual time recorded per case	MC-020-030	F	Inf
MC-88	Expense Variance	System shall support automated report generation from budgeted expense v. actual expense recorded per case	MC-020-030	F	Inf
MC-89	QA Case Review	System shall support automated random selection of cases for QA review	MC-020-030	F	W
MC-90	Case Duration Monitoring	System shall support automated monitoring of case duration	MC-020-030	F	W
MC-91	Aging Case Review	System shall support automated triggering of aging cases for supervisor review based on business rules	MC-020-030	C	Th ty co re
MC-92	Proposed Financials	System shall allow for the manual set up of proposed financials based on business rules	MC-020-040	F	M M

#	Name	Description	Task Reference ID	Response Code	
MC-93	Automated Case Review Assignment	System shall support automated assignment of case for review based on business rules	MC-020-050	F	W
MC-94	Manual Case Review Assignment	System shall support the manual assignment of case for review	MC-020-050	F	M M.
		"Close Case" Functional Requirements			
MC-95	Identify Open Items	System shall support automated checks for open case activities based on business rules	MC-030-010	F	W
MC-96	Manual Activity Closure	System shall allow activity status overrides from open to closed based on business rules	MC-030-020	F	M M.
MC-97	Open Activity Safeguard	System shall prevent case closure due to open case activities	MC-030-040	P	Th
MC-98	Attachment Safeguard	System shall prevent case closure due to missing attachments based on business rules	MC-030-040	P	Th
MC-99	Case Closure	System shall support automated case closure based on business rules	MC-030-040	F	M M.
MC-100	Case Closure Notification	System shall support automated real-time screen notification to case owner confirming case closure	MC-030-040	P	Th Ce ac sta
MC-101	Posting of Financials	System shall support automated posting of proposed financials during case closure	MC-030-040	F	M M.
MC-102	Supervisor Closure Notification	System shall support automated notifications of case closure to supervisor based on business rules	MC-030-040	C	Th ty co re
MC-103	Case Identification	System shall support search functionality based on specified case criteria	MC-030-040	F	M M.
MC-104	Select All Capability	System shall allow manual 'select all' capabilities for case search results for bulk case closure	MC-030-040	P	Fr cl pe
MC-105	Selection Capability	System shall allow manual selection of cases based on case search results for bulk case closure	MC-030-040	P	Fr cl pe
MC-106	Bulk Case Closure	System shall allow manual bulk closure of selected cases based on business rules	MC-030-040	P	Fr cl pe

#	Name	Description	Task Reference ID	Response Code

PS - Process Submissions

Defines the activities to process submission of tax returns, including loading returns into the system, verifying their accuracy, and processing the returns and exceptions.
- Front End Document Processing: Defines the activities to load and process physical and electronic documents into the system.
- Process Exceptions: Defines the activities to access exception work lists and resolve exceptions.
- Process Tax Return: Defines the activities to process tax returns, create exceptions for tax returns that need to be reviewed, and post tax assessments on taxpayer accounts.

#	Name	Description	Task Reference ID	Response Code	
		"Front End Document Processing" Functional Requirements			
PS-1	Electronic Processing	System shall process electronically filed returns and registrations	PS-010-030	F	Re Cu M: Pr:
PS-2	Internal Application Interfacing	System shall directly interface with other state internal applications (i.e. INBiz) to process returns	PS-010-030	C	Th ty co re
PS-3	CD ROM Data	System shall process return data in from CD-ROMs	PS-010-030	C	Th ty co re
PS-4	Manual Data Entry	System shall allow direct, manual data entry of specified form types	PS-010-030	F	Re
PS-5	Manual Voucher Generation	System shall allow manual voucher generation that includes required fields (e.g. tax type, penalty, interest)	PS-010-030	F	Re
PS-6	Manual Comment Creation	System shall allow employees to manually create comments against fields when reviewing forms	PS-010-030	P	Co fie fo
PS-7	Validation Following Manual Data Entry	System shall provide form validation during manual data entry	PS-010-030	F	Re
PS-8	File Listening	System shall support automated generation of an exception if a file is expected to be received, but is not received	PS-010-030	F	M: Pr
PS-9	Document Headers	System shall conduct automated quality checks of input document headers based on business rules	PS-010-030	F	M: Pr
PS-10	Document Content Validation	System shall support automated validation of data field entry based on business rules	PS-010-030	F	Re Th se ru be co co co co wi wi
PS-11	Return Math Data Check	System shall support automated validation that mathematical calculations are to confirm record is correct before processing	PS-010-030	F	Re

#	Name	Description	Task Reference ID	Response Code	
PS-12	Cross-Form Validation	System shall validate file data with other internal DOR data as available	PS-010-030	F	M Pr
PS-13	Attachments	System shall allow for attachment of electronic documents or images to return or registration information	PS-010-030	F	Re Sp M Pr
PS-14	Suspension Notification	System shall support automated email notifications when an exception occurs	PS-010-230	F	M Pr
PS-15	Full Suspension	System shall support automated document suspension of an entire record based on business rules	PS-010-230	F	Re Th se ru be co co co co wi wi
PS-16	Duplicate Recognition	System shall support automated recognition of duplicate records	PS-010-230	F	Re
PS-17	Duplicate Suspension	System shall support automated suspension of duplicate records for review	PS-010-230	F	Re
PS-18	Suspension Acknowledgement	System shall support automated contact with entity via desired channel regarding suspension of data or record based on business rules	PS-010-230	C	Th ty co re Th se ru be co co co co wi wi
PS-19	File Re-validation	System shall re-validate input files that have undergone manual intervention or adjustment	PS-010-040	F	M Pr
PS-20	Taxpayer Correspondence	System shall allow for input and storage of unstructured correspondence	PS-010-190	F	Ge fu
		"Process Exceptions" Functional Requirements			
PS-21	Single View	System shall display all relevant taxpayer data on a single page with executable links	PS-020-020	F	Ge fu
PS-22	Demographics Information	System shall display taxpayer demographic data	PS-020-020	F	Cu
PS-23	Correspondence Information	System shall display taxpayer correspondence history	PS-020-020	F	Ge fu
PS-24	Return Information	System shall display historical taxpayer return data	PS-020-020	F	Re
PS-25	Supplemental Return Information	System shall display taxpayer supplemental return data	PS-020-020	F	Re
PS-26	Original Return Data	System shall display taxpayer return file as submitted by taxpayer	PS-020-020	F	Re
PS-27	Taxpayer Account Balance	System shall display current taxpayer balance (if the taxpayer has a liability or credit)	PS-020-020	F	Re

#	Name	Description	Task Reference ID	Response Code	
PS-28	Taxpayer Account Financial Postings	System shall display historical taxpayer financial postings	PS-020-020	F	Re
PS-29	Associated Entities Information	System shall display information indicating if taxpayer is associated with another filing entity	PS-020-020	F	Cu
PS-30	Withholding Document Information	System shall display taxpayer withholding document(s)	PS-020-020	F	Re
PS-31	Suspense Correspondence Generation	System shall allow employee to generate correspondence from a Suspense Item requesting additional information from the taxpayer	PS-020-040	F	Cu
PS-32	Return Recalculation	System shall support automated recalculation of return based on receipt of an amended return	PS-020-040	F	Re Re wo ve Qu de au pe
PS-33	Audit/Legal Alerts	System shall support automated alerts to employees indicting audit action required for specific work items	PS-020-040	F	W
PS-34	Audit/Legal Flagging	System shall support automated flagging of legal and/or audit action required for specific work items	PS-020-040	F	W
PS-35	Suspense Item Action Tracking	System shall support automated tracking (history) of actions taken on a Suspense Item into a business user-viewable log	PS-020-060	F	Ge fu th ve
PS-36	Suspense Item Attachment	System shall allow additional documentation to be attached to Suspense Items	PS-020-060	F	W
PS-37	Suspense Item Time Out	System shall support automated re-queueing of work items to holding queues after a set period of time based on business rules	PS-020-060	F	W
PS-38	Suspense Item Escalation	System shall support automated escalation of work items from queues after a set period of time based on business rules	PS-020-060	F	W
PS-39	Closed Suspense Item Search	System shall allow users to search for closed Suspense Items	PS-020-060	F	W
PS-40	Suspense Dashboards	System shall allow users to create ad-hoc dashboards of Suspense Items based on pre-defined filters	PS-020-060	F	Inf
PS-41	Suspense Item Closure Reasons	System shall allow employees to select pre-defined reasons for closing a Suspense Item (closure codes)	PS-020-060	F	W
PS-42	Suspense Item Closure Notes	System shall allow employees to log closure notes on a Suspense Item	PS-020-060	F	W
PS-43	Change Return Field	System shall allow employees to update information through field level adjustment	PS-020-060	F	Re
PS-44	Return Field Notes	System shall allow employees to create notes against specific return fields	PS-020-060	P	Co fie fo
PS-45	Return Field Replacement	System shall allow employees to replace return fields	PS-020-060	F	Re
PS-46	Return Preview	System shall provide a side-by-side view of return line items if figures are altered, providing an 'as filed' and 'as computed' view for the employee	PS-020-060	F	Th th ve
PS-47	Return Track Changes	System shall support automated tracking of changes to return fields on a field-by-field and employee-by-employee basis, viewable as notes on the return	PS-020-060	F	Th th ve

#	Name	Description	Task Reference ID	Response Code	
PS-48	Return Change Log	System shall support automated tracking of changes to return fields on a field-by-field and employee-by-employee basis, viewable as a log	PS-020-060	F	Th th ve
PS-49	Return Revalidation	System shall re-validate return files that have undergone manual intervention or adjustment	PS-020-060	F	W
PS-50	Process Review Item--Assignment	System shall support automated assignment of Process Review Items based on business rules	PS-020-070	F	W
PS-51	Process Review Item--Prioritization	System shall support automated prioritization of Process Review Items within queue based on business rules	PS-020-070	F	W
PS-52	Process Review Item--Query	System shall allow users to query Process Review Items in queue	PS-020-070	F	W
PS-53	Process Review Item--Sort	System shall allow users to sort Process Review Items in queue	PS-020-070	F	W
PS-54	Process Review Item--Reassignment	System shall allow employees to assign Process Review Items from queue to themselves for processing	PS-020-070	F	W
PS-55	Taxpayer Process Review Item View	System shall show all Process Review Items related to a taxpayer or entity in a single view	PS-020-070	F	W
PS-56	Process Review Item--Notes	System shall allow employees to log release notes on a Process Review Item	PS-020-070	F	Re
PS-57	Process Review Item--Hold Release Codes	System shall allow employees to select pre-defined reasons for releasing the hold on a Process Review Item (release codes)	PS-020-070	F	Re
PS-58	Process Review Item--Escalation Codes	System shall allow employees to select pre-defined reasons for requesting further Process Review Item investigation (escalation codes)	PS-020-070	F	Re
PS-59	Process Review Item--Correspondence Generation	System shall allow employee to generate correspondence from a Process Review Item requesting additional information from the taxpayer	PS-020-080	F	Cu
PS-60	Process Review Item--Escalation Reassignment	System shall allow employees to re-assign Process Review Items to other employees based on business rules	PS-020-080	F	W
PS-61	Posting Reversal	System shall allow employee to reverse the financial posting from the return (bill or refund)	PS-020-080	F	Re
PS-62	Sending Exception Processible Correspondence	System shall support automated generation of correspondence informing taxpayer of a exception correction to their return	PS-020-090	F	Cu
PS-63	Sending Non-Processible Correspondence	System shall support automated generation of correspondence to taxpayer via their desired channel informing them their return could not be processed with an explanation of the issue	PS-020-100	C	Th ty co re
4	Update Return Status	System shall support automated update of a status such as received, accepted, or rejected, to the state of a return based on business rules	PS-020-110	F	Re
PS-65	Update Return Date	System shall support automated update of determination date a return could not be processed	PS-020-110	F	Re
PS-66	Update Return Workers	System shall support automated update of employees who determined a return could not be processed	PS-020-110	F	Re
		"Process Tax Return" Functional Requirements			
PS-67	Acknowledgement Status	System shall support automated assignment of a status such as received, accepted, or rejected, to the state of a return	PS-030-110	F	Re
PS-68	Queue Assignment	System shall support automated assignment of returns to work queues based on business rules	PS-030-170	F	W
PS-69	Queue Re-Assignment	System shall allow re-assignment of returns to work queues based on employee input	PS-030-170	F	W
PS-70	Exception Code Re-Assignment	System shall allow employees to manually assign pre-determined reason code(s) to returns	PS-030-170	F	Re

#	Name	Description	Task Reference ID	Response Code	
PS-71	Posting Balance Preview	System shall provide a side-by-side view of the taxpayer's account balance, providing a 'current' and 'after posting' view for the employee by tax period	PS-030-170	P	Pa Sic n re
PS-72	Posting Status Preview	System shall provide a side-by-side view of the taxpayer's refund or bill status, providing a 'current' and 'after posting' view for the employee	PS-030-170	P	Pa Sic thi re
PS-73	Posting Status ID	System shall support automated assignment of taxpayer status to the individual taxpayers (by ID), rather than to a filing household	PS-030-170	F	Re
PS-74	Automatic Return Resolve	System shall support automated re-prioritization of returns after a period of time to the auto-resolve queue based on time-lapse business rules	PS-030-170	P	Us iss en
PS-75	Holding Queue	System shall support automated reassignment of returns waiting for taxpayer correspondence to a holding queue based on business rules	PS-030-170	F	W
PS-76	Return Change Log	System shall support automated tracking (history) of actions taken on a return into a business user-viewable log	PS-030-170	F	Re Re do of
PS-77	Return Review Dashboard	System shall allow users to create ad-hoc dashboards of returns under review based on pre-defined filters	PS-030-170	F	Int
PS-78	Return Taxpayer Linking	System shall support automated linking of a return with a taxpayer account	PS-030-060	F	Re
PS-79	Return Taxpayer Re-Linking	System shall allow re-linking of returns to a taxpayer account based on employee input	PS-030-060	F	Re
PS-80	Multiple Return Posting	System shall support automated posting of multiple returns to the same tax period	PS-030-060	F	Re
PS-81	Return Type Assignment	System shall support automated detection of return type (original, duplicate, amended, informational, replacement)	PS-030-060	F	Re Re wo ye Qu de au pe
PS-82	Disbursement Tracking	System shall support automated tracking of postings that require funds to be dispersed to local jurisdictions	PS-030-060	F	Re
PS-83	Fund Commitment Tracking	System shall support automated tracking of the fund a posting commits to	PS-030-060	F	Re
PS-84	Posting Details--Tax Type	System shall post tax type data to taxpayer's account	PS-030-060	F	Re
PS-85	Posting Details--Form Type	System shall post form type to taxpayer's account	PS-030-060	F	Re
PS-86	Posting Details—Tax Period	System shall post tax period data to taxpayer's account	PS-030-060	F	Re
PS-87	Posting Details—Financial Effect	System shall post financial effect data to taxpayer's account	PS-030-060	F	Re
PS-88	Posting Adjustment Rule Hierarchy	System shall support an easily adjustable hierarchy of business rule execution prior to return posting to allow for events such as audit adjustments	PS-030-060	F	Th ar th
PS-89	Posting Adjustment	System shall support automated adjustments to a taxpayer's posting based on business events such as the receipt of an amended return or clerical error	PS-030-060	F	Re
PS-90	Financial Thresholds	System shall support threshold balancing for overpayments and underpayments that do not meet the minimums based on DOR business rules	PS-030-060	F	Re
PS-91	Taxpayer Return Review	System shall support automated flagging of taxpayer returns for review based on business rules	PS-030-060	F	Re

#	Name	Description	Task Reference ID	Response Code	
PS-92	Taxpayer Account Review	System shall support automated flagging of taxpayer accounts for review based on business rules	PS-030-060	F	W
PS-93	Review Item Quality Control	System shall support automated validation to ensure returns do not have an active exception item (review or suspension item) prior to creating financial postings	PS-030-060	F	Re
PS-94	Account Transfers	System shall allow the transfer of returns, refunds, and/or payments within and between taxpayer accounts	PS-030-060	F	Ge fu

WL - Worklist

Defines the activities to generate and maintain work items along with their attributes in task-specific queues for DOR employees.

#	Name	Description	Task Reference ID	Response Code	
		"Worklist" Functional Requirements			
WL-1	Worklist Item Creation	System shall support automated creation of worklist items	TR-010-050	F	Wo
WL-2	Reason Code	System shall support automated assignment of a suspense reason code to a suspended item	TR-010-050	F	Re
WL-3	Priority Level	System shall support automated assignment of a suspense priority level to a suspended item	TR-010-050	F	Wo
WL-4	Assignment by Priority Level	System shall support automated assignment of worklist items by priority based on business rules	TR-010-050	F	Wo
WL-5	Assignment by Capacity	System shall support automated assignment of worklist items by capacity based on business rules	TR-010-050	F	Wo
WL-6	Assignment by Availability	System shall support automated assignment of worklist items by available skills based on business rules	TR-010-050	F	Wo
WL-7	Assignment by Business Rules	System shall support automated assignment of worklist items based on business rules	TR-010-050	F	Wo
WL-8	Leave Tracking	System shall designate end-user availability by date (i.e., leave tracking)	TR-010-050	F	Wo Us ext
WL-9	Re-Assignment	System shall allow for re-assignment of worklist items based on business rules	TR-010-050	F	Wo
WL-10	Delegation	System shall allow for manual delegation of worklist items	TR-010-050	F	Wo
WL-11	Automated Worklist Item Resolution	System shall support automated resolution of open items based on business rules and additional information received	TR-010-050	C	Th ty co rec
WL-12	Follow-Up Worklist Items	System shall supported automated creation of worklist items for follow-up activities, including outbound phone calls	TR-010-060	F	Wo
WL-13	Wait Step	System shall perform a wait step after distribution of correspondence	TR-010-060	F	Wo
WL-14	Immediate Request for Information	System shall make immediate request for information during online registration based on business rules	TR-010-060	F	W
WL-15	Exception Codes	System shall assign an exception reason code to exception items	PS-010-230	F	Wo
WL-16	Suspension Routing	System shall support automated routing of suspense items to work queues based on reason codes	PS-020-040	F	Wo
WL-17	Suspension Alerts	System shall support automated issuance of notifications to employees when a suspense item is placed in a queue	PS-020-040	P	Qu su wo Wo me su on
WL-18	Multiple Owners	System shall allow multiple employees to own a suspense item simultaneously	PS-020-040	X	Ou
WL-19	Suspense Queue Query	System shall allow users to search suspense items in queue	PS-020-040	F	Wo
WL-20	Suspense Queue Sort	System shall allow users to sort suspense items in queue	PS-020-040	F	Wo
WL-21	Return Review Time Tracking	System shall support automated time tracking for return work items spent in queues, by queue	PS-030-170	F	Wo

#	Name	Description	Task Reference ID	Response Code	
		"Worklist" Functional Requirements			
22	Return Review Time	System shall allow employees to see the time a return work item has spent in queue	PS-030-170	F	Wo
WL-23	Multiple Work Queues	System shall support multiple queues for different types of work items (fraud, suspensions, etc.)	PS-030-170	F	Wo
WL-24	Work Queue Views	System shall allow for users to view and select specific information from all work queues based on business rules	PS-030-170	F	Wo
WL-25	Multi-factor Weighting	System shall use a multi-factor weighting system to assess prioritization of work item queue based on business rules	AM-070-060	F	Wo
WL-26	Work Item Notes	System shall allow for notes to be included against work items	AM-070-060	F	Wo
WL-27	Work Item Progression	System shall track work item progression through the system	AM-070-060	F	Wo
WL-28	Escalated Exceptions Worklist	System shall allocate exceptions to a worklist for escalation	PS-010-230	F	Wo
WL-29	Grouped Exceptions Worklist	System shall allocate exceptions to a worklist for grouping	PS-010-230	F	Wo
WL-30	Form Flagging	System shall allocate exception items to manual work queues based on the exception reasons	PS-010-040	F	Wo
WL-31	Suspense Queue Batch Assignment	System shall allow employees to assign multiple Suspense Items from a queue to themselves for processing	PS-020-040	F	Wo
WL-32	Suspense Queue Delete	System shall allow employees to delete Suspense Items from work queue	PS-020-040	P	De sul
WL-33	Time-Based Closure	System shall enforce time-based closure rules for work items based on business rules	AM-070-060	C	Th typ co rec

Technical Proposal

RFP 17-082 , Indiana Department of Revenue Modernization Project

Attachment F3 - Technical Proposal - Project Related Requirement Template

Instructions for this Workbook

General Requirements Instructions

The light blue shaded cells indicate information Vendors are expected to provide. The description cells should be limited
Additional information can be provided beyond what is included in the worksheet descriptions or answers. The additiona
referenced in the specific worksheet line item description.
Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be fulfilled by a future s
Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires to be fulfilled by
Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coc
development. Configuration should be accomplished by functional resources without the need for programming experie
Customization: The modification or extension of software through coding or code like development to meet the specific
customization must be fully supported by the Vendor as part of the solution.
Vendor: The primary implementer who will be responsible for their products and services as well as Vendor-Partner pro
Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DO
Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DO

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner products and service
C = Requirement is fully met by currently available Third-Party products and services, or through current Customization.
N = Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solutio
requirement now, however, the Vendor commits to having the capability to meet the appropriate implementation timeli
P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products and services.
X = Requirement not met and not included in the proposal.

Brief Project Related Requirements Worksheet Descriptions (Tabs)

Project Related Information: DOR requirements for certain project related methodologies including but not limited to, te
management. Open ended questions giving vendors the opportunity to describe approach, impact to overall project and

Project Management: Requirements of the vendor to follow a structured delivery methodology that including but not lim
management, issue management, and budget and scope management.
Organizational Change Management: DOR requirements for transformational change management.
Training: DOR requirements for preparing the organization to fully leverage the new capabilities of the ITS.
Testing: DOR requirements to confirm that the solution is functioning as designed ahead of a production release. Includi
testing, system testing, integration testing, conversion testing, regression testing and user acceptance.
Data Conversion: DOR requirements for the successful conversion of historical data to the new ITS.
Analytics: DOR requirements to enable agency goals including but not limited to, risk based processing, scoring, data driv
management, agency dashboards, interactive reports, behavior modelling and predictive modelling.
Project Team Experience: DOR requirements pertaining to the experience and qualifications of key staff in the delivery of
Maintenance, Support & Upgrades: DOR requirements related to software support, defect resolution, on-site support, on
changes, and upgrades.
Internal Controls: DOR requirements to establish proven internal controls including but not limited to, automated reconc
monitoring, user access and control, and segregation of duties.
Administrative: DOR requirements for the administration of the ITS.

	Please Complete Blue Shaded Regio
	Description or Attachment Reference - If more than 300 w

2.3.2.1 Project Management	Enter your response below. Please indicate if attachments are included.
The DOR ITS replacement and Modernization project is the largest system related project on the Governor's agenda and represents a significant investment for the State of Indiana. As with any complex, long term, transformational project, Indiana will require the Vendor to follow a structured delivery methodology that includes project initiation, project organization, budget and scope management, cost and schedule management, change control, quality assurance, stakeholder communication, issues management, risk management and status reporting. While Indiana does not intend to dictate a methodology, we do expect that the Vendor will specify a methodology and align to that methodology during the execution of the project. Please provide the following documents with your proposal: 1) Overview of your approach to project management methodology, how your methodology incorporates the items listed above, and how your approach impacts the cost, risk, and timelines of the solution delivery. 2) Vendor's strategy to control additional change related costs throughout implementation. 3) Samples from a project of similar size, scope and complexity of the following documents: - Project Schedule (See template in Attachment G2) - Project Management Plan - Status Report - Risk Tracking Report - Issue Tracking Report - Action Items Tracking Report - Roles and Responsibilities Matrix - Escalation Process Documents 4) A response to each requirement with details on how the Vendor will deliver the requirement. 5) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation.	Please see attached document "F3 - 2.3.2.1 Project Management" for our r

2.3.2.2 Organizational Change Management	Enter your response below. Please indicate if attachments are included.

The primary cause of failure for large transformation projects can be traced to a lack of active change management. Change management includes communication and messaging, change assessment, organization or operational redesign, and organizational go-live support. Is change management delivered through the Vendor organization or do you typically leverage partners or sub-contractors? Please provide examples of how you partnered with previous clients for organizational change managment activities including, but not limited to, 1) Overview of your change management approach. 2) Draft Change Management Plan for this project that at a minimum contains: - Behaviors and Change Readiness Approach - Stakeholder Engagement Plan including our activities and frequency - Business Process Reengineering Approach - Transition Management Plan 3) Draft Communication Plan that at a minimum contains: - Audience Analysis - Communication Method/Channel Inventory - Message and Timing Analysis - Communication Strategy 4) Draft Stakeholder Analysis Plan that at a minimum contains: - Categorization of relevant stakeholders by their support for a change (e.g., "Supporters", "Blockers", etc.) and identifies the change's impact on each group - Capture of data on communication with key stakeholders including frequency, preferred channel, and current challenges 5) A response to each requirement with details on how the Vendor will deliver the requirement. 6) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please see attached document "F3 - 2.3.2.2 Organizational Change Manage

2.3.2.3 IV&V	Enter your response below. Please indicate if attachments are included.
The State of Indiana mandates and DOR strongly supports the need for IV&V services for projects of this size and complexity. Please provide your approach to partnering with IV&V vendors. Some examples include how you respond to findings, compliance with best practices and compliance with IV&V practices.	Please see attached document "F3 - 2.3.2.3 IV&V" for our response.

2.3.2.4 Training	Enter your response below. Please indicate if attachments are included.

Training refers to the broader needs around preparing the organization to fully leverage the new capabilities of the ITS. This includes performing skills assessment, identifying gaps, and developing targeted training. The actual execution of training may include presentations and demonstrations, hands on simulations, virtual training, and/or instructor led training (either Vendor delivered or "train the trainer"). Please describe your approach to confirming that the DOR organization is properly trained to leverage the capabilities of the ITS including specific tools or techniques. Please provide the following documents with your proposal: 1) Overview of Vendor's training approach for internal DOR end-users, external users of the ITS, and DOR technical staff. 2) A sample training plan covering end-user (internal and external) training requirements including the following: - Training methods for both internal DOR end-users as well as external stakeholders - Sample curriculum and length of trainings - Scope of training - Training delivery (i.e. trainer identification, logistics, training administration, and schedules) - Training materials - Assessment methodology and plan for re-training of DOR identified users who do not show the proficiency to perform their job in the new ITS solution 3) Provide a sample of the vendor's Technical Training Plan that at a minimum contains: - Training methods - List of required skills and proficiency level by technical position - Sample Technical Staff Skills Assessment - Proposed training courses by role 4) Sample training materials to be used for end-user training including Training Manuals, Job Aids, and Quick Reference Guides 5) Describe the standard methodology for knowledge transfer including objective measures to determine whether there has been sufficient knowledge transfer. 6) Provide a sample of the Vendor's Knowledge Transfer Plan that at a minimum contains: - Plan by role that shows what skills and knowledge will be transferred - Groups that need knowledge transfer and goals for each group - Strategy for knowledge check-ins to confirm progress of knowledge transfer is on track - Objective measures to determine whether there has been sufficient knowledge transfer 7) A response to each requirement with details on how the Vendor will deliver the requirement. 8) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation	Please see attached document "F3 - 2.3.2.4 Training" for our response.

2.3.2.5 Testing	Enter your response below. Please indicate if attachments are included.

DOR will need to confirm that the solution is functioning as designed ahead of a production release. The expectation is that the Vendor will perform multiple rounds of testing and system confirmation throughout the project. This includes unit testing, system testing, integration testing, conversion testing, regression testing and user acceptance testing. The concept of testing would extend to training and dry runs of conversion and go-live activities. Please provide the following documents with your proposal: 1) Overview of Vendor's testing approach including any tools or techniques leveraged. 2) Overview of DOR testing responsibilities. 2) A sample our testing plan that at minimum includes test scripts, test cases, and milestones which will be tied to payment schedule. 3) Describe your standard methodology to developing user test scripts and test cases. 4) A response to each requirement with details on how the Vendor will deliver the requirement. 5) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase	Please see attached document "F3 - 2.3.2.5 Testing" for our response.

2.3.2.6 Data Conversion	Enter your response below. Please indicate if attachments are included.
The agency understands data conversion will be a major challenge for this project. Please describe your approach for this critically important initiative including but not limited to, a Data Conversion Plan, Data Conversion Approaches, Data Conversion Alternatives, Data Conversion Methodology and your view of best practices concerning data cleansing, the amount of historical data to be converted and data archiving. Also please describe any tools, techniques or processes you will utilize to streamline data conversion activities. Specifically, DOR is looking for a Data Conversion Plan of the steps needed to convert the data for the new system and a definition of roles and responsibilities for the conversion processes.	Please see attached document "F3 - 2.3.2.6 Data Conversion" our response.

2.3.2.7 Analytics	Enter your response below. Please indicate if attachments are included.

The agency has a desire to shift toward risk based processing, scoring, data driven decision making and management, agency dashboards, interactive reports, behavior modelling, and predictive modelling. The intent is to leverage analytics across audit, collections, customer service, returns processing and all operational areas within the agency. We expect that proposed solutions would include integration to standardize federal data sources and include discovery capability for non-filers and under reporters. Please provide an overview of how your solution leverages analytics across operational areas. Include any tools or techniques that are included within your solution and how DOR will maintain these solutions post implementation. Please provide the following documents with your proposal: 1) A description of how the Vendor's ITS solution collects, correlates, manipulates, stores, and presents data. In addition, the Vendor should provide sample standard reports that would support this functionality 2) Vendor must provide a list of proposed analytical and reporting tools (e.g. Master Data Management, ETL, Visualization, etc.) used to support the proposed solution's data, reporting, and analytic capabilities. - Describe how each tool is utilized to meet DOR's reporting and analytics needs 3) Vendor must provide a list (with short descriptions) of all standard reports to be part of the proposed solutions. DOR will review these reports as part of the evaluation and determine whether the standard reports meet DOR reporting needs or whether additional reports are needed. 4) Provide samples of scorecards the proposed ITS solution uses for managerial reviews 5) A response to each requirement with details on how the Vendor will deliver the requirement. 6) Describe any differentiators of the Vendor's proposed reporting and analytics solutions as well as describe any additional features not covered as part of this RFP. 7) Describe how the vendor's proposed solution will leverage predictive analytics to drive business insight for future operations	Please see attached document "F3 - 2.3.2.7 Analytics" our response.

2.3.2.8 Project Team Experience	Enter your response below. Please indicate if attachments are included.
The experience of the project team is required to appropriately identify and resolve project risks and issues, actively monitor the ongoing implementation, and confirm that DOR is able to appropriately leverage the capabilities of the COTS solution. DOR reserves the right to approve any replacement or project manager or project lead. Please provide the following documents with your proposal: 1) Names and relevant qualifications of all team members in key roles including their role (i.e. Tax Project Leader, Configuration Resource, etc), percentage of their time that will be devoted to this project plus date range each of them will be onsite at DOR during the project. The key roles should be a subset of roles identified in the Staffing Plan Template. The qualifications should highlight years of experience, number of previous similar states projects, professional certifications, and other areas the vendor deems relevant to demonstrating that the appropriate team is in place for a successful implementation. Please provide an organizational chart consistent with staffing and project plan and a rate chart for all roles and responsibilities represented in the staffing plan. 2) References from other state tax agencies for the above team members, where the proposed team members directed a project of similar size, scope and complexity. 3) A response to each requirement wtih details on how the Vendor will deliver the requirement.	Please see attached document "F3 - 2.3.2.8 Project Team Experience" for o

2.3.2.9 Maintenance, Support and Upgrades	Enter your response below. Please indicate if attachments are included.

DOR intends that the selected ITS will be a multi-generational solution. Ongoing maintenance, support and upgrade services are key areas of focus both internally within the agency and externally amongst stakeholders. DOR intends to specify standards related to software maintenance, resolution of defects, onsite support, ongoing annual and legislative changes, and upgrades. This RFP requires maintenance, support and upgrade proposals and costs for a 10 year period and will include caps on percentage increases allowable on a bi-annual basis (to align with Indiana's budgeting process). Please provide the following documents with your proposal: 1) An overview of the maintenance, support, upgrade models available to DOR including those proposed in your proposal. 2) A response to each requirement with details on how the Vendor will deliver the requirement. 3) Any additional information not covered as part of this RFP that the Vendor deems relevant to increase the likelihood of a successful implementation.	Please see attached document "F3 - 2.3.2.9 Maintenance, Support and Upg

2.3.2.10 Internal Controls	Enter your response below. Please indicate if attachments are included.
DOR expects that the ITS solution will include an established and proven internal control approach that includes automated reconciliation, business process monitoring, user access and control, and segregation of duties. This will include full audit logging, review, and monitoring capabilities. DOR expects the Vendor to provide leading practices and guidance in the following areas: Control Environment, Risk Assessment, Information and Communication, Monitoring Activities, and Control Activities including at a minimum Segregation of Duties, System Access and Control, Transactional Thresholds, Anomaly Detection, and Reconciliation. Please provide the following documents with your proposal: 1) An overview of your approach to internal controls and specific examples of how that approach is implemented within your solution for each of the items list above. 2) The Vendor's proposal should describe the features of the Vendor's proposed solution that would support and enhance DOR's internal control objectives. 3) A response to each requirement with details on how the Vendor will deliver the requirement. 4) Vendor shall provide their approach to internal controls and any additional tasks or areas not covered as part of this RFP included in its proposed ITS solution. Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please see attached document "F3 - 2.3.2.10 Internal Controls" for our resp

2.3.2.11 Administrative Tools	Enter your response below. Please indicate if attachments are included.

Administration of the Integrated Tax System (ITS) is central to the overall effectiveness of the new system. The vendor solution should demonstrate an understanding of the administrative needs of DOR through: 1) ease of administration, 2) configurability, and 3) flexibility. DOR expects the administrative features of the ITS to empower, rather inhibit the administration of the system. The administrative tools should be easy to use and should not require outside technologists to make changes. DOR expects that the administrative tools allow for enhanced configurability. Please provide the following documents with your proposal: 1) Describe the administrative features of the ITS, specifying how the proposed solution would not only support current functionality, but also enhance administrative tools to meet DOR's needs. The administrative features of the proposed ITS should include tools that are intuitive and configurable. 2) A response to each requirement with details on how the vendor will deliver the requirement. Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please see attached document "F3 - 2.3.2.11 Administrative Tools" for our r

2.3.2.12 On-Site Facilities	Enter your response below. Please indicate if attachments are included.
Please provide a list and description of on-site facilities requirements that will be needed for the Vendor, Vendor-Partner and Third-Party team members in the scope of your ITS implementation.	Please see attached document "F3 - 2.3.2.12 On-Site Facilities" for our resp

2.3.2.13 Other Capabilities	Enter your response below. Please indicate if attachments are included.
Please provide a list and description of innovative capabilities that we be included in the scope of your ITS implementation.	Please see attached document "F3 - 2.3.2.13 Other Capabilities " for our res

2.3.2.14 Other Requirements	Enter your response below. Please indicate if attachments are included.
Please provide a list and description of requirements not listed in this RFP that will be included in the scope of your ITS implementation.	Please see attached document "F3 - 2.3.2.14 Other Requirements " for our

1. Project Management

#	Name	Description	Response Code	Description/Attachment (< 300 words)
1.01	DOR onboarding requirements	All Vendor personnel involved in this project shall follow DOR security onboarding requirements including a Indiana Tax Liability Clearance	F	FAST understands and will comply with this requirement.
1.02	Communication plan	Provide type, frequency, recommended attendees, expectation-, Vendor roles and responsibilities and expected DOR roles and responsibilities	F	Please see Tab B.3.b OCM for our approach to the Communication Plans.
1.03	Document samples	Vendor shall provide samples from a project of similar size, scope and complexity, of the following documents: - Comparable project schedule - Project management plan - Status report - Risk tracking report - Issue tracking report - Action items tracking report - Roles and responsibilities (RACI matrix) - Escalation process document	P	Project status information is available in FAST Workbench. Reports for parties outside of created using FAST tools, such as FAST Workbench. Information typically contained in th the documents requested in this line item. Tab G. Additional Documents contains sample and reports that highlight FAST's Workbench.
1.04	Steering Committee	DOR is the owner/facilitator of the Steering Committee; the Vendor shall provide support for all meetings, request and provide a senior staff member to sit on the Steering Committee as an active and accountable member	F	FAST understands and will comply with this requirement.
1.05	Risk and issue monitoring/tracking	Vendor shall perform risk and issue management	F	FAST understands and will comply with this requirement.
1.06	Issue communication	Vendor shall report weekly on all identified risks, issues and open action items.	F	FAST understands and will comply with this requirement.
1.07	Status reporting	Vendor shall submit a weekly status report detailing accomplishments, current & upcoming activities, milestones, issues and risks.	F	FAST understands and will comply with this requirement.
1.08	Document repository	Vendor shall utilize DOR's document repository to store all project related documents. The current repository is SharePoint. Vendor and DOR shall agree on a document management plan to include, but not limited to, versioning, audience and mediums of communication.	F	FAST understands and will comply with this requirement.
1.09	Project forms and templates	All project forms and templates used by Vendor's project manager shall be approved by DOR. DOR may require Vendor to use internal agency project forms and templates.	F	FAST understands and will comply with this requirement.
1.10	Meeting facilitation	Vendor shall facilitate meetings as required, take & timely distribute meeting minutes, notes and action items.	F	FAST understands and will comply with this requirement.
1.11	Project management plan	Vendor's project manager shall create and review the project management plan with DOR PM and project team	F	FAST understands and will comply with this requirement.
1.12	Project schedule	Vendor's project manager shall create, maintain and update a project schedule. The project schedule should contain a work break down structure for all project phases/ gates, with a deployment plan, communication plan, detailed implementation plan, training schedule, payment milestones and any other items deemed necessary by DOR for successful project completion and implementation.	F	FAST Workbench provides functions for creating, organizing, and managing the Gantt-s project through the tracking of project tasks, assignment of resources, and identification Workbench displays a calendar-based project schedule in a visual and interactive layout fo Tasks and subtasks are organized into groups and projects and can be associated with a information such as start and end dates, task assignments/owners, attributes, notes, att status. Multiple projects can be linked together (Training, Testing, Change Management, display an accurate integrated schedule of the overall project. Tab G. Additional Documen documentation and reports that highlight FAST's Workbench.
1.13	Implementation plan	Vendor's detailed implementation plan shall describe impact, timing and fallback options.	F	FAST understands and will comply with this requirement.
1.14	Project schedule updates	Vendor's project manager shall provide an updated project schedule on a weekly basis.	F	FAST understands and will comply with this requirement.
1.15	Project management methodology	Vendor shall follow the methodology agreed upon by DOR and vendor	F	FAST proposes using the FAST Implementation Methodology, which was designed for the our COTS software. After discussions and on-site demonstrations with Indiana DOR, we a DOR will agree to our methodology that will guide the activities and deliverables necessa deliver GenTax for DOR.
1.16	Project / Phase close out summary	Vendor's project manager shall provide a closeout summary, including lessons learned, for each project phase which must be agreed to by DOR.	F	FAST understands and will comply with this requirement.
1.17	IV&V	At DOR's discretion, Vendor shall engage and participate in all appropriate activities associated with IV&V.	P	Please see Tab B.3.c IV&V for our approach to IV&V.
1.18	Project management experience	Vendor's project manager shall have at least five years experience as a senior project manager leading projects with a similar size and scope to DOR requirements as stated in the	F	FAST understands and will comply with this requirement.
1.19	Project manager approval	DOR shall approve Vendor's lead project manager.	F	FAST understands and will comply with this requirement.
1.20	Project manager replacement	Vendor shall not replace or substitute the project manager without prior written approval from DOR. The vendor shall replace vendor's project manager at any time during the project at the request of DOR.	F	FAST understands and will comply with this requirement.
1.21	Project team	Vendor's project team shall be full-time resources dedicated to implementing the requirements of this RFP.	F	FAST understands and will comply with this requirement.
1.22	Project team replacement	At the request of DOR, Vendor shall replace any member of the project team, including sub-contractors, within a timeframe that does not negatively affect the project. DOR must approve in writing, the replacement of the Vendor's project team.	F	FAST understands and will comply with this requirement.
1.23	Reporting structure	Vendor's project manager shall report directly to DOR's Chief Modernization Officer, Project Director and Executive Sponsors	F	FAST understands and will comply with this requirement.
1.24	Vendor activities	Vendor's project manager shall directly manage all vendor activities on the project	F	FAST understands and will comply with this requirement.
1.25	Vendor subcontractors	Vendor's subcontractors shall be seamlessly managed by the vendor	F	FAST understands and will comply with this requirement.
1.26	Requirements Management	Vendor shall provide a requirements management approach, utilizing a requirements management tool to ensure visibility, collaboration and traceability. This approach should include at a minimum: - Process for Requirements Elaboration and Validation - Process for Changes and Revisions to requirements - Roles and responsibilities - Requirements Processes and Tools - Requirements traceability matrix with bi-directional traceability through user acceptance testing, including but not limited to: functional and technical specifications, system test scripts and user acceptance test scripts. Vendor shall provide the approach tools and processes to support the storage, classification, control, change log, mapping and documentation of all functional, non-functional and technical requirements. Vendor and DOR shall agree to above approach, processes and tools prior to initiation.	F	FAST will provide a high-level classification and resource plan for roles and responsibilities Matrix B and a standard deliverable in the FAST Implementation Methodol Workbench to track definitions and link them to the development tasks > Tab G. Additional Documents contains sample documentation and reports
1.27	Changes to project scope, schedule or budget	DOR is responsible for authorizing and approving changes to the project through the agreed upon change management process	F	FAST understands and will comply with this requirement.
1.28	Change requests	Vendor shall address change requests according to the agreed upon change management process.	F	FAST understands and will comply with this requirement.
1.29	Cost Management Plan	Vendor shall work with DOR to establish an agreed upon budget reporting method and timeline that communicates actual costs and variances to baseline plan	X	Our response is based on a fixed-cost bid. Our payments are not the type based on the num activities we have on the project.
1.30	Interface Design Document	Vendor shall provide an Interface Design Document containing information that includes, but is not limited to: Additional Requirements- Glossary- Background- Business Process- Data Transfer and Transaction Details- Logical Flow (s)- Communication Methods- Job Description- Triggering Mechanism- Task Locations- File locations- Technical and Security Details- Database Impacts- Data Maintenance- Data Mapping- Message Formatting- Data Types- Interface Processing Time Requirements- Exception Handling and Risk Mitigation	F	FAST will provide Interface Design Documents. Our document typically includes data such description, file type, frequency, partner agency information, reformatting, project, data fl
1.31	Design Specification Document	Vendor shall provide a COTS based Design Specification Document which contains, but is not limited to: Identifies - Block Testing Design- Integration Plan- Reporting- The data tables of each block or zone of the form (vertical) and tables relevant for validations or lookups (horizontal). Screen Design- Navigation Logic- Report Design- Data Design- Table-Data Sources- SQL Design- Performance Consideration- Behavioral Design that includes: Function/Operation Design- and Business Rule Design- Interface Design that includes Service Design- and external interface design- Restart Strategy, Crash Recovery and Security- Database Design- Archiving- Installation Considerations or other COTS appropriate design elements.	P	FAST will deliver Deliverables items that define the implementation items per rollout to be Workbench and used as reference material to project staff.
1.32	Delivery Expectation Document (DED)	Vendor shall provide a Delivery Expectation Document for every deliverable which is agreed upon prior to delivery	X	Delivery Expectation Documents are not part of FAST's methodology. Deliverables are list RFP response
1.33	Software Development Life Cycle (SDLC)	Due to potential for: enhancement and significant configurations, Vendor shall supply detail for all appropriate project tasks, including, but not limited to: Project Management Governance, Release Plan and Solutions Approach, Organizational Change & Training, Requirements Management, Business Process Management, Business Rules Management, Testing/Go Live, Interface/Integration Management, Approach to Deliverables, Data Conversion, Operations and Management, Turnover, Security and Privacy, Staffing, Project Operations, Functional Requirements, and Non-Functional Requirements.	F	Traditional SDLC is not a standard deliverable in the FAST Implementation Methodology. documentation and tracking for the listed items in the FAST Workbench.

2. Org Change Management

#	Name	Description	Response Code	Descriptio
2.01	Organizational Change Management	Vendor shall support and partner with DOR to establish and execute an Organizational Change Management (OCM) plan. Please see Attachment F - Project Related Requirements Detail for additional information about the OCM approach	I	FAST understands and will comply with this r documentation and reports that highlights Fa
2.02	Gap Analysis	Vendor shall support assessing gaps between current state and end state vision, including the degree of change necessary to reach vision	F	FAST understands and will comply with this r
2.03	Stakeholder Identification	Vendor shall support DOR in identifying stakeholders impacted by the implementation	F	FAST understands and will comply with this r
2.04	Change Readiness	Vendor shall support conducting a change readiness assessment for both internal and external stakeholders	F	FAST understands and will comply with this r
2.05	Resistance to Change	Vendor shall support determining group(s) resistant to change and develop action plan(s) to create acceptance	F	FAST understands and will comply with this r
2.06	Stakeholder Engagement Content	Vendor shall support determining content of messaging	F	FAST understands and will comply with this r
2.07	Stakeholder Engagement Method	Vendor shall support determining methods of engaging stakeholders	F	FAST understands and will comply with this r
2.08	Stakeholder Engagement Action Items	Vendor shall support assignment and ownership of action items regarding engagement effectiveness	F	FAST understands and will comply with this r
2.09	Baseline	Vendor shall support development of a baseline of change readiness to which progress will be measured against	P	Successful implementations require a close p provide support and guidance for OCM base effort.
2.10	Progress and Outcomes	Vendor shall support tracking of change readiness progress across stakeholder groups and development of desired outcomes	P	Successful implementations require a close p provide support and guidance for OCM base effort.
2.11	Strategy Alignment	Vendor shall continually assess and align stakeholder engagement and communications back to the plan	P	Successful implementations require a close p provide support and guidance for OCM base effort.
2.12	Milestone Tracking	Vendor shall continually track assigned milestones to confirm they are being met	F	FAST Workbench provides functions for creat project through the tracking of project tasks, can be maintained and tracked using the Fas
2.13	Position Definition Approach	Vendor shall develop an approach that identifies the method in which necessary skills and positions are validated for the future state of the organization	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.14	Roles and Responsibilities	Vendor shall develop and identify internal roles and responsibilities around the organization's future state	P	Successful implementations require a close p provide support and guidance for OCM base effort
2.15	Position Definition - Future State	Vendor shall support the definition of future state positions	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.16	SPD Rules of Engagement	Vendor shall support development of DOR Job Activity Questions (JAQ) in adherence to the State Personnel Department's rules of engagement	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.17	JAQ	Vendor shall support updating current DOR Job Activity Questions (JAQ)	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.18	Skill Determination	Vendor shall identify trainable skills to be assumed by employees	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.19	Background Assessment	Vendor shall determine the appropriate skill and experience levels required for specific roles in the new JDS	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.20	Staffing	Vendor shall determine the number of employees necessary for given tasks	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.21	Position Mapping	Vendor shall support the development of a position mapping of current tasks and skills to future positions	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.22	Position Validation	Vendor shall support the validation of the position mapping with DOR leadership and Human Resources and the State Personnel Department.	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.23	Position Descriptions	Vendor shall support in developing and validating position descriptions with DOR Human Resources and the State Personnel Department.	P	FAST partners with the agency to provide su This requirement falls outside of the method
2.24	Position Definition Deliverable	Vendor shall support the development of a Position Definition deliverable that at a minimum includes: I. A finalized organization structure II. The task and skills spreadsheet III. Validated position descriptions.	P	FAST partners with the agency to provide su This requirement falls outside of the method

3. Training

#	Name	Description	Response Code	Description/Attac
3.01	End-User Training Plan	Vendor shall develop an End-User Training Plan to validate the approach to developing training following the industry that at a minimum includes: - Full list of all end users to be trained as agreed upon during contract finalization - Timeline for material development and review - Approach to classroom and material design including the integration of people, process and technology - Classroom and virtual delivery approach and timeline	F	FAST understands and will comply with train
3.02	Training Timing	Vendor shall leverage a "just in time" approach to training end users.	F	FAST understands and will comply with the requirem
3.03	Training Environment	Vendor shall provide a dedicated training environment	F	FAST understands and will comply with this requirem
3.04	Training Environment Upgrades	Vendor shall coordinate training environment upgrades with the training team to not interfere with the training schedule.	F	FAST understands and will comply with this requirem
3.05	Training Delivery Approach	Vendor shall provide for process driven classroom training delivery.	F	FAST training applies a three-tier approach to trainin additional detail.
3.06	Training Environment Resources	Vendor shall provide necessary resources to maintain the training environment refresh schedule to support concurrent classes as defined by the training schedule.	F	FAST understands and will comply with this requirem
3.07	Professional Trainers	Vendor shall provide professional trainers rather than using a train-the-trainer approach for training activities.	P	The FAST training approach will include professional t home details, please see Tab B 3.d Training for additi
3.08	Training Data Setup	Vendor shall perform data setup activities for the training environment	F	Data creation in the training environment is advised agency trainers.
3.09	Training Plan Support	Vendor shall offer all activities to support the various phases of the Training Plan including but not limited to: - Defining user roles - Supporting the identification of appropriate curriculum and delivery models Validating and approving training materials related to the technical Solution - Building and maintaining the training environments - Creation of user profiles and log-in credentials in any quantity as requested by DOR to allow trainers and end users appropriate access to the training environments	F	FAST understands and will comply with the requirem
3.10	Classroom Computer Station Setup	Vendor shall coordinate and support the training lab setup with the DOR for training delivery purposes. This includes loading required training manuals, surveys, CBTs, etc. on the training lab computer stations	F	FAST understands and will comply with this requirem
3.11	Computer Based Training Software	Vendor shall provide a software tool or solution that supports creation of computer based training.	P	For Tier 3 training, users are provided self-paced trai courses. These courses introduce users to GenTax an system. Courses are designed to introduce users to st overview of GenTax, base system functionality, and t be found in Tab B 3.d Training of this proposal.
3.12	Computer Based Training Storage	Vendor shall provide computer based training that can be stored on the DOR network for future use	F	FAST understands and will comply with the requirem
3.13	Computer Based Training Maintenance	Vendor shall provide computer based training files that can maintained and edited by DOR after implementation	F	FAST understands and will comply with this requirem
3.14	Training Materials	Vendor shall produce training materials required to address DOR training needs	P	To develop job specific training materials, the FAST t develop training materials that further facilitate agen training materials to serve as the basis for the trainin sample documentations and reports that highlights FA
3.15	Online Help	Vendor shall produce all help files including on-line help files targeted at System users.	C	FAST deploys an integrated Help manager that deliv procedures for implementation of GenTax. The Help information to help them with understanding the sys task they are undertaking. The Help manager allows t is searchable and updateable to offer the user comm allows the seamless integration of site-specific topics benefit from a rich repository that makes the applica productivity and reducing acceptance time for the ne
3.16	Training Material Review and Approval	Vendor shall support (i.e. track material development, reviews and approval) DOR in the review and approval of all training material	F	FAST understands and will comply with this requirem
3.17	Training Pilots	Vendor shall facilitate pilot sessions of classroom training sessions with DOR UAT participants	P	As part of our training services, FAST conducts a train must be trained, where they are located, what learni customers using GenTax. Based on the information g confirmed strategy, FAST develops a training plan tha The plan identifies users and their needs, specifies th identifies instructors and other required resources corresponding training schedule.
3.18	Training Pilot Feedback	Vendor shall incorporate feedback from the UAT Training Pilots into training to be delivered to end-users updates as mutually determined	P	The training team will make adjustments to training c business managers and testers
3.19	UAT Training Material Feedback	Vendor shall incorporate feedback from UAT participants into training materials updates as mutually determined	F	The training team will make adjustmen business managers and testers
3.20	Training Assessments	Vendor shall conduct training assessments for all internal DOR training sessions to validate adequate training/knowledge transfer has been performed prior to completing training sessions	F	Success shall implementations require a close partnersh provide support and guidance for training based on e effort.
3.21	Training Assessment Results	Vendor shall track classroom assessment results at the training sessions	P	Successful implementations require a close partnersh provide support and guidance for training based on e effort.
3.22	Training Assessment Reporting	Vendor shall report classroom assessment results to DOR	P	Successful implementations require a close partnersh provide support and guidance for training based on e effort.
3.23	Training Surveys	Vendor shall conduct survey of the end users, super users and support staff to gather feedback from participants	F	FAST understands and will comply with the requirem
3.24	Training Survey Reporting	Vendor shall report feedback provided in training surveys to DOR	F	FAST understands and will comply with this requirem
3.25	Training Delivery	Vendor shall provide complete training for all users, both technical and business, preceding each release (production code deployment)	P	All DOR users associated with tax-type and rollout tra users may be trained post go-live as needed. Learning the implementation.
3.26	Training Material Production	Vendor shall provide hardcopy and electronic documentation of the functionality in each release from the business and technical standpoint	P	Courses and curriculum materials used during rollout the training and development of future employees. Th
3.27	Training Location	Vendor shall provide all training at DOR or at location(s) agreed to by DOR	F	FAST understands and will comply with this requirem
3.28	Training Material Templates	Vendor shall provide training material templates to DOR for approval	F	FAST understands and will comply with this requirem
3.29	Off-Site User Training	Vendor shall provide training for off-site internal business user staff (i.e. District Offices)	F	FAST understands and will comply with this requirem
3.30	Context-sensitive Online Help	System shall provide online help that has search capabilities	F	FAST understands and will comply with the requirem
3.31	Online Help Search	System shall provide context sensitive online help that is relevant to the screen or transactions being executed	F	FAST understands and will comply with the requirem
3.32	Online Help Training-Search	Vendor shall provide training on online help search mechanisms	F	FAST understands and will comply with the requirem
3.33	Training Material-Electronic	Vendor shall provide training materials in an electronic, editable format	F	FAST understands and will comply with this requirem

#	Name	Description	Response Code	Description/Amp
3.34	Training Material Updates	Vendor shall update the training materials as the system is maintained and enhanced during the project	F	Maintenance of training materials is a shared respons supporting effective knowledge transfer during the fi
3.35	Training Material Updates-Maintenance	Vendor shall update the training materials as the system is maintained and enhanced after implementation during the maintenance period	F	Maintenance of training materials is a shared respons supporting effective knowledge transfer during the fi
3.36	Training Material Rights	Vendor shall provide the agency full rights to update the training materials as the system is maintained and enhanced after the conclusion of the project	F	Course material prepared during the Training Phase v
3.37	Computer Based Training-SCORM 1.2 Compliance	Vendor shall provide online training that is SCORM 1.2 compliant in order to be compatible with DOR's Learning Management System	P	Courses and curriculum materials used during reinvat the training and development of future employees. A agency. FAST training material formats include, but are not lir format, and Adobe Captivate. The training material is made available for the benefit of agency staff. GenTa help entries. These entries can be expanded upon to Help is integrated into GenTax, so users are a few clic and use tips.
3.38	External Stakeholder Training	Vendor shall provide user training to the DOR's external ITS users in the use of the external facing portions of the system in a format mutually agreed upon with DOR	P	This is a shared responsibility between FAST and desi effort.
3.39	External Stakeholder Training Format	Vendor shall provide external ITS training through non-classroom based methods	P	This is a shared responsibility between FAST and desi effort.
3.40	Online Help-External	System shall provide context-sensitive online help and documentation for external users	F	FAST understands and will comply with this requirem
3.41	Training Material Content	Vendor shall provide system, technical, and internal and external user documentation that has each element, screen, and report fully documented	X	FAST partners with the agency to provide support an requirement falls outside of the methodology.
3.42	Training Material Customization	Vendor shall provide material that has been customized to reflect the windows, screens, element names, modified and configured functionality, agency and other distinguishing characteristics, and site-specific configuration applicable to DOR.	P	Agency trainers learn the new system and work close and processes, document agency-specific configurati Agency trainers then use tailored and targeted traini provide relevant training sessions to specific groups o than personnel in each agency's operating divisions re and activities.
3.43	Technical Training Plan	Vendor shall develop a Training Plan to validate the approach to developing training following industry standards that at a minimum includes: - Full list of all end users to be trained as agreed upon during contract finalization - Timeline for material development and review - Approach to classroom and material design including the integration of people, process and technology - Classroom and virtual delivery approach and timeline - Approach to Skills Assessment to be conducted on DOR technical staff	F	FAST understands and will comply with this requirem
3.44	Technical Team Skills Assessment	Vendor shall conduct a skills assessment of the DOR technical team to determine level of training needed	P	Successful implementations require a close partnersh provide support and guidance for training based on e effort.
3.45	Technical Training-System Modifications	Vendor shall provide training to the technical/operations team on any System changes/changes in System components functionality/architecture	F	FAST understands and will comply with this requirem
3.46	Technical Training-General	Vendor shall provide training to DOR on the development methodology, code propagation, and all aspects of creating a production application	F	FAST understands and will comply with this requirem
3.47	Technical Training-Support	Vendor shall provide technical training that covers such topics as; 1) COTS application and customization support; database installation, configuration, tuning, backup and recovery, and disaster recovery; 2) Business intelligence, archival system, and data warehouse installation (if the agency chooses to replace), configuration, tuning, and backup and recovery; 3) Operating system and security configuration, tuning, and backup and recovery; 4) Job scheduling and print operations; and 5) Disaster recovery procedures	F	FAST understands and will comply with this requirem
3.48	Technical Training-Operations	Vendor shall provide operational training to the DOR's technical staff including: 1) Basic operation and troubleshooting; 2) Preventive maintenance; 3) Customization of set-up features; 4) Creation of internal and external user logins; 5) Setting of access privileges; 6) Scheduling of jobs; 7) Job dependencies; 8) Failure and restore procedures for each job and the system; 9) Communication procedures; 10) Procedures for stopping and starting components of the system; 11) Database administration; 12) Application maintenance; 13) System performance tuning; 14) Interface maintenance; 15) Application support; and 16) Any other training reasonably necessary to support the system.	F	FAST understands and will comply with this requirem
3.49	Technical System Documentation	The vendor must provide complete system documentation that documents the application software and its architecture as it is implemented at the DOR	F	FAST will provide agency IT personnel with access to documentation contains a Developers Guide, guides processes to perform specific tasks. The documentat
3.50	Technical Operations Documentation	The vendor must provide operations documentation that includes overviews of the application, system structure, processing, interfaces, reports, and correspondence	F	Agency developers are provided with the same cours first month of employment with FAST. Course curricu operations is based on use of GenTax modules, tools, customized to be applicable to each client agency.
3.51	Technical Documentation Quick Reference Guides	Vendor shall provide technical quick reference guides	F	FAST will provide agency IT personnel with access to documentation contains a Developers Guide, guides processes to perform specific tasks. This documentat
3.52	Knowledge Transfer Approach	Vendor shall provide a knowledge transfer approach that shall confirm the DOR has knowledgeable internal business users (experts), system administrators, programmers, and other technical personnel sufficient to operate and maintain the system independently	F	Please see Tab B.3.d Training for our detailed approa
3.53	Knowledge Transfer Execution	Vendor shall execute Knowledge Transfer activities throughout the project	F	FAST's focus on effective knowledge transfer begins with the goal of enabling the agency to maintain the
3.54	Knowledge Transfer Monitoring	Vendor shall measure progress of Knowledge Transfer activities throughout the project	P	FAST partners with the agency to provide support an proven methodology. FAST's focus on effective knowl GenTax is implemented with the goal of enabling the complete. Our projects include knowledge transfer a technology staff in maintaining rules on an ongoing b
3.55	Knowledge Transfer-Assessment	Vendor shall conduct assessments of Knowledge Transfer activities throughout the Project to measure progress	P	FAST partners with the agency to provide support an proven methodology. FAST will support the agency in

4. Testing

#	Name	Description (Testing requirements should be considered in three sections: Implementation testing; Operational testing, and Vendor Certification testing.)	Response Code	
	Section 1: Implementation testing	**With a project of this scope and size, testing is vitally important to its implementation success. This section outlines the Vendor requirements for testing during the implementation phase.**		
4.1.01	Master Test Plan	Describe Vendor's Master Test Plan (MTP) which describes the types of testing that must be executed, how testing concepts must be applied to the project, testing prerequisites, the projects approach to testing with external entities, resource and schedule constraints, and how the project can make use of automation during test processes. Plan should include testing milestones which will be tied to the payment schedule. DOR wishes to participate and collaborate throughout the testing process. The project team should have frequent and easy visibility into the progress of the solution including configurations and development objects. The MTP should suggest a number based on Vendor's approach.	F	This step begins while the config toward the end of the Developm as opposed to individual screens - Business test conditions - Business test cycles - Approach to executing business - Modules targeted for performan - End-to-end testing approach Please see Tab B.3.e Testing for a behind Tab G. Additional Docume
4.1.02	System Verification test description	Describe the System Verification Test Description (SVTD) documents the approach for System Verification Testing (SVT) as well as the approach to User Acceptance Testing (UAT). SVTD must include: 1) Introduction, 2) Scope, 3) SVT test environment, 4) Planning and preparation, 5) Formal execution, 6) Witnessed test, 7) regression test, 8) Roles and responsibilities, 9) Personnel, 10) Metrics	P	Please see Tab B.3.e Testing for a
4.1.03	System Verification Test Report	Describe the System Verification Test Report (SVTR) which must describe the SVT and include relevant appendices for both System Test and System Performance testing. At a minimum, this report must cover information on the following sections and appendices: Scope, Test scripts tied to system requirements, Overview of test results, Impact of test environments, Detailed test results, Test logs, Defect log, Remediation log and Other Notes, Appendix A (summary of results from system test execution,) Appendix B (Detail of remaining SVT deficiencies.)	F	Please see Tab B.3.e Testing for a
4.1.04	System Performance Test Description	Describe your approach to a System Performance Test Description (SPTD). SPTD documents the approach for System Performance Testing (SPT). SPT is specifically related to system speed, scalability and stability. SPTD must include: Introduction, Scope, SPT test environment, Planning and preparation, Formal execution, Witnessed test, Regression test, Roles and responsibilities, Personnel, and Metrics.	F	Please see Tab B.3.e Testing for a
4.1.05	System Test Report	Describe your approach to a System Test Reporting (STR). STR documents the expected and actual results of the System Test and is used in the determination of operational readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust build plans accordingly. Document must include: Scope, Overview of Test Results, Detailed System Verification Test Results, Work Product Inventory.	F	Please see Tab B.3.e Testing for a
4.1.06	System Test Protocol	Describe your approach to a System Test Protocol (STP). The STP is intended to validate that the system satisfied the requirements for its intended use and user needs, validate that the right problem is solved; establish responsibility and accountability for testing processes; facilitate early detection and correction of software and system anomalies; provide an early assessment of software and system performance. The description must include: Introduction, Scope, Test environment, Planning and preparation, formal executions, witnessed test, regression test, roles and responsibilities, personnel, and metrics.	P	Please see Tab B.3.e Testing for a
4.1.07	Security Test Plan	Describe your approach to the Security Test Report (SETR). The SETR documents the expected and actual results of security testing and is used in the determination of operation readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust plans accordingly.	P	Security testing is incorporated in the system protects data from un functionality as intended. It is pe objectives of security testing are - Confirm that users have access have access to unauthorized area - Confirm that unauthorized users - Confirm that e-Services (web po security hierarchy.
4.1.08	Accessibility Test Plan	Describe your approach to the Accessibility Test Report (ATR). The ATR documents the expected and actual results of accessibility testing and is used in the determination of operation readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust plans accordingly.	P	Accessibility Verification is a verif system functionality is stable. It is
	Section 2: Operational testing	**After the implementation is complete, the department is committed to ongoing testing at the development, integration, and regression levels. It is expected that the functionality described below will be included in the implementation. If the core system does not support these requirements, it is expected that the integrator will secure and integrate the functionality in a seamless manner.**		
4.2.01	Testing Overview	Please describe your solution for an ongoing testing solution. Provide a solution that on a given day in high demand testing would be able to support 20 unit tests, 5 integration tests, 4 systems test, and 2 regression tests in a single day. This traffic is complicated by needing to set and reset processing dates to insure that business rules for penalty and interest are working correctly. As a rule, testing capacity cannot be a bottle neck to system change implementation.	F	Please see Tab B.3.e Testing for a
4.2.02	Unit testing	The system shall have the ability to exercise single units of functionality in isolation in both positive and negative test modes	F	Please see Tab B.3.e Testing for a
4.2.03	Integration Testing	The system shall have the ability to perform end to end testing of changes in relation to business processes and technical coordination of individual units or modules within the larger system.	F	Please see Tab B.3.e Testing for a
4.2.04	system testing	The system shall have the ability to provide confirmation that functionality passing unit and integration testing will perform correctly when subjected to user perspective and scenarios covering end-to-end business process	F	Please see Tab B.3.e T... for a
4.2.05	Regression testing	The system shall have the ability to verify that system modifications have not caused unintended effects and that the existing software or system components still comply with specified requirements	F	Please see Tab B.3.e ...r a
4.2.06	UAT testing	The system shall have the ability to provide collaboration, open communication and knowledge sharing between testing resources and end users to provide accurate and comprehensive UAT.	F	Please see Tab B.3.e Testing for a
4.2.07	Accessibility testing	The system shall have the ability to perform testing to validate all IOT accessibility requirements are built into system and are maintained on a scheduled basis.	P	Accessibility Verification is a verif system functionality is stable. It is
4.2.08	Security testing	The system shall have the ability to perform testing to validate all security mechanisms built into the system and that they are maintained on a scheduled basis.	F	Please see Tab B.3.e Testing for a
4.2.09	Test status reporting	The system shall provide a well defined reporting process on the status of test execution, trends, and defects tracked by pre-defined metrics. Results are compiled and presented both daily and weekly showing testing progress and key accomplishments. Status reports will include a defect summary, and issues and risks recap.	F	The Integrated FAST Workbench implementation project. This incl
4.2.10	Mock production migration	The vendor shall migrate all code and configuration changes through the DOR system instances as follows: System Test -> PreProduction -> Production. The vendor shall provide scripts for each migration so each migration package can be migrated multiple times with the same result unless the scripts are modified.	F	Please see Tab D.1 Att G1 - Impl A paths
4.2.11	Testing environments	At a minimum the system shall provide the following test environments: unit test alone, system test environment, and UAT sterile pre prod environment. The state will accept recommendations for additional test environments. These recommendations need to mitigate version control risks balanced against the department's need to maintain the department's high demand for ongoing and thorough testing. Please provide your recommendations and rationale.	F	Please see Tab D.1 Att G1 - Impl A paths.
4.2.12	Automatic generation of test scripts	The system shall have the ability to create test scripts automatically	X	Automated testing tools are not prefer allowing agency SMEs and needs. The software was designe software, as configured for the ag business process. Automated testing tools are not commercial-off-the-shelf solution Center in Colorado. As such, the configuration and integration of ensures that the system meets an
4.2.13	Manual generation of test scripts	The system shall have the ability to utilize test scripts manually.	F	Please see Tab B.3.e Testing for a
4.2.14	Test Data	The system will provide a "virtual office" space where test taxpayers and registrations are not production data. All test entities are unique and not traceable to production data.	F	Please see Tab B.3.e Testing for a

#	Name	Description (Testing requirements should be considered in three sections: Implementation testing; Operational testing, and Vendor Certification testing.)	Response Code	
4.2.15	Integration of production data	The system will have the ability to import production data sets onto test entities for the ability to test specific scenarios to diagnose certain production parameters while masking the personal information of the original production data.	F	Please see Tab B.3.e Testing for a
4.2.16	Testing volumes	Testing is an ongoing high demand process with multiple users running multiple tests for a variety of processes using various input channels, the system will provide best practices that will allow the department to effectively and efficiently maintain high volume testing. Please describe how your solution will accommodate this high use environment.	F	Please see Tab B.3.e Testing for a
4.2.17	System date	The system shall have the ability to change system date of test to be able to test the affect of date on output.	F	Testers will received training that perform regression testing, or hav
4.2.18	Rollback tests	The system shall have the ability to rollback data from prior tests so that subsequent reuse of test data does not cause duplicate records	F	The system can be backed up to t
4.2.19	Test size	The system shall be able to create a large and varied number (7000 per tax type) of test scripts so that many variables are tested.	P	Automated testing tools are not t prefer allowing agency SMEs and needs. Automated testing tools are not t commercial-off-the-shelf solution Center in Colorado. As such, the f configuration and integration of c ensures that the system meets an in production in a robust, secure, Performance testing validates the environment. It is concerned with transactions, throughput, and res project. The objectives of perform volume (stress/load) needs as def
4.2.20	Testing environment adjustments	The system shall be able to support automated tools for the ability to reset environment.	F	End-to-end testing also includes s the project team conducts tests t or point in time
4.2.21	Migrations	Test environment migrations shall be documentable	F	Please see Tab D.1 Att G1 - Impl A paths.
4.2.22	Migration rollback	The system shall have the ability to rollback migrations and reset the database.	F	Please see Tab D.1 Att G1 - Impl A paths.
4.2.23	Test system ingestion	Test environments shall have the ability to ingest files from multiple channels, i.e. MEF, Imaging, Intax, bulk upload, Indiana Interactive, electronic correspondence, image correspondence	F	End-to-end testing tests full proc in a pre-production environment. to schedule and run daily, nightly, over a period of time. The tests in Like system testing, end-to-end t
4.2.24	Data export	The system shall be able to export data to multiple channels such as image repository, financial test system, etc.	F	The GenTax core architecture sup be exported in multiple formats.
4.2.25	Interface exchanges	The system shall be able to replicate interface exchanges without needing to touch third party data.	F	The system supports SFTP file tra
4.2.26	Testing interfaces	The system shall have the ability to test the requirements of interfaces i.e. schema requirements, image requirements, etc.	F	Please see Tab D.1 Att G1 - Impl A
4.2.27	Interface errors	A system shall have the ability to log defects and provide error messages across interfaces.	F	When errors occur during batch p records are created for technical s there are record-level errors, Gen invalid records to be investigated processing or can delete interven Authorized users can view jobs th error text is displayed when erro future tuning. Users can manually automatically. When critical jobs continuing. Non-critical jobs are c
4.2.28	Defect reporting	A system shall provide the ability to view defects reported in a dashboard with drill down ability.	F	The Integrated FAST Workbench p implementation project. This Incl describes the Testing Phase of th be used and by whom.
4.2.29	Defect traceability	A system shall have the ability to track defects with the ability to trace back defects to releases and requirements	F	The Integrated FAST Workbench p implementation project. This incl describes the Testing Phase of th be used and by whom.
4.2.30	Testing artifacts	A system shall have the ability to retain testing artifacts for successful and unsuccessful tests	F	The FAST Workbench will support
4.2.31	Signoff	The system shall provide the signoff approval at the requirement level. All artifacts of approval shall be retained in the system.	F	The FAST Workbench will suppor
4.2.32	System resets	The system shall allow the ability of the tester to reset testing system.	F	Integrated testing tools include th (called "slices") from which to op tools also include utilities to purg data, which eliminates the need t have easy access to clean data
4.2.33	Happy path testing	The system shall allow the ability to test happy path	F	Please see Tab B.3.e Testing for a
4.2.34	Testing negative outcomes	The system shall allow the ability to test specific negative outcomes; for example items that should be suspended, or items that should be stopped in ERP or MEF gateways, plus other interfaces.	F	Please see Tab B.3.e Testing for a
4.2.35	Testing database (Environment)	Standing up and preparing testing environments must take less than 1/2 day	F	Testing environment can be set u
4.2.36	Testing database (Environment)	System must support multiple testing environments to enable simultaneous projects	P	Following are samples of some of - Customer Extract and Load Agen Insert records into a slice for testi - Slice testing – To enable staff to impacting the data of others, a "s and training activities. Each teste testers or students. Slices or sess - Slice Copy – used to copy, delet
4.2.37	System Validation	The ITS system shall provide system validation which matches system functionality to user requirements	F	The FAST Workbench will support

#	Name	Description (Testing requirements should be considered in three sections: Implementation testing, Operational testing, and Vendor Certification testing.)	Response Code	
4.3.36	System testing	During system testing, system must be able to adjust data element identifiers to accommodate ingested data from systems whose numbers cannot be adjusted in order to avoid data duplication	F	The FAST Workbench will support
	Vendor Certification testing.	Each year the department processes over 2 million individual and 100,000 corporation tax returns electronically. It is expected that with the implementation of an ITS that bulk filing of trust taxes through the self-service portal will also go through this certification process. These electronic returns are prepared by various Vendor software products. In order to drive compliance and data quality the department certifies all products annually. The Vendor supplies a set number of returns that their software prepares based on scenarios that the department prepares. Each year the department certifies approximately 40 individual software packages and 20 corporation software packages. They often have to make corrections to their algorithms in order to make corrections to processing errors that the department identifies in the testing process. As a result this is a high volume test bed from November through mid January. It is expected that the functionality described below will be included in the implementation. If the core system does not support these requirements, it is expected that the integrator will secure and integrate the functionality in a seamless manner.		
4.3.01	Unique system	System shall have separate environment from Test and Production	P	Vendor certification testing is inte FAST has experience with a range The MeF Manager is configured t thresholds for submissions accept depends on a number of factors a FAST will provide a testing enviro an internal user can maintain the transmit electronic returns. GenT submission rates. Generally, e-Fil FAST provides a test environment results are made available for an i vendors looking for certification. I on daily, monthly, yearly acknowl and communication efforts. It is i process outside of GenTax as they process
4.3.02	Syncing system	The Vendor certification system shall have the ability to be synced to incorporate validated changes that have been applied to other test environments.	F	GenTax is a highly configurable s Implementation Group for Electr respective subsystems and tools, implemented programs including certification process is generally r software vendors. GenTax provid outside the system. A test environment is provided th available to internal users for revi communicating testing results is Tools are provided to an internal transmit electronic returns. There
4.3.03	Certification vendor records	System shall be able to store vendor certification information such as vendor id, contacts, testing status, certification status etc. internally. In addition, the system should keep track of submissions for paper returns, etc.	X	Please see our response to 4.3.02
4.3.04	vendor portal	System shall have a Vendor portal that will permit the Vendor to check status of submitted paperwork or tests, check important dates and check overall progress towards certification, submit encrypted test submissions, and contact testing personnel.	X	Please see our response to 4.3.02
4.3.05	test processing	Once test is dropped into portal, testing personnel will be able to process manually or automatically.	P	Vendor tests must be submitted t manual or automatic processing.
4.3.06	vendor notification	System will send prepared emails to vendors as identified milestones are met.	X	Please see our response to 4.3.02
4.3.07	test scripts	System will prepare a designated number of test scripts which follow the "happy path" for a variety of tax types and form types. The scripts will be consistent between vendors, yet will be identifiable to each vendor so that the system can test multiple vendor's similar test cases at the same time.	Y	Please see our response to 4.3.02
4.3.08	test scenarios	System will permit new scenarios to be developed based on changing requirements. Once requirements are established the system will generate new test script	X	Please see our response to 4.3.02
4.3.09	Test scenario interface	System will provide a user interface to permit the ability to change test case requirements. In addition, this capability should extend to notice generation to product contacts when test scripts change.	X	Please see our response to 4.3.02
4.3.10	test results	system will provide DOR testing staff with comparison results between expected results and submission results for each test.	X	Please see our response to 4.3.02
4.3.11	Result parameters	System will provide a user interface to set acceptable ranges of results and system still generate a positive outcome for the test.	X	Please see our respon 3.02
4.3.12	Override negative results	System will provide the opportunity for manual user override of results	X	Please see our respo .02
4.3.13	logging overrides	system will log all overrides and require reason notes.	X	Please see our respo .02
4.3.14	test results to vendors	The system will provide a "virtual office" space where test taxpayers and registrations are not production data. All test entities are unique and not traceable to production data. In essence the return data would come from production but PII would be masked with Virtual user data	P	Within our test environments use testing.
4.3.15	successful test result	For all successful tests, system will update vendor and testing personnel via system generated email	X	Please see our response to 4.3.02
4.3.16	system reset	System will be able to accept duplicate tests from the same vendor and segregate the data so that they will not "dup out"	F	The system can accept and proce
4.3.17	certification review	Once all tests and milestones have been met, system will provide all documentation, and test results for review	P	Our Modernized eFile manager w
4.3.18	Certification	Certification will be manually done by tester with supervisor review	F	Certification is done directly in th by vendor basis.
4.3.19	notification of certification electronic	system will notify Vendor that certification is complete and that they can submit electronic returns.	X	Please see our response to 4.3.02
4.3.20	notification of certification paper returns	system will notify Vendor that certification is complete and that they can submit paper returns.	X	Please see our response to 4.3.02
4.3.21	Interface to production system	system will interface with production system and permit certified products to be processed	P	Certification is done directly in th by vendor basis.
4.3.22	Post certification testing	System will permit additional Vendor testing post certification to allow for testing of changes to their products	F	Vendor tests submitted through t Vendor testing after acceptance i year. FAST recommends that ven windows. The agency can staff ca to re-certify vendors for the next
4.3.23	Decertification	In the event of negative post certification testing the system will allow the manual decertification with supervisor approval of a Vendor or Vendor product. System would interface to production system to block decertified products from being processed.	F	Manual decertification is done di on a vendor by vendor basis.
4.3.24	Report card	System will generate a Vendor score card based on adjustable criteria such as meeting testing milestones, number of total returns submitted in past 12 months, number of test submissions to get it right, fraud percentage, live submission rejection rate, etc.	X	Please see our response to 4.3.02

5. Data Conversion

#	Name	Description	Response Code	Description/Attach
5.01	Data Conversion - General(1)	The Vendor system shall enable the conversion of historical DOR data as described in attachment L "Conversion Data Source Detail".	F	The FAST conversion process entails the determinatior of legacy data and its requirements.
5.02	Data Conversion - General(2)	The Vendor conversion methodologies shall support the conversion of historical DOR data as described in attachment L "Conversion Data Source Detail".	F	The FAST conversion process entails the determinatior of legacy data and its requirements.
5.03	Data Conversion - General (3)	The Vendor shall provide data conversion documents including, but no limited to, Data Conversion Plan, Data Conversion Schedule, Data Conversion Task List and Data Conversion Risks List	F	FAST understands and will comply with this requireme The responsibilities can vary from client to client basec knowledge and client development capacity. Generally • Identification of conversion elements and scope - DC • General conversion documents, e.g. schedules, plans • Verification/testing of converted data - DOR • Legacy system reporting for conversion reconciliatio • Identification of conversion data sources - DOR • Data purification, cleansing and legacy system adjust • Conversion file layout definitions - FAST • Programming and extraction into flat files from legac • Documentation required on the process of extractior • Extraction report for conversion reconciliation - DOR • Bulk loading of flat files - FAST • Reconciliation of bulk loaded data for conversion rec • Programming, configuration and conversion of bulk f • Documentation required on the process of convertin • GenTax report for conversion reconciliation - FAST • Overall reconciliation report - FAST • Post conversion processing (if required) - FAST • Reconciliation report approval - DOR
5.04	Data Conversion - General (4)	The Vendor shall work with DOR resources in data conversion and in resolving data issues during the conversion.	F	FAST understands and will comply with this requireme Conversion extract processes are developed and led by create standard extract files. The conversion-extract pr extraction process and are used to confirm the load pr In our standard conversion approach, agency IT persor their existing systems and data stores. This includes th data from legacy applications or automatic data purific responsible for cleansing the source data due to their l is typically responsible for the following activities. • The creation of detailed conversion and conversion t • Data transformation and load after extract • Mock conversion runs • The creation of reconciliation reports to verify the cc • The creation of reports detailing data anomalies that • Consulting with agency IT personnel and subject mat identify data errors, reconcile the conversion, and resc • Working with agency staff to verify the conversion pi
5.05	Data Conversion - Data Cleansing & Development (1)	The Vendor shall conduct a data validation against all identified data sources to identify the data that need to be corrected.	F	FAST understands and will comply with this requireme
5.06	Data Conversion - Data Cleansing & Development (2)	The Vendor shall provide a prioritized list of data elements to be cleansed.	F	FAST understands and will comply with this requireme
5.07	Data Conversion - Data Cleansing & Development (3)	The Vendor shall provide tools, processes and automation to support the data conversion services.	F	FAST understands and will comply with this requireme
5.08	Data Conversion - Data Cleansing & Development (4)	The Vendor shall provide technical documentation, verification, and certification documentation for each data point.	F	FAST understands and will comply with this requireme

#	Name	Description	Response Code	Description/Attach
5.09	Data Conversion - Data Cleansing & Development (5)	The Vendor shall produce a data mapping schema for the data sources being used for conversion into the new ITS systems including but not limited to UAT and Production environments.	F	FAST understands and will comply with this requireme FAST will work with DOR to produce data mar 'oc an audit trail showing a "conversion" user. D ıe are generally related to metadata instead of th. .lue: changed during conversion but the address type migh legacy system to "MAL" (for mailing address) in GenTa conversion offsets or other changes, then transactions for during the reconciliation process. The bulk loaded maintained indefinitely. It is also possible to retain the flat files and the entire l copy of their legacy databases or to import all of the k Warehouse. This is especially true when data falls outs conversion.
5.10	Data Conversion - Data Cleansing & Development (6)	The Vendor shall develop audit trail and retain history (audit trail) of all data elements that are changed through migration.	F	FAST understands and will comply with this requireme FAST will work with DOR to produce data mapping doc an audit trail showing a "conversion" user. Data eleme are generally related to metadata instead of the value changed during conversion but the address type migh legacy system to "MAL" (for mailing address) in GenTa conversion offsets or other changes, then transactions for during the reconciliation process. The bulk loaded maintained indefinitely. It is also possible to retain the flat files and the entire l copy of their legacy databases or to import all of the le Warehouse. This is especially true when data falls outs conversion.
5.11	Data Conversion - Data Cleansing & Development (7)	The Vendor shall assist DOR to ensure the data is cleansed according to municipal code, administrative rules, and policies.	P	FAST will support the agency as they apply their munic legacy data.
5.12	Data Conversion - Data Cleansing & Development (8)	The Vendor shall provide scripts which will correct the extracted data from the legacy data sources and place the data into a staging database, as applicable and appropriate. NOTE: This means the DOR's production data in the origin system is not changed in any manner.	F	FAST understands and will comply with this requireme
5.13	Data Conversion - Data Cleansing & Development (9)	The Vendor shall document business rules used for data conversion.	F	FAST understands and will comply with this requireme
5.14	Data Conversion - Data Cleansing & Development (10)	The Vendor shall ensure data is transferred between the data conversion team members in an automated and secure manner. The Vendor must adhere to DOR's data security policy when handling DOR's data. Encryption, data masking/data scrambling and the use of Secure FTP and/or other secure file delivery as defined in the RFP technical requirements and contract must be met by the Vendor for data in transit and if/when residing at the conversion vendor's site.	F	FAST understands and will comply with this requireme The FAST implementation team members ar te work onsite with DOR personnel. The develop.....n an be completed onsite using the DOR's existing infrastru data security team to ensure the procedures used duri alignment with DOR policies. In some cases, it may be necessary to create convertec however it is possible to thoroughly de-identify data p includes the use of staging and conversion environmer these environments to be Production environments w these environments configured in an identical fashion conversion database that is secured with access exter Server Auditing. The conversion environment containi purposes, is considered a production environment anc reporting on specific taxpayer access between tempor
5.15	Data Conversion - Testing (1)	scenarios and expected results for the migration from the staging database to the new ITS database.	P	FAST will support the agency. Test scenarios are a shar
5.16	Data Conversion - Testing (2)	The Vendor shall provide general support to the project team for any needs related to converted data.	F	FAST understands and will comply with this requireme

#	Name	Description	Response Code	Description/Attach
~~5.17~~	~~Data Conversion - Testing (2)~~	~~The Vendor shall provide general support to the project team for any needs related to converted data.~~		DOR - This requirement is a duplicate of 5.16.
5.18	Data Conversion - Testing (4)	The Vendor shall identify and develop reconciliation and comparison tools (i.e. scripts, queries, reports, etc.) that reconcile data from the legacy system to the new ITS.	F	FAST understands and will comply with this requireme Reconciliation is generally performed in an Excel sheet compares data at each step in the process (extraction, numbers should match or the difference should be pre to compare the GenTax conversion result report to the extraction criteria. The results can be pulled into an Ex executed against databases used in the conversion pro for a more granular level of detail such as transactions
5.19	Data Conversion - Testing (5)	The Vendor shall develop automated comparison reports which compare legacy system data with corresponding data from the new ITS system.	P	The final step of conversion entails the creation of the created by combining and comparing the extract, load, serves as the conversion record and is used to confirm the legacy systems and converted into GenTax. Reconciliation is generally performed in an Excel sheet compares data at each step in the process (extraction, numbers should match or the difference should be pre to compare the GenTax conversion result report to the extraction criteria. The results can be pulled into an Ex executed against databases used in the conversion pro for a more granular level of detail such as transactions
5.20	Data Conversion - Implementation	The Vendor shall execute the data conversion scripts to populate the final production environment.	F	FAST understands and will comply with this requireme
5.21	Data Conversion - Archive	The Vendor shall create a full data archive of all data extracted from the legacy system including any data that is not converted into the new ITS.	F	FAST understands and will comply with this requireme FAST will work with DOR to produce data mapping doc an audit trail showing a "conversion" user. Data eleme are generally related to metadata instead of the values changed during conversion but the address type might legacy system to "MAL" (for mailing address) in GenTa conversion offsets or other changes, then transactions for during the reconciliation process. The bulk loaded maintained indefinitely. It is also possible to retain the flat files and the entire l copy of their legacy databases or to import all of the le Warehouse. This is especially true when data falls outs conversion.

6. Analytics

#	Name	Description	Response Code	Descrip
6.01	Internal Controls Governance	Vendor shall support identification of potential policy changes required to support the ITS analytics, reporting, and internal control.	F	Project leadership and the on- ag each rollout. Documentation of Workbench.
6.02	Data Dictionary—Vendor	Vendor shall deliver DOR's ITS data dictionary to include relevant terminology and acronyms.	F	A GenTax glossary of terms will be availa
6.03	Data Quality	Vendor shall enable DOR defined data quality metrics and transformations required for data conversion into the ITS.	C	These requirements are agency-specified combination of business rules and objects definition.
6.04	Data Change Management	System shall have the capability to define how changes in data values are handled within the ITS.	C	These requirements are agency-specified combination of business rules and objects configuration and definition.
6.05	Data Processing	System shall have the ability to manage the rules for updates of data within applications.	F	The Management Studio in the GenTax co
6.06	Data Model—Conceptual	Vendor shall provide DOR conceptual data model	F	The Reporting subsystem in the GenTax c modify standard report templates should commonly IT personnel). My Searches do
6.07	Data Model—Technical	Vendor shall review DOR technical data model	F	The Reporting subsystem in the GenTax c modify standard report templates should commonly IT personnel). My Searches de
6.08	Flexible Naming	System shall allow for flexibility in data labelling and naming	F	The Reporting subsystem in the GenTax c
6.09	Data Monitor	Vendor shall support data monitoring for data quality based on defined metrics and DOR business rules.	F	The Operations Support subsystem (with and facilitates the functionality. Alerts, P
6.10	Data Cleansing Tools	Vendor shall provide tools to support data cleansing (e.g., ETL tools).	P	These requirements are agency-specified combination of business rules and objects Definition. Transformation and cleansing
6.11	Real-time Data Validation	System shall support real-time validation of data	F	The GenTax core architecture supports ar end-user perform validation (i.e., drop-do entered etc.) Business objects are progra be validated.
6.12	Batch Data Validation	System shall support batch validation of data	F	The GenTax core architecture supports ar throw handled or unhandled exceptions v
6.13	Business Consumable	Vendor shall provide data in appropriate structures to support ability of business users to generate ad hoc reports.	F	The My Search subsystem in the GenTax c
6.14	Historical Data Integration	Vendor shall support determination of the quantity of historical data (if any) to bring to the new system	C	These requirements are agency-specified combination of business rules and objects Definition.
6.15	Historical Data Warehousing	System should support housing historical data in new system based on flexible and adjustable retention rules.	C	These requirements are agency-specified combination of business rules and objects Definition.
6.16	Report Portal	System shall provide a portal for users to receive reports	F	The Reporting subsystem in the GenTax c
6.17	Accessibility	System shall provide appropriate access and control related to reports and underlying data.	F	The Security subsystem defines, enforces, activity. Functional access is granted to as only the screens, data, and functions asso
6.18	Publishing	System shall confirm data is correctly formatted before delivering	C	The GenTax core architecture supports an user. User defined requirements (i.e. rep implementation, driven by a combination evaluated during base configuration and
6.19	Data Deliver-Email	System shall allow for delivering data to stakeholder(s) through e-mail (Link to log-in to view data securely within the ITS)	F	The E-Services subsystem in the GenTax c taxpayers of activity via Web Notices. A l users, emails can be configured to alert/n
6.20	Extract	System shall provide data extraction tool to other formats (e.g., .csv, Excel)	F	The GenTax core architecture supports ar exported in multiple formats.
6.21	Data Delivery-SFTP	System shall provide the ability to transfer data via Secure File Transfer Protocol	F	The Interfaces subsystem in the GenTax c via Secure FTP.
6.22	Reporting Interface-Drop Down	System shall include a reporting user interface with drop downs	F	The Reporting subsystem in t
6.23	Reporting Interface-Drag and Drop	System shall include a reporting user interface that has drag and drop capabilities	F	Data cubes within the Reporting functionality. Drag and drop options exist data cube etc.
6.24	Report Templates	System shall allow the creation of templates for standard reports.	F	The Reporting subsystem in the GenTax c
6.25	Report Template–Modification	System shall allow for modification of standard report templates by business users	F	The Reporting subsystem in the GenTax c modify standard report templates should commonly IT personnel). My Searches de
6.26	Report Template-Storage	System shall allow for storing of standard report templates	F	The Reporting subsystem in the GenTax c
6.27	Sort	System shall allow employee to sort fields within report	F	The Reporting subsystem in the GenTax c
6.28	Filter	System shall allow employee to filter fields within report	F	The Reporting subsystem in the GenTax c
6.29	Order	System shall allow employee to order fields within report	F	The Reporting subsystem in the GenTax c
6.30	Reporting Limits	System shall support limiting results to prevent impact to system performance	F	The Reporting subsystem in the GenTax c
6.31	Reporting Limits-Override	System shall support the ability to override reporting limits based on user privileges.	F	The Reporting subsystem in the GenTax c include row limits for standard list contro
6.32	Reporting Database	Vendor will provide separate operational and reporting databases.	F	The GenTax core architecture supports an databases are integrated into the applica
6.33	Notifications	System shall provide notifications when report thresholds are exceeded	F	The Reporting subsystem in the GenTax c include row limits for standard list contro
6.34	Export	System shall support export of all reports to other file types (e.g., .csv, Excel, PDF)	F	The Reporting subsystem in the GenTax G reports can be exported to Excel whereas formats.
6.35	Visual	Vendor shall support design of graphics-driven dashboards	F	The Executive Summary subsystem in the
6.36	Drill-down	System shall allow employee to drill-down on fields within dashboard to view more granular data	F	The Executive Summary subsystem in the

#	Name	Description	Response Code	Descrip
6.37	KPI Development	System shall support KPIs identified by business users for reporting purposes	F	The Analytics, Executive Summary and Re facilitate the functionality.
6.38	KPI Measurement	System shall be able to present comparison data.	F	The Analytics, Executive Summary and Re facilitate the functionality.
6.39	Granularity	System shall allow for dashboards to be created at multiple levels of granularity (e.g. agency, department, business unit, etc.)	C	The Analytics, Executive Summary and Re facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.40	Dashboard Definition	Vendor shall support DDR in defining dashboard	C	The Analytics, Executive Summary and Re facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.41	Customization	System shall support dashboard customization by users	C	The Analytics, Executive Summary and Re facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.42	Active User	System shall confirm that notifications are linked to an active business owner	F	Notifications within the GenTax core arch
6.43	3rd Party Integration	System shall support integration with 3rd party data sources (e.g. databases, other computers, HTML)	C	These requirements are agency-specified combination of business rules and objects configuration and definition.
6.44	View--Operational Report	System shall allow for view of operational report lists	F	The Reporting subsystem in the GenTax c
6.45	View--Mandatory Report	System shall allow for view of mandatory report lists	F	The Reporting subsystem in the GenTax c
6.46	Report Scheduling	System shall allow for scheduling reports to run at a specific time	F	The Reporting subsystem in the GenTax c
6.47	Report Distribution-Email	System shall allow for delivering data to stakeholder(s) through a link within an email to log into a secure location in the ITS to view the data	C	These requirements are agency-specified combination of business rules and objects configuration and definition.
6.48	Real Time Reporting	System shall allow for real time online report generation	F	The Reporting subsystem in the GenTax c
6.49	Report Distribution-Server	System shall allow for the posting of reports to a location on a server	F	The Reporting subsystem in the GenTax c data as required.
6.50	Business Intelligence	Vendor shall support DDR in determining business intelligence strategy and approach	C	The Analytics, Executive Summary and Re facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.51	Segmentation	System shall support data segmentation	C	The Analytics subsystem in the GenTax co requirements are agency-specified config combination of business rules and objects configuration and definition.
6.52	Tracking	System shall track and report on segmented groups	C	The Analytics subsystem (Decision Suppor facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.53	Champion-Challenger	System shall support use of Champion-Challenger strategy on segmented data groups to improve processes	C	The Analytics subsystem (Decision Suppor facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.54	Linkages	System shall maintain link between defined customer segments and results to support champion / challenger capability and continuous process improvement.	C	The Analytics subsystem (Decision Suppor facilitate the functionality. These require implementation, driven by a combination evaluated during base configuration and
6.55	External Data Match	System shall provide ability to leverage available IRS data for audit selection, treatment strategies, and analytics.	F	The Discovery subsystem in the GenTax c functionality.
6.56	Matching Detection	System shall provide matching capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.	F	The Discovery subsystem in the GenTax c functionality.
6.57	Scoring Detection	System shall provide scoring capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.	C	These requirements are agency-specified combination of business rules and objects configuration and definition.
6.58	Analytic Detection	System shall provide analytic capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.	C	These requirements are agency-specified combination of business rules and objects configuration and definition.
6.59	Fraud Identification	System shall provide analytical tools for fraud identification.	C	The Fraud subsystem in the GenTax core functionality. These requirements are agr driven by a combination of business rules configuration and definition.
6.60	Collection Treatment Strategies	System shall provide analytical tools for collection treatment strategies	C	The Analytics subsystem in the GenTax co functionality. These requirements are agr driven by a combination of business rules configuration and definition.
6.61	Dynamic Threshold Levels	System shall provide dynamic threshold levels for authorizations, reviews, and approvals based on evaluation of risk	F	The Business Rules and System Values sub configuration of this functionality. Examp strategies etc.
6.62	Scoring Methodology	Vendor shall support DDR define scoring methodology, including: range, activities, and follow-up	C	The Collections and Analytics subsystems configuration of this functionality. These GenTax implementation, driven by a comb be evaluated during base configuration a
6.63	Advanced Visualization--Vendor	Vendor shall support implementation of advanced visualization techniques in DDR	F	The Analytics, Executive Summary and Re facilitate the functionality.
6.64	Advanced Visualization--Geocoding	System shall support geocoding advanced visualizations	X	This requirement falls outside of scope.
6.65	Advanced Visualization--Heat maps	System shall support heat maps advanced visualizations	P	The Management Studio "SQL Editor" in

#	Name	Description	Response Code	Descrip
6.66	Third Party Data	System should have ability to import from 3rd party data sources	F	The Data Warehouse subsystem in the Ge this functionality.
6.67	Predictive Analytics--Vendor	Vendor shall support DOR in using the ITS capabilities to meet DOR's predictive analytics objectives	C	The Analytics subsystem in the GenTax co functionality. These requirements are age driven by a combination of l les configuration and definition.
6.68	Predictive Analytics--System	System shall support predictive analytics capabilities	C	The Analytics subsystem in the GenTax co functionality. These requirements are age driven by a combination of business rules configuration and definition.
6.69	Revenue Projections	System shall support revenue projections through statistical forecasting methods based on business rules	C	combination of business rules and objects configuration and definition. Statistical fo historical data.
6.70	Rate Adjustments	System shall support the use of analytics to simulate rate adjustment scenarios.	X	This requirement falls outside of scope.
6.71	Scorecards	System shall be able to develop scorecards to measure operational effectiveness	C	The Reports Subsystem (Executive Summa and Analytic Scoring) in the GenTax core example includes benchmarking within th configurations, typical for a GenTax imple This type of requirement will be evaluate
6.72	Scorecard Criteria	Vendor shall assist DOR on scorecard criteria	C	The Reports Subsystem (Executive Summa and Analytic Scoring) in the GenTax core example includes benchmarking within th configurations, typical for a GenTax imple This type of requirement will be evaluate
6.73	Root Cause	Vendor shall be able to determine root cause of success/failure of procedures	C	The Reports Subsystem (Executive Summa and Analytic Scoring) in the GenTax core example includes benchmarking within th configurations, typical for a GenTax imple This type of requirement will be evaluate

7. Project Team Experience

#	Name	Description	Response Code	Des
7.01	Tax Project Leader	Vendor's Tax Project Leader shall have more than 5 years of project leadership experience and full Vendor tax system implementation experience.	F	FAST confirms that our proposed Tax and full GenTax implementation expe
7.02	Sr. Project Manager	Vendor's Sr. Project Manager shall have either a) more than 5 years of project management experience or b) previous full Vendor tax system implementation experience.	F	FAST confirms that our proposed Sr. F experience and full GenTax implemer
7.03	Tax Technology Architect	Vendor's Tax Technology Architect shall have more than 5 years of Vendor tax technology experience with the Vendor tax system and full Vendor tax system implementation	F	FAST confirms that our proposed Tech
7.04	Tax Configuration Expert	Vendor's Tax Configuration Expert shall have more than 5 years of Vendor tax system configuration experience.	F	FAST confirms that our proposed Con
7.05	Sr. Tax Test Lead	Vendors' Sr. Tax Test Lead shall have more than 5 years of Vendor tax system testing experience.	P	Our proposed Sr. Tax Training Lead ha
7.06	Sr. Tax Training Lead	Vendors' Sr. Tax Training Lead shall have more than 5 years of Vendor tax system training experience.	F	FAST confirms that our proposed Sr. T

8. Maintenance, Support & Upgrades

#	Name	Description	Response Code	Description/Attachme
8.01	Maintenance	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to enable the Vendor to: 1. Provide patches to correct system errors, faults or bugs detected by DOR, the vendor, or other system users in the community. 2. Provide patches to remediate known (all-) security issues. 3. Improve performance. 4. Provide updated schema input process for IRS standard formats, GUDEF file formats, and 5. Provide community based enhancements. These products and services include, but are not limited to, help desk, advisory, consulting and development services.	F	Please see Tab B.3.i Maint, Support & Upgrades for our re
8.02	Support	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to enable the Vendor to support DOR's continuous improvement strategy. These products and services may include, but are not limited to: 1. Dedicated DOR support team and on-demand support from key Vendor resources, 2. Support for changes resulting from legislation, rate changes, tax type addition/removal, and 3. Business productivity workflow enhancements	F	Please see Tab B.3.i Maint, Support & Upgrades for our re
8.03	Upgrades	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to provide all solution related services to fully implement all upgrade (major and minor) on a schedule mutually agreed by DOR and the Vendor. Vendor commits to upgrading DOR within 12 months of upgrade availability at DOR's discretion.	F	Please see Tab B.3.i Maint, Support & Upgrades for our re

9. Internal Controls

#	Name	Description	Response Code	Descrip
9.01	Centralized Access Control	System shall provide a centralized screen for employees to view and edit user access	F	Every action in GenTax is logged and user agency requirements.
9.02	Industry Access Standards	System shall account for the principle of least privilege when establishing users access	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.03	Flagging	System shall support sending a selection of transactions to be reviewed by internal audit based on business rules	C	These requirements are agency-specified requirement will be evaluated during bas Include Indicators, My Searches, Ad hoc C
9.04	Threshold Inventory	Vendor shall provide an inventory of system thresholds and limits established as business rules	F	The Work Management subsystem provi staff individually or in bulk. Using busines their staff should work, and GenTax can a
9.05	Message Broadcast	System shall provide the ability to message relevant stakeholders of system updates based on business rules	F	Agency users can receive system-wide no
9.06	ITS/State financial system	System shall support the reconciliation of records between the ITS and state financial system	F	The Accounting subsystem in the GenTax General Ledger Module provides many re
9.07	Accounts Receivable	System shall reconcile sub ledger accounts to the ledger accounts	F	The Accounting subsystem in the GenTax
9.08	Accounting Method - Accrual	System shall allow for modified accrual basis accounting reporting	F	The Accounting subsystem in the GenTax
9.09	Accounting Method - Cash	System shall allow for cash basis accounting reporting	F	The Accounting subsystem in the GenTax
9.10	Fund Accounting Reconciliation	System shall support automated reconciliation of agency fund accounting, including distributions	C	These requirements are agency-specified defined role-based security configuration configuration and definition.
9.11	Segregation of Duties--Enterprise	System shall enforce segregation of duties at the enterprise level based on business rules	C	These requirements are agency-specified defined role-based security configuration configuration and definition.
9.12	Segregation of Duties--Transactional	System shall enforce segregation of duties at the transaction level based on business rules	C	These requirements are agency-specified defined role-based security configuration configuration and definition.
9.13	Role Definitions	System shall enforce definitions for roles based on business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to a and each user has access to only the scre
9.14	Role Definition View	Vendor shall provide a centralized view within the ITS of all information relating to a specific role, including: title, role ID, and access level	F	The Security subsystem defines, enforces activity. The User Profile screen within th
9.15	Grouping	System shall allow for grouping of roles based on business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scre
9.16	Group Definition View	System shall provide a view of all information relating to groups including: title, group ID, and access level	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scre Security Groups list and Security Groups t
9.17	Group Identification	System shall support automated creation of a unique identification number to specified groups	F	The Security subsystem defines, enforces activity. Unique identifiers are assigned t
9.18	Authorization Limit	System shall enforce authorization limits against roles based on business rules	F	The GenTax core architecture supports ar
9.19	Approval Chain	System shall enforce an approval chain for decisions and updates based on business rules	F	The Implementation Toolkit subsystem w architecture supports and facilitates the f tools between environments etc.
9.20	Standardized Workflow--Tracking	System shall allow for tracking processes against the standardized workflow	F	The Business Rules subsystem within the supports and facilitates the functionality. Configuration/security decisions can allow workflow. All changes are tracked and ev
9.21	Anomaly Detection Capabilities	System shall provide automated anomaly detection software or related capabilities	F	The Operations Support subsystem in the Examples include database health checks
9.22	Anomaly Definition--User	System shall provide automated anomaly detection software or related capabilities	F	The Operations Support subsystem in the Examples include database health checks
9.23	Anomaly Definition--System	System shall detect anomalies across activity based on System	F	The Operations Support subsystem in the Examples include database health checks
9.24	Anomaly Definition--Transactions	System shall detect anomalies across activity based on Transactions	F	The Operations Support subsystem in the Examples include database health checks
9.25	Anomaly Detection--Activities	System shall detect anomalies across activity based on Activities	F	The Operations Support subsystem in the Examples include database health checks
9.26	Automated Anomaly Detection	System shall support automated detection of data anomalies within the system based on business rules	F	The Operations Support subsystem in the Examples include database health checks
9.27	Anomaly Detection--View	System shall provide a view of data anomalies for review	F	The Operations Support subsystem in the Examples include database health checks Anomaly Data may be viewed in the Syste
9.28	Data Conflict Identification	System shall identify data conflicts within the system based on business rules	F	The GenTax core architecture supports ar prevent data conflicts from occurring, but include primary keys on tables, architectu only fully completed processes are comm Unexpected conflicts are individually eval
9.29	Data Conflict Resolution--Automated	System shall allow for automated resolution of data conflicts within the system based on business rules	C	The GenTax core architecture supports ar prevent data conflicts from occurring, but include primary keys on tables, architectu only fully completed processes are comm Unexpected conflicts are individually eval

#	Name	Description	Response Code	Descrip
9.30	Data Conflict Resolution—Manual	System shall allow for manual resolution of data conflicts within the system	C	The GenTax core architecture supports an prevent data conflicts from occurring, but include primary keys on tables, architectu only fully completed processes are comm Unexpected conflicts are ind val
9.31	Data Conflict Resolution—Automated	System shall support automated resolution of data conflicts within the system based on business rules	C	The GenTax core architectur s ar prevent data conflicts from occ ng, but include primary keys on tables, architectu only fully completed processes are comm Unexpected conflicts are individually eval
9.32	Data Conflict Reason Code	System shall support automated assignment of a reason code to a conflict	C	The GenTax core architecture supports an prevent data conflicts from occurring, but include primary keys on tables, architectu only fully completed processes are comm Unexpected conflicts are individually eval Unique identifiers (reason codes) are assi
9.33	Screen Access	System shall enforce different levels of screen accessibility based on role ID	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.34	Data Access	System shall enforce different levels of data accessibility based on role ID	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.35	Extended Leave	System shall capture data around extended employee leave to determine balance of workload	F	The Work Management subsystem provid staff individually or in bulk. Using busines their staff should work, and GenTax can a for assignment real-time through use of V be removed from the Work Groups and a Managers have access to view/manage te
9.36	Access/Control	System shall enforce access and control limitations based on business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.37	Linking—Role	System shall allow for linking of an employee to a role based on business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scree functions numbers are defined, functions
9.38	Linking—Group	System shall allow for linking of an employee to a group based on business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scre functions numbers are defined, functions
9.39	Security access-Editing	System shall enforce limitations on editing based on role	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.40	Security access-View Only	System shall enforce view only access of fields based on role	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.41	Security access-Accessing	System shall enforce limitations on accessing based on role	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.42	Security access-Deleting	System shall enforce limitations on deleting based on role	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.43	Update Access—Screen	System shall enforce limitations to editing screens based on role and business rules	F	The Security subsystem define rees activity. Functional access is ap to only the screens, data, and is a
9.44	Update Access—Field	System shall enforce limitations to editing fields based on role and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.45	Update Access—Correspondence	System shall enforce limitations to editing correspondence based on role and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.46	Update Access—Report	System shall enforce limitations to editing reports based on role and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.47	Access Thresholds	System shall enforce thresholds for employee access based on role and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.48	Access—Tax Type	System shall enforce limitations to access data based on tax type, role, and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap to only the screens, data, and functions a
9.49	Access—Case Type	System shall enforce limitations to access data based on case type, role, and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scre to Case Types can be defined with a Secu
9.50	Access—Customer Profile	System shall enforce limitations to access data based on customer profile, role, and business rules	F	The Security subsystem defines, enforces activity. Functional access is granted to ap and each user has access to only the scre
9.51	Sensitive Customer Flag	System shall allow for flagging of sensitive customers	F	The GenTax core application supports an feature used to support this.

#	Name	Description	Response Code	Descrip
9.52	Sensitive Customer Access	System shall enforce limitations to view sensitive customer's (e.g., celebrities, coworkers, etc.) information based on user's role	F	These requirements are agency-specific defined security configuration. This type
9.53	Sensitive Customer Access Report	System shall provide a report of attempts to access sensitive customer information	F	The Reporting subsystem in the GenTax c
9.54	Personal Records	System shall enforce limitations to access a user's own information	F	The GenTax core application supports and subsystem by associating the user logon t
9.55	Personal Records Report	System shall provide a report of attempts to access user's own information	F	The Reporting subsystem in the GenTax c
9.56	Analytics	System shall provide a forecasting tool to assist with determining thresholds	C	The Business Rules Subsystem provides t Reporting tools such as My Search can be Scan Jobs can be used to test the thresho
9.57	Thresholds	System shall allow for thresholds to be established based role and business rules	F	The Business Rules and System Values sul configuration of this functionality. Examp strategies etc.
9.58	Stops	System shall allow for stops to be established based on business rules	F	GenTax core architecture supports and fa be stopped per business rules.
9.59	Alerts	System shall allow for alerts to be established based on business rules	F	GenTax core architecture supports and fa Tasks etc. monitor system health and pro
9.60	Threshold Hierarchy	System shall allow for setting a hierarchy of thresholds within a process based on role and business rules	F	The Business Rules subsystem and Work facilitate the functionality.
9.61	Threshold Hierarchy—Adjustment	System shall allow for real time adjustments to the hierarchy of thresholds within a process based role and business rules	F	The Business Rules subsystem (System V architecture supports and facilitate the fu typical for a GenTax implementation. This definition. Real time adjustments are not
9.62	Dynamic Limits	System shall allow for limits and thresholds to be set dynamically (i.e., based on tax type) based on business rules	F	The Business Rules subsystem in the Gen
9.63	Historical Data	System shall use historical data, where possible, to determine thresholds and limits	C	These requirements are agency-specified combination of business rules and object configuration and definition.
9.64	Bidirectional Traceability	System shall trace transactions bi-directionally (i.e., sub-ledger to GL and GL to sub-ledger)	F	The Accounting subsystem in the GenTax
9.65	Visibility	System shall provide a report of audits performed on transactions by internal audit	C	These requirements are agency-specified combination of business rules and object configuration and definition.
9.66	Transaction ID	System shall support automated creation of a unique identification number to transactions	F	GenTax core architecture supports and fa
9.67	Accounting Close-Monthly	System shall provide for monthly accounting closing	F	The Accounting subsystem in the GenTax
9.68	Accounting Close-Quarterly	System shall provide for quarterly accounting closing	F	The Accounting subsystem in the GenTax
9.69	Accounting Close-Yearly	System shall provide for yearly accounting closing	F	The Accounting subsystem in the GenTax
9.70	Exception Reporting	System shall provide reporting on exceptions detected from reconciliation effort	C	The Reporting subsystem in the GenTax requirements are agency-specified config combination of business rules and object
9.71	PeopleSoft Reconciliation	System shall support manual reconciliation of accounting information against PeopleSoft data	F	The Accounting subsystem in the GenTax
9.72	Bank Account Reconciliation	System shall support automated reconciliation of accounting information against bank account data	C	These requirements are agency-specified reporting requirements. This type of requ
9.73	Language Integration	System should integrate DOR language by updating labels and titles across the ITS	F	GenTax core architecture supports and fa
9.74	Security access-monitoring	System shall provide a report detailing all users and their security access	C	The Reporting subsystem in the GenTax c requirements are agency-specified config combination of business rules and object configuration and definition.
9.75	PeopleSoft ID	System shall provide a mapping between the ITS ID and the PeopleSoft ID	F	The Accounting subsystem in the GenTax
9.76	Audit Log	System shall provide a log of all transactions that includes relevant information (date, amount, transaction type, employee, change (from/to))	F	GenTax core architecture supports and fa
9.77	Account Threshold Notification	System shall support establishing account parameters for threshold or volume transactions to managers or staff	C	These requirements are agency-specified combination of business rules and object configuration and definition.
9.78	Random Selection for Review-Accounts	System shall support random selection of entity accounts for review	C	These requirements are agency-specified combination of business rules and object configuration and definition.
9.79	Random Selection for Review-Transactions	System shall support random selection of transactions for review	C	These requirements are agency-specified combination of business rules and object configuration and definition.
9.80	Transaction Mapping	Vendor shall provide a mapping of identified controls to transactions	F	Every financial action in the system creat rules are imposed in order to maintain a
9.81	Backlog Monitoring	System shall provide backlog monitoring to identify points of bottlenecks within processes	F	The Operations Support subsystem (Withi and facilitates the functionality. Perform
9.82	Business Activity Monitoring	System shall allow for monitoring of business activities to identify points of potential bottlenecks for continuous process improvement	F	The Work Management subsystem provi staff individually or in bulk. Using busines their staff should work, and GenTax can a

10. Administrative Requirements

#	Name	Description	Response Code	Description/Att
	1) Tax Type			
10.1.01	Add tax type	System shall provide capability to add tax type	F	Tax type accounts are created for cu ne account usually pertains to a specific uch but can also reflect other concepts such as an item
10.1.02	Edit tax type	System shall provide capability to edit tax types	F	The highly flexible tax type account structure is des their activities.
10.1.03	Remove tax type	System shall provide capability to remove tax type	F	The highly flexible tax type account structure is des their activities.
10.1.04	Effective dates—tax type	System shall provide capability to determine effective dates for tax type(s)	F	Tax type account attributes may be configured to r frequency, account start and end dates, business st closure, and so on.
10.1.05	Form content management	System shall provide administrative rights for form content management (e.g., account, forms, name, details)	F	The Correspondence subsystem provides functions customers. Letters are configured in GenTax using content, and behavior for each type of letter. Most staff using an intuitive drag-and-drop interface for
10.1.06	Tax type summary	System shall provide tax type summary view (e.g. descriptions, status, history)	F	Tax type account attributes may be configured to r frequency, account start and end dates, business st closure, and so on.
10.1.07	Filter—tax type	System shall provide filtering of tax types in viewable list based on business rules	F	Reporting functionality can provide users with view
10.1.08	Display—tax type	System shall display tax types in a viewable list	F	Reporting functionality can provide users with view
10.1.09	Tax type procedures	System should provide guided procedures for administration of tax type	P	FAST deploys an integrated Help manager that dea procedures for implementation of GenTax. The Hel information to help them with understanding the s task they are undertaking. The Help manager offer is searchable and updateable to offer the user cus allows the seamless integration of site-specific tool benefit from a rich repository that makes the appli- productivity and reducing acceptance time for the.
10.1.10	Reporting frequency	System shall allow for determination of tax type reporting frequency based on business rules	F	The Returns subsystem handles all aspects of proce submitted by customers. Driven by business rules, issues return forms, and processes incoming return A tax type account's filing frequency indicates how return for an account. Most filing due dates are det or annually and a specific number of days after th active, GenTax creates a filing expectation for each and due date business rules. For irregular filing freq requirements for the tax type account based on se
	2) Forms			
10.2.01	Create form	System shall provide capability to create form(s) (e.g., tax, correspondence)	F	The Correspondence subsystem provides functions customers. Letters are configured in GenTax using content, and behavior for each type of letter.
10.2.02	Create form—template	System shall provide pre-populated templates for forms	F	GenTax uses mail types to simplify the creation and settings based on agency business rules, such as wh manual or automated processes, which account ty customer names, addresses, and identifiers used in Letter templates are created using a drag-and-drop the template and resize and format as necessary. T information in GenTax, including data from the thir party entities that interface with GenTax. When a l automatically populates the data fields with the ap
10.2.03	Form content	System shall provide capability to specify form content based on user-defined parameters (e.g. user codes)	F	Letter templates are created using a drag-and-drop the template and resize and format as ty. T information in GenTax, including data nts party entities that interface with Gen , a l automatically populates the data fields with the ap
10.2.04	Edit form	System shall provide capability to edit static content in forms	F	Letters are configured as "editable" or "not editabl they are printed. Once printed, however, a letter c "invalid," meaning that it should never have been p letter can be marked as "Not Ready," meaning that also be set to temporarily suspend outgoing corres letter content by selecting predefined options wher regions to provide more flexibility. Users can also a paragraphs for use in composing letters.
10.2.05	Form alignment	System shall allow for manual form field alignment	F	Letter templates are created using a drag-and-drop the template and resize and format as necessary.
10.2.06	Carry forward	System shall provide capability to carry forward previously used forms	F	Templates can draw data from virtually any source previously used.
10.2.07	Remove form	System shall provide capability to remove form(s)	F	GenTax can remove forms or make letter inactive.
10.2.08	Approve form	System shall provide administrative review process to authorize form(s)	F	Letters can be secured to allow only authorized use on a template to choose options and add content.
10.2.09	Special characters	System shall provide the use of graphics, electronic signatures, or special characters on form(s)	F	Users can add images, text, electronic signatures, v and can also format headers, footers, and page bre modify elements of the letter template.
10.2.10	Spell Check	System shall provide spelling check capabilities equivalent to the spell check capabilities in software products such as the Microsoft Office suite	C	Spelling and grammar check is provided by native t
10.2.11	Grammar Check	System shall provide grammar checking capabilities equivalent to the grammar check capabilities in software products such as the Microsoft Office suite	C	Spelling and grammar check is provided by native t
10.2.12	Version control	System shall provide version control mechanism across forms	F	Version control and history is captured for forms a

#	Name	Description	Response Code	Description/Att
10.2.13	Valid dates– forms	System shall allow for ability to define valid form beginning and end dates	F	User can mark an issued letter as "invalid," meanin been printed and sent. In addition, a letter can be n printed. A "Stop Mail" indicator can also be set to t
10.2.14	Valid dates–content	System shall allow for ability to define valid content block beginning and end dates	F	Users can mark an issued letter as "invalid," meanin been printed and sent. In addition, a letter can be n printed. A "Stop Mail" indicator can also be set to t
10.2.15	Revision dates	System shall record revision dates on forms	F	Version control and history is captured for forms as
10.2.16	Revision approval	System shall support supervisor review for form revision(s)	F	The "look and feel" for a mail type is controlled wit customer the default template for the mail type is c mail types by adding a new template, which can be template is published and becomes the default tem
10.2.17	Branded forms	System shall provide forms with DOR-specific branding	F	Users can add images, text, electronic signatures, v and can also format headers, footers, and page bre modify elements of the letter template.
10.2.18	Pre-population	System shall support automated population of entity information into manually personalized correspondence	F	The system can automatically populate text in lette manually composing notices.
10.2.19	Map schema	System shall provide mapping of underlying schema to form data fields	F	GenTax provides mapping of schema to the data fo
10.2.20	Language	System shall provide the ability to create forms in different language(s)	F	All languages in the requirement above are capable (for internal users) and e-Services (for external user system what to display. These decodes can be cont Spanish, or French) based on user preferences. Lan the agency. Customers can also indicate their natu correspondence template exists in that language, a Translation is performed manually using a built-in t system into one location. This tool also quickly high
10.2.21	Bi-lingual forms	System shall allow language of form to be selected based on user profile	F	All languages in the requirement above are capable (for internal users) and e-Services (for external user system what to display. These decodes can be cont Spanish, or French) based on user preferences. Lan the agency. Customers can also indicate their natu correspondence template exists in that language, a Translation is performed manually using a built-in t system into one location. This tool also quickly high
10.2.22	Generate form--electronic	System shall provide capability to generate electronic version(s) of all forms	F	Electronic delivery is available. The agency designa must be delivered in hardcopy. GenTax securely de through e-mail that new, unread letters are availab
10.2.23	Generate form—paper	System shall provide capability to generate paper version(s) of all forms	F	Letters can be created and sent to customers. Base upon user request. The GenTax correspondence fu Agency users can also initiate letters and other con
10.2.24	Print preview	System shall provide capability to view form in print preview	F	GenTax provides print preview for correspondence
10.2.25	Print file	System shall generate form print file	F	GenTax produces letters in Portable Document For printed document as an electronic image that can l person.
10.2.26	Print form	System shall provide capability to print form locally	F	GenTax produces letters in Portable Document For printed document as an electronic image that can l person.
10.2.27	Import form	System shall provide capability to scan or import forms to create editable fields	F	GenTax will support the capability to scan or impor
10.2.28	Form depository	System shall provide central repository of forms	F	Content Management provides project teams with documents. Documents stored in Content Manage management, and authorization features of the Se user actions. All versions of documents are stored, to indicate they are finalized.
10.2.29	View forms	System shall display all forms in viewable list based on business rules	F	The GenTax core architecture supports and facilita be viewed in list format.
10.2.30	Search forms	System shall provide searching of forms in viewable list based on business rules	F	The GenTax core architecture supports and facilita be searched and filtered based on business rules.
10.2.31	Filter forms	System shall provide filtering of forms in viewable list based on business rules (e.g. form name, date)	F	The GenTax core architecture supports and facilita be searched and filtered based on business rules.
10.2.32	Embedded hyperlinks	System shall allow for embedded hyperlink(s) to external websites	F	Letters may contain images, text, electronic signatu templates, and can also format headers, footers, a to draw and modify elements of the template.
	3) Rules/Workflow			
10.3.01	Add rules	System shall provide user interface with ability to create rules	F	The Work Management subsystem provides tools t staff individually or in bulk. Using business rules, m their staff should work, and GenTax can automatic
10.3.02	Edit rules	System shall provide user interface with the ability to edit rules	F	Supervisors and managers can use the Work Mana them to users. This is done by creating sets of rules queues house the tasks until a user needs more wo a user with the proper security permissions can ma this is done based on the user's work group and oth also be used to track tasks assigned to and complet
10.3.03	Remove rules	System shall provide user interface with the ability to remove rules	F	Business rules can be applied to the work managen
10.3.04	Deploy rules	System shall provide user interface with the ability to deploy rules	F	Business rules can be applied to the work managen
10.3.05	Define workflow	System shall provide capability to define workflow functionality for select business processes such as document processing, exception handling, customer service, auditing, collections, appeals, and criminal investigations	F	Tasks, such as cases and work items, can be config manage workflow within a task. The status of open other relevant task attributes can be viewed and m clear snapshot of the current agency workload.
10.3.06	Implement workflow	System shall provide capability to implement workflow functionality for select business processes	F	Supervisors and managers can use the Work Mana them to users. This is done by creating sets of rules queues house the tasks until a user needs more wo a user with the proper security permissions can ma this is done based on the user's work group and oth also be used to track tasks assigned to and complet

#	Name	Description	Response Code	Description/Att
10.3.07	Track rules	System shall provide capability to track changes to business rules in a viewable list	F	Supervisors and managers can use the Work Mana them to users. This is done by creating sets of rules queues house the tasks until a user needs more wo is user with the proper security permissions can ma this is done based on the user's work g 1 ot also be used to track tasks assigned t Jet of the system.
10.3.08	Retain rules	System shall provide capability to retain business rules for multiple filing periods	F	Supervisors and managers can use the v wana them to users. This is done by creating sets of rules queues house the tasks until a user needs more wo a user with the proper security permissions can ma this is done based on the user's work group and ot also be used to track tasks assigned to and comple of the system.
10.3.09	Apply rules	System shall provide capability to apply rules to past periods	F	GenTax can automatically reassign tasks to a new
10.3.10	Valid dates--rules	System shall allow for determination of activation date(s) of business rules based on DOR-specified criteria	F	Benchmarking provides a way to define and measu describe the expected number of tasks (quota) to b benchmarked against other users to see how much run to further analyze work performance.
10.3.11	Route work	System shall support workflow technology to route work to appropriate user based on business rules (e.g., sort, prioritize, balance, send)	F	The Work Management subsystem provides tools i staff individually or in bulk. Using business rules, m their staff should work, and GenTax can automatic
10.3.12	Workflow paths	System shall designate dynamic workflow paths based on analytics	F	Managers can actively monitor and manage work completed on time and according to defined proce
	4) Users			
10.4.01	Establish administrative access	System shall provide capability to establish administrative access for a user	F	Security roles can be developed to provide certain
10.4.02	Multiple levels of access	System shall provide multiple levels of administrative roles with varying level of access	F	Security roles can be developed to provide certain
10.4.03	Customize levels of access	System shall provide capability to assign user access with customizable levels of administrative access (e.g., access to tax type, but not forms)	F	Security roles can be developed to provide certain
10.4.04	Roles-based access	System shall allow administrators to set varying level of access based on user role(s)	F	The Security subsystem defines, enforces, and track activity. Functional access is granted to agency use to only the screens, data, and functions associated
10.4.05	User access level	System shall allow administrators to change user/user group access (e.g. by level, function)	F	Security roles can be developed to provide certain
10.4.06	Notification of access	System shall support automated generation of notification of user access update based on business rules	F	Reports are created to track and report user's acti
10.4.07	Display errors	System shall display notification errors if user does not have privilege(s) for specific action	F	Access to functionality in GenTax is restricted by as user is not assigned the security identifier they do
10.4.08	View users	System shall display all users in viewable list, based on business rules (e.g. status, level of access)	F	Security manager can provide list views of users by
10.4.09	Search users	System shall provide searching of users in viewable list based on business rules	F	Users are searchable in the security manager
10.4.10	Filter users	System shall provide filtering of users in viewable list based on business rules (e.g. name, level of access, department)	F	Security manager can provide lists of users by grou
10.4.11	Master administrator	System shall provide capability to assign master administrator access privileges	F	Security roles can be developed to provide certain
10.4.12	Revoke access	System shall support automated revocation of user access privileges based on business rules	F	Start and end dates can be designated on users pro
10.4.13	Revoke access--manual	System shall allow users to manually revoke user access privileges	F	Start and end dates can be designated on users pro
10.4.14	Notification of revocation	System shall support automated generation of notification of user access revocation based on business rules	F	Start and end dates can be designated on users pro
10.4.15	Access expiration	System shall support automated access expiration based on select criteria (e.g., employment, employment status, date)	F	Start and end dates can be designated on users pro
10.4.16	Temporary access	System shall allow for temporary user access based on select criteria (e.g. time, access level)	F	Start and end dates can be designated on users pro
	5) Views			
10.5.01	User View	System shall allow administrators to view screens user is viewing	F	Snapshot allows authorized users to view current v
10.5.02	Customize workspace	System shall provide capability to customize work space, such as: screen resolution, font size, color scheme, navigation preferences)	F	Font size, color scheme, and navigation links for In
10.5.03	Customize view	System shall provide capability to customize user view	F	Any GenTax list screen has an option to change the outlining can also be saved under a user's personal be retrieved with those settings. Their ay
10.5.04	Customize navigation	System shall provide capability to customize navigation paths (e.g., ability to navigate to desired screen)	F	Users can create bookmarks that are qu can be created, saved, and shared with users
10.5.05	Multiple screens	System shall support viewing multiple screens at the same time within the system	F	GenTax is web-based so users can take advantage multiple windows.
10.5.06	Screen portioning	System shall support screen partitioning to allow for simultaneous viewing of multiple screens	F	GenTax is web-based so users can take advantage multiple windows.
10.5.07	View profile information	System shall provide consistent profile information on each screen (e.g., entity name, ID number)	F	User profile information is available on each screen
10.5.08	Interface	System shall provide capability to interface with external agencies to view relevant information	F	New or custom interfaces are documented during t document. This document specifies information su contact, technical contact, and formats/layouts. Th coordination with an agency project manager and impact, risk, and available resources.
	6) Reports			
10.6.01	Create report	System shall provide capability to create report(s) based on data available to DOR	F	The Reporting subsystem provides tools to create, that adhere to an agency's formatting standards. and distributed automatically in GenTax according and print reports.
10.6.02	Select variable	System shall provide capability to select variables to be included on report	F	The My Searches function within the subsystem all run their own queries through a point-and-click int pre-configured data navigation tree. Users select s traversing the tree. Query results are presented in filter data results.
10.6.03	Report access--view	System shall provide capability to access reports based on access level	F	Security can be configured for reports to restrict d
10.6.04	Report access--create	System shall provide capability to create reports based on access level	F	Security can be configured for reports to restrict d
10.6.05	System reports	System shall support the manual generation of DOR-created reports (e.g., annual, department)	F	FAST understands and will comply with this require

#	Name	Description	Response Code	Description/Att
10.6.06	Format: to send/save	System shall support multiple formats for reports (e.g., HTML, PDF, document, spreadsheet)	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.07	Generate form—electronic	System shall provide capability to generate electronic version(s) of reports	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.08	Generate form—paper	System shall provide capability to generate paper version(s) of reports	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.09	Print preview	System shall provide capability to view report in print preview	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.10	Print file	System shall generate report print file	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.11	Print report	System shall provide capability to print report locally	C	GenTax produces reports in Portable Document Fo printed document as an electronic image that can person. GenTax creates a PDF document for each report using an integrated reader such as Adobe Pl
10.6.12	Form repository	System shall archive all reports in a central repository based on business rules	F	GenTax maintains a history of all generated reports misplaces their printed report or needs this inform restrict access to queries, reports, data cubes, My
10.6.13	View report	System shall display all reports in viewable list based on business rules	F	Users can view, search, export, and print reports.
10.6.14	Search report	System shall provide capability to search reports based on business rules	F	Users can view, search, export, and print reports.
10.6.15	Filter report	System shall provide filtering of reports in viewable list based on business rules (e.g. report name, date)	F	In many cases, the information users need to make window. Unlike many legacy systems, GenTax take customer attributes, and returns to provide access list windows may sort, filter, group and outline the Microsoft Word or Microsoft Excel. Once exported data in external documents or programs as necess
10.6.16	Backup report	System shall provide capability to backup reports based on business rules	F	GenTax maintains a history of all generated reports misplaces their printed report or needs this inform restrict access to queries, reports, data cubes, My
	7) Rates/Dates			
10.7.01	Effective rates	System shall provide capability to select effective dates for rate(s) (e.g., interest, penalty, distribution)	F	Agencies often require updates to key values. To sh GenTax utilizes reference tables (maintained by IT technical staff) to store these static values.
10.7.02	Effective rates—document	System shall provide capability to document effective dates for rates	F	Business rules with a high degree of variability and "system values" in GenTax. Authorized business us date for modified business rules to take effect.
10.7.03	Vary rates	System shall allow rates to be varied during select time period	F	Business rules with a high degree of variability and "system values" in GenTax. Authorized business us date for modified business rules to take effect.
10.7.04	Calculate rates	System shall calculate rates based on different components of entity (e.g., tax type, liability type, amount owed)	F	Business rules with a high degree of variability and "system values" in GenTax. Authorized business us date for modified business rules to take effect.
10.7.05	Rate parameters	System shall provide capability to set parameters for rate amounts based on business rules	F	Business rules with a high degree of variability and "system values" in GenTax. Authorized business us date for modified business rules to take effect.

ORGANIZATIONAL CHANGE MANAGEMENT

2.3.2.2 Organizational Change Management

"The primary cause of failure for large transformation projects can be traced to a lack of active change management. Change management includes communication and messaging, change assessment, organization or operational redesign, and organizational go-live support. Is change management delivered through the Vendor organization or do you typically leverage partners or sub-contractors?

Please provide examples of how you partnered with previous clients for organizational change managment activities including, but not limited to:

1) Overview of your change management approach.

Please note that updates to the original submission are identified in yellow highlight.

FAST's proposal includes all OCM services necessary for a successful implementation of GenTax. We strongly believe that hiring a separate OCM contractor to work on an implementation of FAST software increases the risk to the project.

FAST's approach to Organizational Change Management (OCM) has been developed through our experience successfully implementing our system for government agencies over the course of many years. It is aligned with industry "best practices," but customized for our implementations.

OCM is an integral part of a FAST implementation project. There may be profound differences in how business functions are administered in legacy systems and how they will be administered in GenTax. OCM is a set of activities within the FAST Implementation Methodology that helps an agency:

- Mobilize the commitment of people to implement change;
- Address the "people matters" that arise when an organization changes;
- Develop skills in leaders, managers, and employees to manage and accept change.

OCM is not:

- Conducted separate and apart from the FAST implementation;
- Something that is done to an organization by independent experts;
- A way to make people happy or a magic solution that makes change occur without effort.

Successful implementations require a close partnership on all activities. FAST partners with the agency to provide support and guidance for OCM based on our proven methodology. Each engagement is tailored to the needs of the agency, based on the culture, readiness, and ability.

ORGANIZATIONAL CHANGE MANAGEMENT

The OCM implementation is a shared responsibility. Agency engagement and ownership of the change process is crucial. FAST provides structure and experience by offering guidance, tools, and best practices, as needed. The agency provides the leadership and change champions from within.

The table below provides a high-level overview of the roles and responsibilities between the agency and the FAST team specifically associated with OCM processes.

Group	Roles and Responsibilities
Leadership Team	– Support project goals and objectives and remain positive champions for the project – Create a climate that promotes the organizational changes to be made – Select your best and brightest to represent you on the project – Provide timely decisions related to business process changes that are escalated – Assist in reviewing key messages to be distributed – Assist in resolving issues related to resistance to change – Provide strong leadership and effective communications in support of the project – Clearly communicate the need and reason for the change
FAST	– Develop or support the development of OCM-related deliverables and work products – Incorporate OCM-related implementation tasks into the schedule – Develop training curriculum and prepare FAST and agency trainers – Support the agency with a communications framework
Project Team	– Timely review of OCM deliverables – Participate in OCM planning activities – Assist in identifying changes – Assist in identifying and escalating OCM-related issues to senior management – Assist in defining key messages related to the project and business processes
Agency Departments	– Select your best and brightest to represent you on the project – Provide support in reviewing changes and mitigation activities – Define implementation activities associated with business process changes – Provide updates on implementation activities that are solely being performed by the department – Ensure staff are available to support knowledge transfer and training activities – Conduct internal meetings with staff to communicate the need/reason for changes
Affected Business Units	– Help identify how their units will be affected – Help develop tactics to support the changes – Make efforts to execute the tactics – Seek ways to embrace the changes

ORGANIZATIONAL CHANGE MANAGEMENT

The primary purpose of the OCM Approach is to support DOR as it transitions to the new system. This includes documenting the business process changes, identifying the internal and external stakeholders that may be affected by the changes, analyzing the nature and degree of the change on stakeholder groups, and developing tactics to help each stakeholder make an effective transition. The approach is closely aligned and integrated with a number of our other system implementation management approaches, including communications, training, and knowledge transfer.

FAST's organizational change approach focuses on transformational changes, not all of the changes that come with the implementation of a new IT system. With the implementation of GenTax, screen layouts will be different, new terminology will be introduced, and system navigation will change. In most cases, employees will be performing work very similar to the work they used to perform, but will need to learn how to do so in the new system. For the purposes of this effort, these types of changes are not regarded as transformational changes. Familiarizing employees with the look and feel of the FAST software, system navigation, how to use new features and functionality, and how to perform their old job using a new system will be addressed through the training program.

Communication/Messaging

Communication is a crucial component in any project and the approach is developed to ensure that the appropriate messages are delivered to the appropriate audiences at the appropriate times over the course of a project.

The communication plan provides a framework to use when communicating the system's impact and benefits to stakeholders. The team analyzes each stakeholder and determines the mode, method, medium and timing for specific communications. The team consults and follows the plan when changes to processes, procedures, or functions affect stakeholders.

Updated throughout training and go-live for deskside support. The communication plan is updated to keep all project team members, management, and other stakeholders aware of progress toward cutover. During the Preparation Phase of the FAST methodology, the communication plan is developed as part of primary implementation activities.

Change assessment

FAST's OCM Approach contains a Change Readiness Assessment, which serves as an impact-analysis report of major system changes. Major system changes are identified with the assistance of project team members who are familiar with the software configuration, existing and new business processes, and the training plan. Those consulted include business representatives, FAST team leads, FAST

implementation consultants, and the FAST training manager. Changes are verified by cross-checking the project's requirements and are validated through meetings with front-line managers. The Change Readiness Assessment focuses on major system changes. Not every change that comes with the implementation of FAST software will be major or transformational. As previously stated, implementation of the new system introduces new screen layouts, terminology, and system navigation. In most cases, users will perform work in the new system that is very similar to the work they conduct in legacy systems. This means that although the software provides new tools, functionality, and navigation features, it doesn't fundamentally alter the work that users perform. For the purposes of the Change Readiness Assessment, these types of changes are therefore considered non-transformational and are typically addressed through FAST's training program rather than through OCM efforts. Major system changes (transformational changes) are those that fundamentally alter how work is to be performed, and may affect who does the work as well as the underlying business processes. By definition, transformational changes invoke a broader range of change management tactics to effectively support an agency's transition to a modern, integrated, software solution.

Each transformational change is documented and includes the following information:

- Impact analysis
- Affected user identification
- Change tactics
- Change execution plan

Go-live support

During the early stages of system-adoption within a production environment, it is important to provide enhanced support to first-time users. During this time, deskside support goals include:

- Provide guidance to any user performing a regular activity for the first time
- Identify any conversion or software distribution/installation problems as soon as possible
- Catch any common user mistakes or bad habits early and address with ad hoc training and/or general communications to the user community
- Provide moral support for users who may not be confident in their new skills
- Confirm proper use of the system
- Ensure a smooth transition from the legacy system to GenTax

Change Request Management

Information on the change-management approach will be included in the project plan to define the process for introducing, evaluating, and potentially incorporating project changes. Schedule,

requirements, deliverables, and scope modifications are controlled through the change-management process. The implementation of enterprise-level IT systems is a dynamic process that is best served by flexibility. We understand that some requirements will inevitably change during the course of a project. We will address changes to in-scope requirements through a collaborative working relationship between FAST and DOR project personnel. Our focus is on configuring GenTax to provide our clients with a state-of-the-art solution, not on haggling about scope, price, requirements, and schedule.

Our objective on this project, as on all our projects, is to complete the project on time and within the proposed price. We know what it takes to deliver a modern tax system and this knowledge is reflected in in our schedule, our fixed-price cost, and our willingness to accommodate changes to requirements as the project unfolds. Change orders are extremely rare on our projects and in every case, have been initiated at the request of our client agencies, typically to add significant scope that was not in the original contract.

Due to the flexibility inherent in our COTS software, formal change requests are needed only when an item of significant scope change is presented, such as the addition of a new tax program or a significant change in project direction that would require a formal change request and contract modification. Low-level change impacts are considered for implementation based on multiple considerations. The considerations involve if, when, and how the change will be made based on current project bandwidth and answers to questions such as:

- What additional value will the change provide to the agency?
- Is the change mandated by law?
- Who or what is affected by the change (for example, all taxpayers, two jurisdictions, or a new interface to an external agency)?
- Does the change fit within the current stage in the project life-cycle (for example, does configuration, testing, and training need to be modified)?
- Is the change a configuration or development modification?
- Does the change impact other modules, and if so, in what way?
- What is the nature of the change (for example, cosmetic, additional business-rule validations, workflow route, and so on)?
- Is the change needed at go live or can it be addressed in post-production?
- What will occur, or not occur, if the change is not performed?
- What are the alternatives, if any, to address the requested change?

Based on the above considerations, FAST and DOR will determine if the change should be implemented without need for a change request or if rework or redirection is needed. If rework or redirection is needed, the amount of necessary work is estimated. Relevant baselines are re-baselined upon change order implementation.

The goal of this process is to:

- Ensure that standardized methods, processes, and procedures are used for changes
- Facilitate the efficient and prompt handling of changes
- Maintain the proper balance between the need for a particular change and the potential detrimental impact of the change
- Improve communication within the organization
- Provide for a centralized repository and maintenance of project changes. A change request is not a risk, issue, schedule change, or Solution Request. However, risk, issues, schedule changes, and Solution Requests may result in a change request.

Project management is ultimately responsible for the change-management process. The project managers can delegate responsibilities within the project team as appropriate. The project managers, executive sponsor, and executive steering committee typically represent the three progressively authorized levels of change control on our implementation projects. Additionally, based on the approved change, steps may be defined for sending changes to a change-control or change-advisory board.

Our standard decision-request process helps to ensure that the project team presents issues to decision makers in a complete and concise fashion as part of the overall change-control process. Issue resolution is facilitated by use of a decision-request form, which requires project personnel to include the issue origination date, the decision "needed-by" date, and the project priority level (such as emergency, expedited, or standard). The decision-request form, in conjunction with the decision-request log, track issues and decision requests from inception to resolution and serve as project artifacts.

Because project teams are able to make most decisions without the input of executive management, issues that are escalated to the executive levels are generally those that cannot or should not be decided by lower or mid-level agency management. For instance, issues that have a high impact on customers (such as the frequency of which to send customer communications) or the agency (such as the automation of a previously manual process, prompting reassignment of agency personnel) are examples of issues that are typically escalated to the executive level.

2) Draft Change Management Plan for this project that at a minimum contains:
- Behaviors and Change Readiness Approach
- Stakeholder Engagement Plan including detailed activities and frequency
- Business Process Reengineering Approach
- Transition Management Plan

Tab G. Additional Documents contains documentation that highlights FAST's standard Organizational Change Management Approach.

3) Draft Communication Plan that at a minimum contains:
- Audience Analysis
- Communication Method/Channel Inventory
- Message and Timing Analysis
- Communication Strategy

Tab G. Additional Documents contains documentation that highlights FAST's standard Communication Approach.

4) Draft Stakeholder Analysis Plan that at a minimum contains:
- Categorization of relevant stakeholders by their support for a change (e.g., "Supporters", "Blockers", etc.) and identifies the change's impact on each group
- Capture of data on communication with key stakeholders including frequency, preferred channel, and current challenges

Stakeholder Analysis is captured in the Organizational Change Management and Communication Plans. FAST's standard approach documentation can be found in Tab G. Additional Documents.

5) A response to each requirement with details on how the Vendor will deliver the requirement.

FAST's response to each requirement can be found in tab B.3 Att F3 – Project Related Req.

6) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation

Please see RFP Attachment P - Project Related Requirements Detail for additional information."

ORGANIZATIONAL CHANGE MANAGEMENT

FAST's proposal includes all OCM services necessary for a successful implementation of GenTax. We strongly believe that hiring a separate OCM contractor to work on an implementation of FAST software increases the risk to the project.

It is our intent to be responsible for Organizational Change Management for the Revenue Modernization Integrated Tax Systems and Services (RMITSS) project. Third-party involvement poses significant challenges and delivery risk as vendors have very little expertise with our solution, our technology, our methodology, or the day-to-day business of the agency. We look forward to an opportunity to discuss our approach to OCM and how this aligns with the agency's vision. Additional discussions to examine scope and approach can help determine any pricing impacts.

2.3.2.3 IV&V

"The State of Indiana mandates and DOR strongly supports the need for IV&V services for projects of this size and complexity. Please provide your approach to partnering with IV&V vendors. Some examples include how you respond to findings, compliance with best practices and compliance with IV&V practices."

Please note that updates to the original submission are identified in yellow highlight.

FAST commits to providing a solution that is proven, tested, and 100% reliable. We also commit to providing a solution that meets the highest level of performance.

FAST understands that IV&V services are required by the State of Indiana and FAST does believe that traditional IV&V services can add value to a project. However, FAST must insist on limiting the number and time IV&V contractors are dedicated to the project. FAST's experience is that increased IV&V involvement directly translates to increased risk of schedule slippage, budget overruns, and quality degradation. FAST proposes that IV&V contractors may participate on the project but that the total time dedicated to any DOR work of all IV&V contractors will be limited to the equivalent of one full time employee or 37.5 hours per week. The role of IV&V contractors must also be limited to ensure that they are only providing traditional verification and validation functions and not expanding the scope of their role. This includes reviewing project material, conducting interviews, and observing (not participating or directing) project work such as meetings, testing or training to verify that the project plan is being followed and that the project is proceeding according to schedule. They may not make any attempt to influence, affect or change the FAST Implementation Methodology that the project is following beyond the identification of projects risks and concerns within their reports to project leadership. DOR will address or provide any reports or deliverables that are required by the State and/or DOR and that are not produced as part of the FAST Methodology. Further, neither FAST nor DOR staff shall expend any effort to train individuals providing IV&V services in DOR business, GenTax, or the FAST Implementation Methodology.

FAST's experience has shown that in order to be successful, these types of projects need to be staffed by State employees. Ideally, all of the employees working as part of the State project team have a vested interest in the project outcome. Should DOR need to hire staff to backfill, the newly hired staff should not be assigned to the project. The newly hired staff should cover for the existing DOR employees who are reassigned to the project. FAST firmly believes that any person working on the project must be a full time DOR employee, should relocate their office to the project space, and should expend 90% of their working hours every week on project work. This facilitates project progress and helps to ensure that other DOR employees will accept the new system. FAST will allow programming and IT staff that are

provided by a third party under a staff augmentation agreement as long as they are supervised by DOR or FAST employees and their primary role is providing technical services including conversion, programming, database administration, hardware management, network administration and/or disaster recovery planning. For the avoidance of doubt, only State employees shall be able to review and approve any project related material that requires approval.

2.3.2.5 Testing

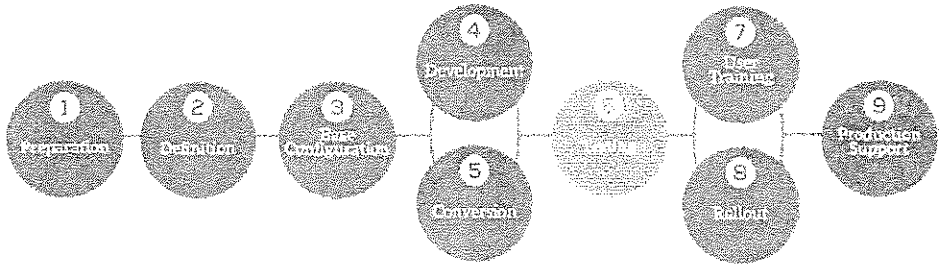
"DOR will need to confirm that the solution is functioning as designed ahead of a production release. The expectation is that the Vendor will perform multiple rounds of testing and system confirmation throughout the project. This includes unit testing, system testing, integration testing, conversion testing, regression testing and user acceptance testing. The concept of testing would extend to training and dry runs of conversion and go-live activities.

Please provide the following documents with your proposal:

1) Overview of Vendor's testing approach including any tools or techniques leveraged.

Please note that updates to the original submission are identified in yellow highlight.

The Testing Phase is one of nine phases of the FAST Implementation Methodology. Our testing approach has been used successfully on all of our integrated software projects for more than 45 government agencies. Highlights of this approach are provided in the following narrative.



The Testing Phase ensures that the production system is able to meet the business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues. High-level activities of the Testing Phase are outlined in the following graphic and text.

6.1 Test Planning – This step begins while the configuration is being confirmed and verified by developers and business staff toward the end of the Development Phase. Testing is focused on testing business functions and outcomes as opposed to individual screens or background processes. The test plan identifies:

- Business test conditions
- Business test cycles
- Approach to executing business testing
- Modules targeted for performance testing

- End-to-end testing approach
- Acceptance criteria

6.2 Business Testing – The purpose of business testing is to ensure functions in testing meet the agency's business needs. Agency SMEs and the implementation teams jointly create test cases and scenarios. The business test scenarios are executed per the test plan. Anomalies identified during testing are recorded and tracked to resolution in the FAST Workbench. During this step, agency testers may identify additional high-impact business-process changes that can be addressed within the change-impact analysis.

6.3 Converted Data Testing – When the system goes live, it will be operating on converted data. Converted data testing is performed to confirm that new system processes execute correctly on the converted data and users can perform the functions necessary to manipulate the converted data.

6.4 Performance Testing – A selection of high-volume items, both online and batch, are selected and used to:

- Plan background processes
- Ensure response times
- Validate network throughput

6.5 End-to-End Testing – End-to-end testing is the final step in the FAST Testing Phase. End-to-end Testing is conducted in the staging environment with an agency's converted data from full mock conversions. This test is often performed in parallel with the final steps of converted-data testing. This testing activity uses the full functionality of the system to replicate daily business activities with converted data. End-to-end testing has the following objectives:

- Ensure that the system correctly executes business functions.
- Ensure that the system correctly executes external interfaces (inputs and outputs).
- Ensure that system functions triggered by a production job correctly execute required functionality.
- Ensure that database adds, reversals, modifications, and tracing are correct.

During end-to-end testing, an emphasis is placed on testing interfaces. The FAST team manager(s) responsible for handling interfaces on the project works closely with the agency to ensure the full participation of the agency's business partners in the testing process. Note that business testing and end-to-end Testing constitute what is commonly referred to as user-acceptance testing.

Testing Phase – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results

Testing Considerations

Because GenTax is fully developed COTS software that has been tested in the FAST Development Center, the focus of testing on a GenTax implementation project is on site-specific configuration and integration. Thorough testing ensures that the production system is able to meet agency business needs in a robust and stable manner. This includes identification of potential system and specification instabilities or issues. It is imperative that agency users be heavily involved in the testing process. We believe it is critical to ensure, as early as possible, that the new system will meet the agency's business needs. We recognize that while the agency understands the benefits of a COTS solution, such as faster delivery, reduced risk, and reduced cost, there may also be some misgivings. Bringing users into the testing process offers them early exposure to the new system and helps to relieve their concerns that the system will not meet their needs.

FAST Implementation Methodology – Testing Phase

The Testing Phase of the FAST Implementation Methodology is initiated toward the end of the Development Phase and while unit testing continues. The Testing Phase ensures that the production system is able to meet an agency's business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues.

Test Plan

We create a test plan for use during the Testing Phase of each project rollout. The test plan describes:

- The formal testing approach
- The types of testing that will be conducted
- The required characteristics of testers, the number of testers needed, and schedules that outline when they must conduct testing or partake in training
- A description of the testing process (prerequisite criteria, scenario creation, test execution and reporting)

- A description of the test environment and data
- Defect management and reporting

Described below are the different types of iterative testing and system confirmation that will be conducted throughout the project. All of these testing methods contribute to the confirmation that the system is functioning prior to a production release.

Unit Testing

During the Development Phase of the FAST Implementation Methodology, developers carry out tests at the individual configuration and component level. This step ensures that each configuration and component functions as expected. Any anomalies identified at this stage are analyzed and remedied.

Unit testing involves testing of the smallest software elements. It involves testing internal structures, logic data paths, functions, and observable behavior. The purpose of unit testing is to discover discrepancies between a GenTax function's defined specifications and its actual behavior. Within the project, this stage of testing focuses on testing and evaluating business functionality during the Development Phase. Because of the integrated nature of GenTax, as unit testing is performed, the equivalent of string testing also occurs. In most cases, the different components in the system must interact successfully to complete the testing of a particular function.

In addition to allowing developers to iteratively test their configurations, unit testing gives developers the opportunity to have business representatives verify system configuration as it develops by using the iterative GenTax development approach. This iterative approach is comprised of multiple configure, demonstrate, and discuss cycles. This in turn promotes earlier understanding of the system and provides feedback to the development team from SMEs at an early enough point to allow timely, meaningful changes in approach or functionality to be addressed and reflected in the solution.

Results of unit testing are tracked by individual developers who work to ensure that the system is ready for functional testing by business users. The development team and SMEs discuss and review the iterative development of the system in design sessions. Important design considerations are reflected in the requirements definitions recorded in GenTax, as well as in meeting minutes. Any issues that arise that cannot be resolved by the development team and SMEs are brought to the attention of project management using the established decision-request process. Formal test scenarios are not developed or tracked during unit testing.

TESTING

Although unit testing is not necessary for core COTS components, comprehensive testing of the software is still required to ensure that configurations, agency site-specific components, customizations, parameters, and rules are correct. In other words, emphasis is placed on ensuring the solution is properly configured to correctly address an agency's business needs.

Unit testing is conducted primarily in the development environment at developers' workstations. Within the development environment, each developer has his/her own share or "slice" of data that can be easily backed up and copied to allow for iterative testing and maximum flexibility. Developers have the ability to manage their own copies of test data.

System Testing

Since GenTax is a pre-packaged COTS product that has been tested by our FAST Development Center, system testing consists primarily of business function testing as opposed to individual screens or background processes. The purpose of business testing is ensure the functions in testing meet the agency's needs. Agency SMEs and the implementation teams jointly create test cases and scenarios. Anomalies identified during testing are recorded and tracked to resolution in the FAST workbench. Listed below are the two types of test scenarios that are utilized in the system testing phase.

- Preliminary Test Scenarios (Test Cases) – FAST assist agency project personnel in creating preliminary test scenarios related to each major business function. Preliminary test scenarios are created in the integrated FAST Workbench.
- Final Test Scenarios (Test Cases) – Using the preliminary test scenarios, agency SMEs enhance, expand, and customize the test scenarios for applicability to an agency's programs. Final test scenarios are developed in the FAST Workbench.

Training Testers

Testers are provided with training prior to their testing activities. Therefore, testers do not need to be proficient in GenTax. Rather, they should hold expertise in their respective business areas. Tester training includes an orientation of GenTax, the testing process, the process for managing test data, and use of GenTax incident-reporting tools. Training specifically focuses on testing within GenTax. For example, how to test a scenario versus a script, how to perform regression testing, or how to change the system date within GenTax to test how a process changes over time. In addition, prior to testing specific functionality, either a FAST trainer or a member of the implementation team provides an overview on the area to be tested (for example, adding work items, reallocating payments across accounts, or registering a customer). Throughout the Testing Phase, additional specialized training is provided as needed based on upcoming testing activities.

The objective of the training is to give testers sufficient knowledge to be able to use the system to execute test scenarios/cases. It is not intended to be comprehensive user training. Any gaps in knowledge that testers encounter during test execution are filled by an agency SME, developer liaison, or a testing supervisor.

Obtaining Test Data

While it is not feasible to test for all possible logic and process flows, we make an effort to test the identified logic and flows and we schedule time to allow testers to perform ad-hoc testing to catch any missed processes. This is accomplished by using a variety of test data from multiple sources. Examples of test data include:

- *Use of realistic data* – The success of testing is enhanced when it is conducted using data that closely represent the data that will be used in production. Testing is conducted with samples of completed customer forms and extracted files derived from copies of production data.
- *Converted data* – Converted data consists of data extracted from legacy systems, then loaded and processed by the conversion team.
- *Incoming electronic files* – Payment information and transmitted interface files are examples of incoming electronic files that are fed into the system. Samples of these files are used to test the solution. Typically, testing starts with data in small volumes then uses progressively larger volumes of data as testing progresses.
- *Completed forms or returns from customers* – Copies of completed customer forms or returns are used for testing.
- *Supplemental data to test specific scenarios* – The project team creates data so testers can verify specific business scenarios that would not otherwise be represented in the test data.

Testing Guidelines

Most users have little or no experience with testing. Some may have tested maintenance and enhancement changes to legacy systems; a few may have been involved in testing a newly developed system. Typically, almost none will have had the opportunity to test a configurable COTS package of the functional scope of GenTax. In addition to learning to work with GenTax, one of the "tools" that testers need is guidance on how to test GenTax or, more specifically, how to test their agency's configuration of GenTax.

Some FAST testing principles:

- Test the business process, not the software. The software was designed to perform certain functions. The intent of testing is to verify that the COTS software, as configured for an agency's specific programs, provides the anticipated results in the context of the business process.

- Start with the test scenarios, but don't stop there. Testers are provided with high-level test scenarios. A test scenario is, however, only a starting point. Testers refine, extend, and augment the scenario throughout the Testing Phase to improve the scenario's reflection of a real-world business process.
- General approach: using test scenarios, testers proceed through each step, verifying the results after each step. If any problems arise the testers document the issue(s) and continue with the scenario. In some cases, testers may have to discontinue working on a scenario until the problem is resolved. If this occurs, the testers proceed to the next scenario.
- Verify results each step of the way. As each step of a process or scenario is completed, testers verify that the results (such as calculations, issue creation and messages, letters, reports, and so on) are as anticipated. Testers document any deviation from anticipated results and report these to the testing lead.
- Unstructured testing. Time is also made available for simply exploring the software. During this time, the focus is not on specific business processes. Instead, testers explore various aspects and functions of the system to interact with the solution and probe software features and results. This testing, while less structured than scenario-based testing, is still conducted from the standpoint of testing business processes.
- Negative testing. Not only should the system support the things users need to do, it should also prevent users from doing things that they should not be allowed to do. Testers are encouraged to attempt activities beyond those detailed in scenarios to ensure the system restricts users from conducting unauthorized activities.

Resolving Problems and Errors Identified In Testing

Testing problems are identified as testers execute test scenarios and discover results that are not what they expected. The project team documents all problems identified during testing using the FAST Workbench. The FAST Workbench provides tracking and documentation of issues, from discovery to resolution and, finally, to promotion into the production environment. Using the FAST Workbench, developers, team leads, and managers can track completion of work, research previous solutions to apply similar fixes to new problems, and measure and monitor workloads.

When an SME reports a problem, the issue is documented and a solution is formulated, coordinated, implemented, tested, promoted, and migrated through the environments. Each of these actions is tracked in the FAST Workbench or the GenTax Solution Manager, resulting in an important project artifact. The project team maintains strict control over the migration of configurations and components from one environment to the next to ensure that all changes are tested before they enter production.

Each identified issue is associated with its test scenario and contains a title and description. The FAST Workbench tracks the associated information as the identified issue moves through various stages and environments to resolution.

Authorized team members can assign issue items to individuals. Testers and developers can record comments directly from the tool. Search, filter, sort, and export functions are available on the inventory of identified issues. The FAST Workbench provides an easy way to prepare detailed status lists for tracking and follow-up. The tool also maintains a full history of all requests.

Logging and Tracking Errors

The FAST Workbench is used to document any defects or other issues that arise during the various testing phases. The item in the FAST Workbench contains information including:

- Step-by-step description of the system and/or user actions that led to the problem
- Screenshots of any screens with errors messages
- Identification of the environment and data slice in which the error occurred
- Specific customer IDs, if applicable

Also during system test, users focus efforts on security testing. Security testing is conducted at the system test level to validate that the system protects data from unauthorized access, misuse, and accidental damage, and maintains functionality as intended. It is performed to ensure that security vulnerabilities are identified. The objectives of security testing are to:

- Confirm that users have access to the functionality needed to do their jobs and ensure that they do not have access to unauthorized areas or functionality within the system.
- Confirm that unauthorized users are not able to access the system.
- Confirm that e-Services (web portal) users are able to access e-Services functionality as defined by the user-security hierarchy. For example, certain third-party partners may have more access than general-public customers.

Once the technical team has resolved the problem, the item is updated with additional details, as well as a description of the resolution. The item is then assigned back out to be retested.

Integration/Interface testing

During integration/interface testing, testers, with the support of developers, confirm that data entering GenTax from external interfaces is received and processed correctly by the system. Extracted data leaving the GenTax system through an external interface is reviewed by GenTax developers prior to transmission to an external system. Upon receipt of the GenTax data by the external system, testers and

developers of that system confirm that the data is received and processed correctly by the external system. Interface testing is carefully coordinated and timed to ensure that both sides of the interfaces are thoroughly tested. Interface testing conducted during the system-testing stage includes small files (less than one hundred records) to allow for careful desk-checking of data fields. Files transmitted during end-to-end testing more closely resemble production size to allow for performance tuning as well as additional data processing and validation.

Conversion Testing

Converted data testing, or reconciliation, is a critical part of the conversion process. Converted data testing ensures that relevant data was correctly extracted from the legacy system and converted into GenTax. The major steps of reconciliation include:

- Reconciliation of baseline statistics for the legacy application data and the control reports generated during the extraction process.
- Reconciliation of the extracted data with the data processed into the conversion staging tables.
- Reconciliation of the post-conversion data in GenTax with the baseline statistics from the legacy application, the extraction control reports, and the conversion staging tables.
- User verification through side-by-side comparison of data in the legacy system and GenTax.
- Use of converted data in final system testing.

Reconciliation is performed at the customer, certification, and transaction levels. Agency staff confirm that the conversion process has been correctly reconciled.

Reconciliation is performed on all full mock conversions, as well as selected mini mock conversions, and all discrepancies are addressed before the final conversion (production run) is performed. In the event that there are discrepancies in the production run, they are addressed at that time.

The recommended process for reviewing reconciliation reports:

- Legacy and extraction reports are compared by agency staff to validate the extractions.
- Files are bulk loaded and agency staff compare the load report to the extraction report to ensure all extracted data has been staged correctly for conversion.
- The conversion process is run and FAST compares conversion report data to the load and extraction reports to ensure data is loaded correctly.
- Extraction, load, and conversion reports are combined into a reconciliation report.
- The entire conversion team verifies the final conversion reconciliation report.

Performance Testing

Performance testing occurs throughout the Testing Phase. During performance testing, a selection of high-volume items, both online and batch, are selected and used to:

- Plan background processes
- Ensure response times
- Validate network throughput

Performance testing is an iterative and non-functional testing area that confirms that the system is in a stable state and free of critical and serious defects. The nature, complexity, and level of risk to the system is used to focus testing efforts, and some performance tests may begin as early as unit testing. A key objective of performance testing is to attain pre-defined system performance goals.

Performance testing validates the speed, scalability, and stability of the system in the pre-production environment. It is concerned with achieving response times of various time-critical business processes and transactions, throughput, and resource utilization levels that meet the performance objectives for the project. It also helps to identify and resolve any serious performance problems before end-to-end testing begins. The test data and system configuration will be as closely modeled to the production environment as possible for the results to have integrity. This establishes the performance expectation under a specific configuration of infrastructure.

Performance testing is executed by the technical team and managed by a FAST technical lead. In addition, a FAST technical lead supervises operations or production-support personnel in the execution of the system processes. This allows operations personnel to practice and run through a mock-production routine, while under the supervision of FAST staff who are knowledgeable of the various job streams. At the same time, both application specialists and database administrators are involved to monitor and further optimize both hardware and software performance.

Performance testing also includes testing remote access (for example, from one or more business centers) into the staging environment to test application access and response performance.

The objectives of performance testing are to:

- Demonstrate the processing and response times of critical functions and transactions under operational conditions.
- Confirm that user queries, generated reports, data searches, and data cubes function in a timely manner.

- Verify that the system completes batch transactions within an acceptable timeframe.
- Track system uptime and transaction response times to demonstrate operation is within acceptable levels.
- Confirm the solution can support the peak volume (stress/load) needs as defined in the requirements.

Stress testing involves use of stress, load, and performance testing tools, including:

- The GenTax load simulator tool
- The GenTax system monitor tool
- Microsoft SQL Profiler

Integrated Testing Tools

Integrated GenTax testing tools are used to:

- Validate business objects prior to implementing them into production
- Create developer-specific or user-specific sets of test data (called "slices") from which to operate independently of other team members and production data
- Conduct a variety of other tasks that support testing activities.

These tools also include utilities to purge test data that has become "stale" and repopulate the slices with "fresh" data, which eliminates the need to sanitize data in these sliced environments since users and developers have easy access to clean data.

Following are samples of some of the integrated GenTax testing tools.

- Customer Extract and Load Agent – used to extract all the records that pertain to a specific customer and insert records into a slice for testing and troubleshooting.
- Slice testing – To enable staff to perform actions within the same environment without negatively impacting the data of others, a "sliced" testing and training environment is used for the majority of testing and training activities. Each tester/student has their own set, or slice, of data that is not available to other testers or students. Slices or sets of data can be saved and reused throughout testing and training activities.
- Slice Copy – used to copy, delete, back up, and clear database slices used in all testing environments.

TESTING

GenTax also includes stress-testing tools to simulate actual system use and ensure optimal performance. The GenTax simulation tool supports performance testing by initiating a large number of online server transactions in a short period, mimicking user loads for application performance and stress testing.

Using the simulation tool, technical staff define simulation scripts that include commonly accessed or processing-intensive functions. The simulation scripts are then executed in high frequency and volume to measure the resource utilization of a specified number of concurrent users.

Automated testing tools are not typically used or supported by FAST personnel for functional testing. We prefer allowing agency SMEs and users to test the software to ensure that it meets an agency's business needs. The software was designed to perform certain functions. The intent of testing is to verify that the software, as configured for the agency's programs, provides the anticipated results in the context of the business process.

Automated testing tools are not typically used for functional testing. Since GenTax is a pre-packaged, commercial-off-the-shelf solution, testing of the core software is conducted in our FAST Development Center in Colorado. As such, the focus of testing on our implementation projects is on the site-specific configuration and integration of our software for the agency's specific instance of GenTax. Thorough testing ensures that the system meets an agency's distinct business processes and technical/security requirements in production in a robust, secure, and stable manner.

End-to-End Testing

End-to-end testing includes final verification that the system meets business users' needs as specified in final requirements definitions and that all acceptance criteria have been met. Users conduct end-to-end testing in an environment that mimics production. This includes evaluation of business rules and confirmation that the system is fully usable for daily business needs. At this stage of testing, changes to the system are addressed for portions of the implementation that do not meet business needs as documented by requirements definitions. If new business needs are identified, the project team devises an approach to addressing the functionality while taking into account any risk to the project schedule.

End-to-end testing tests full production cycles on a full database that is pre-populated with converted data in a pre-production environment. Emphasis is placed on batch processing using the GenTax job stream tool to schedule and run daily, nightly, weekly, and monthly job streams to simulate a sampling of processing over a period of time. The tests include testing of interface data transmitted to, and received from, GenTax. Like system testing, end-to-end testing incorporates the testing of interface data, only at much higher volumes.

The results of all job streams are logged and reviewed. Outstanding problems that require changes in configuration or code are logged within the FAST Workbench.

End-to-end testing also includes specific tests for application database backup and recovery. For example, the project team conducts tests to restore components, configurations, and the database to previous state or point in time. End-to-end testing also includes verification that the system is working correctly at each regional office.

The end-to-end testing phase is managed by FAST and is conducted in the pre-production environment. Additional personnel from various divisions of the agency may be asked to participate in the testing. The GenTax test team aids in the creation of testing scenarios, assists in the execution of the testing, and reviews the test results upon completion of this test level.

The objectives of end-to-end testing are to:

- Re-verify that the system meets the finalized and approved requirements.
- Re-verify that acceptance criteria are met.
- Re-test the usability of the system.
- Perform regression testing of fixed errors that were raised in end-to-end testing.
- Re-test workflow and business scenarios.
- Re-confirm performance testing with an emphasis on response time from users' perspective.

Once end-to-end testing is successfully completed, DOR can be confident that the new system is ready for production use.

For clarification, End-to-end does not equal regression testing, but rather has elements of regression testing as required. End-to-end testing includes final verification that the system meets business users' needs as specified in final requirements definitions and that all acceptance criteria have been met. End-to-end testing is the final step in testing cycle. It is designed to test full production cycles in the staging environment. This end to end testing verifies that:

- The new, configured, modified, and unmodified software work in concert;
- The system has been properly configured for use by the agency;
- The system's Security and Workflow has been correctly defined;
- Correspondence and reports work in accordance with business requirements;
- Interfaces function properly.

TESTING

End-to-end tests full production cycles on a full database that is pre-populated with converted data in a pre-production environment. Emphasis is placed on batch processing using the GenTax job stream tool to schedule and run daily, nightly, weekly, and monthly job streams to simulate a sampling of processing over a period of time. The tests include testing of interface data transmitted to, and received from, GenTax. Like system testing, end-to-end testing incorporates the testing of interface data, only at much higher volumes.

Test Entrance and Exit Requirements

The FAST project team will finalize acceptable test entrance and exit requirements during creation of the Test Plan for the project. Our entrance and exit criteria, as listed in the following table, generally fall into three primary testing categories—business testing, performance testing, and end-to-end testing.

Test Types – Entrance and Exit Criteria

Test Type	Entrance Criteria	Exit Criteria
Business/ System Testing	• Test team is adequately staffed and provisioned • Test environment is available and able to support testing • Test scenarios are complete and approved • Test data is available as required • Configuration is substantially complete • Approved configuration is migrated to the test environment	• All test scenarios have been executed • All test results have been recorded and reported • No critical defects remain open • No untested new code has been introduced • Test stakeholders agree that testing activity is complete
Performance Testing	• Configuration is substantially complete and representative of the final production software • Approved configuration is migrated to the test environment and/or the staging environment • Test scenarios are complete and approved	• All test scenarios have been executed • All test results have been recorded and reported • Remediation of deficiencies has been completed • Performance meets required level • Test stakeholders agree that testing activity is complete
End-to-End Testing	• Configuration is substantially complete and representative of the final production software • Approved configuration is migrated to the staging environment • Test scenarios are complete and	• All test scenarios have been executed • All test results have been recorded and reported • No critical defects remain open and the business users have agreed on future remediation of non-critical issues that do

Test Type	Entrance Criteria	Exit Criteria
	approved	remain open • No untested new code has been introduced • Test stakeholders agree that testing activity is complete

It is important to note that these testing environments can accommodate both an ongoing rollout and production changes for tax types that are in production. We employ a ladder of environments through which software components and configurations must pass. All changes must migrate from the development environment through the testing and staging environments before the migration tool will permit promotion to production. If software components and configuration are not intended to be promoted to production environment until a designated time (for example, year end and legislative changes) they remain in the lower environments until testing is complete and a cutover schedule is created to promote changes to production. This method makes it possible to run simultaneous testing schedules and not conflict with on-going rollout development.

Test Reporting

Our approach for test reporting centers on use of the FAST Workbench to record and manage all aspects of the project's testing efforts. During the Definition Phase of the project, business requirements/ definition items are recorded in the FAST Workbench. Development and configuration tasks are created and linked to the definition items. Once definition items are finalized, business test scenarios are created and linked to the items. Individual test scenarios are assigned to designated testers during testing execution and progress is tracked in the FAST Workbench. By tracking all testing-related project activities using the FAST Workbench, project managers have access to a rich repository of performance data that can be analyzed using a variety of GenTax reporting tools, data cubes, queries, and PDF reports.

In the following bullets, we describe our approach for tracking and reporting various aspects of testing.

- *Test Planning* – Early in the Testing Phase, the project team creates a test plan that describes how the new system will be tested. The test plan is reviewed and approved in accordance with the project's deliverable-acceptance procedure.
- *Unit Testing* – Configuration and site-specific code extensions created during the project's Base Configuration and Development phases are tracked in the FAST Workbench. Developers update task statuses in the FAST Workbench once they have completed unit testing and applicable code reviews. This enables reporting on the statuses of tasks and unit testing.

- *Test Script Creation* – Test scripts are created in the FAST Workbench and linked to related business requirements. The linkage between test scripts and requirements enables reporting on the test script coverage for business requirements.
- *Test Script Execution* – Test scripts are assigned to testers for execution. Script successes and failures are recorded in the FAST Workbench, which enables up-to-the-minute reporting on tester progress.
- *Test Reporting* – The FAST testing manager prepares a weekly report that summarizes testing status and highlights issues for management attention.
- *Testing Signoff* – The FAST testing manager prepares a report of final testing results for management approval.

2) Overview of DOR testing responsibilities.

The overall testing approach is a collaborative effort between FAST and DOR. In order to achieve production readiness of the system, the plan assumes collaboration in all areas with each party bringing their areas of expertise to the project environment.

Roles	Responsibilities
FAST	• Overall responsibility for conducting system testing by establishing timelines, training testers, confirming test scenarios, and leading testers through the process with assistance from the DOR Testing Coordinator. • Provide sample test scenarios and templates. • Fix incidents identified during system testing including GenTax site-specific code and configuration. • Report test results.
DOR	• Confirm GenTax meets the tax processing needs of DOR. • Verify business rules from the FAST Workbench by creating appropriate test scenarios. • Report any and all incidents for resolution. • Verify reported incidents have been satisfactorily resolved. • Create test scenarios. • Expand sample test scenarios provided by Fast to include GenTax-specific tax intricacies. • Execute test scenarios to ensure GenTax behaves as expected.
Testing Lead (DOR) and Test Coordinator (FAST)	• Coordinate the development of test scenarios. Review and contribute to creation of test scenarios. • Coordinate review of failed scenarios and the creation of Development Tasks.

TESTING

Roles	Responsibilities
	• Monitor and report on test progress to the Project Management Team. • Coordinate test schedule, testers, and support staff. • Lead status meetings with SMEs and team leads. • Assist in the testing room, as needed.
Testers (DOR)	• Execute test scenarios. • Execute appropriate ad-hoc test scenarios to reflect full range of job responsibilities that might not be covered by formal scenarios. • Evaluate and document results of executing test scenarios. • Complete attachments and notes for failed scenarios. • Conduct re-testing and regression testing activities, as required.
Test Room Monitor (DOR and FAST)	• Per the daily schedule, serve as the senior coordinator of the day's testing team. • Review scenario failures. Create and assign development tasks from the day's testing. • Provide support to testers.
Subject Matter Experts and Business Analysts	• Create test scenarios to test the full range of business and system functionality. • Participate in training of testers providing business process expertise. • Support the test effort using business process expertise and system knowledge. • Review failed scenarios to confirm that the reported test failure accurately describes a deficiency and that the required information is complete.
Development Team Leads (FAST)	• Review and contribute to creation of test scenarios. • Review failed scenarios and development tasks. • Assign Development Tasks to Developer(s) or Security Analyst(s). • Review and approve migrations to test environment. • Assist in the testing room, as needed.
Developer (FAST and DOR)	• Complete Development Task activities as assigned by the Team Lead. • Assist in the testing room, as needed.
Data Conversion Lead (FAST)	• Provide a test database based on converted data from legacy system. • Support refresh of test database, as needed.
Technical Team (FAST)	• Provide the Testing and Staging environments for testing. Provide support, as needed.

Roles	Responsibilities
Security Test Coordinator (FAST and DOR)	• Coordinate the development of the Security Test scenarios. • Monitor and report on security test progress to the Project Management Team. • Coordinate Security Test schedule, testers, and support staff. • Coordinate review of scenarios and creation of Development Requests. Assign Development Requests to Development Team Leads. • Assist in the testing room, as needed.
Security Team Lead (FAST)	• Assign Development Tasks to Developer(s) or Security Analyst(s). • Review Development Task resolutions. • Assist in the testing room, as needed.

3) A sample detailed testing plan that at minimum includes test scripts, test cases, and milestones which will be tied to payment schedule.

Tab G. Additional Documents of this proposal contains a sample plan that highlights FAST's Testing Approach.

4) Describe your standard methodology to developing user test scripts and test cases.

A test scenario is a description of what could possibly happen. Its purpose is to perform tasks end-users will carry out within GenTax. When possible, they should be based on actual information, processes and data in order to simulate or replicate actual activities users will perform. Upon execution, it generates a "pass" or "fail" result. A scenario typically represents one complete unit of work that an end-user would perform, however other test scenarios might be designed to exercise batch operations, reporting, or other non end-user functions of the system. Scenarios can include "negative" tests, which are designed to use the system to perform something that should be prohibited or to uncover unintended functionality.

Test scenarios are created by agency SMEs and other functional experts to test all of the functions in scope. All test scenarios will be reviewed by Fast Development Leads prior to execution of the scenarios during system test. The test scenarios will be reviewed by the Business Leads for coverage against requirements and FAST Workbench. The review will include verification of the scenario flow, test steps, expected outcome, and validation points, which include data, negative testing, and usability.

Test scenarios will be stored in the FAST Workbench to describe a discrete function, or series of functions, that the system must perform. The scenario will include a description, pre-requisites (as

needed), actions, and the expected result. Besides testing the scenarios, users will be encouraged to do ad-hoc testing based on their knowledge of their job area to be sure they can perform all their usual responsibilities in the new system.

5) A response to each requirement with details on how the Vendor will deliver the requirement.

FAST's response to each requirement can be found in Tab B.3 Att F3 – Project Related Req.

6) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation and assist in increasing end user confidence in preparation for deployment."

Vendor Certification

FAST has experience with a range of clients, using both scenario- and example-based MeF testing methods. The MeF Manager is configured to reflect the agency's vendor certification process. This includes adjusting thresholds for submissions acceptance. Each client can report on suspense rates individually, and each rate depends on a number of factors above and beyond e-File testing methods.

FAST will provide a testing environment for transmitters and their submissions. FAST provides a tool where an internal user can maintain the results and vendor statuses which directly impact whether they can transmit electronic returns. GenTax reporting tools can be used to help agency staff manage the status and submission rates. Generally, e-Filed returns exhibit a much lower suspense rate overall. Vendor testing after acceptance is solely up to the client. This can be supported testing at any point of the year. FAST recommends that vendors and agency take advantage of the designated MeF testing submission windows. The agency can staff can and prepare accordingly to monitor, pull, and verify submissions in order to re-certify vendors for the next tax year.

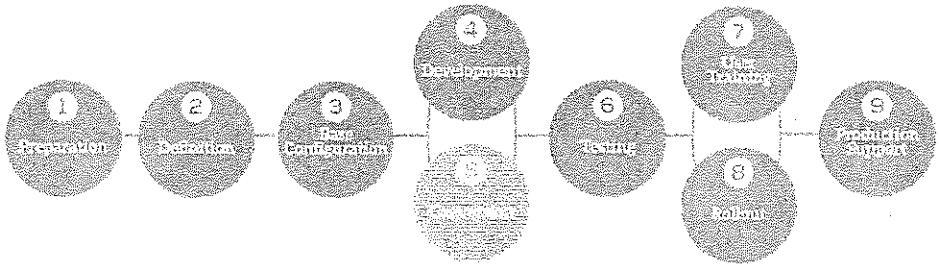
DATA CONVERSION

2.3.2.6 Data Conversion

"The agency understands data conversion will be a major challenge for this project. Please describe your approach for this critically important initiative including but not limited to, a Data Conversion Plan, Data Conversion Approaches, Data Conversion Alternatives, Data Conversion Methodology and your view of best practices concerning data cleansing, the amount of historical data to be converted and data archiving. Also please describe any tools, techniques or processes you will utilize to streamline data conversion activities. Specifically, DOR is looking for a Data Conversion Plan of the steps needed to convert the data for the new system and a definition of roles and responsibilities for the conversion processes."

Please note that updates to the original submission are identified in yellow highlight.

Conversion Phase



Conversion is an iterative process to extract, convert, purify, verify, and reconcile legacy data for use in the new system. In the Conversion Phase, legacy data from various sources is converted into the target database of our software. Final conversion to the production environment happens once per rollout.



Through a series of mock conversions, in environments separate from the production environment, the project team builds a database optimized for the new system. The conversion process starts early in the project to allow time for purification and to allow a fully converted database to be used during end-to-end testing. As the cutover date approaches, the mock conversion activity includes optimizing the time it takes to convert the whole database, so that conversion is completed in the time allotted during cutover. At cutover, the production database and feeder systems are addressed according to a cutover checklist so that conversion can be conducted with minimal conflict. The following graphic and text outline the high-level activities of the Conversion Phase.

5.1 Inventory Data Resources – Existing data sources are inventoried for each rollout. The inventory of data sources is used to define the scope of agency data that is available to the conversion process. Each data source is reviewed for integrity and quality.

5.2 Conversion Approach – The conversion approach work product defines how the business data will be converted and includes details on items such as:

- Manual versus automated processes
- Customer information
- Approach to historical data
- Number of years of financial data
- Financial detail versus summaries
- Approach to work in progress
- Impact on new system processes and organizations
- Interim conversion manual or automated processes

The team creates a conversion schedule for timing of key activities. In addition, the team creates a conversion task list that provides an inventory and schedule for completing the conversion tasks.

5.3 Data Purification – Prior to the execution of the conversion, the team inspects the data from each legacy source to determine if there are inconsistencies in the data. These inconsistencies are resolved by developing and executing strategies to purify the data prior to (the preferred option), during, or after conversion.

5.4 Conversion Extracts – Conversion extract processes are developed and led by agency IT staff to access conversion data sources and create standard extract files. The conversion-extract process also provides control reports that detail the extraction process and are used to confirm the load processes.

5.5 Conversion Loads – Conversion loads include functionality to:

- Validate the extract files
- Reformat and load the extract files into the new data structures
- Produce conversion load control reports detailing the validation and load process

5.6 Sample Mock Conversions – The conversion team practices extracting and converting data multiple times through mock conversions. With each mock conversion, more data and more functions are added to the process until the full complement of data is extracted, purified, and formatted. The team makes

available sample sets of converted data from early mock conversion for users to perform verification and comparison back to the legacy sources.

5.7 Full Mock Conversions – One or more complete mock conversions are performed to provide the basis for the timing and user verification of the converted data. Verification is supported by a reconciliation document that describes how converted data is reconciled to its legacy source.

Conversion Phase – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation

In our standard conversion approach, agency IT personnel are typically responsible for data extract from their existing systems and data stores. This includes the programming of any modules designed to extract data from legacy applications or automatic data purification. Agency subject matter experts are typically responsible for cleansing the source data due to their familiarity with existing systems and data stores. FAST is typically responsible for the following activities.

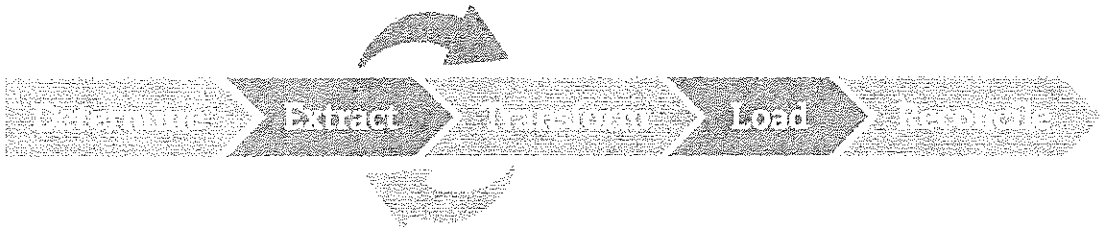
- The creation of detailed conversion and conversion test plans
- Data transformation and load after extract
- Mock conversion runs
- The creation of reconciliation reports to verify the conversion process
- The creation of reports detailing data anomalies that manifest during conversion
- Consulting with agency IT personnel and subject matter experts to extract legacy data in the correct form, identify data errors, reconcile the conversion, and resolve data anomalies
- Working with agency staff to verify the conversion process

Similar to other phases of the FAST Implementation Methodology, the Conversion Phase is an iterative process of refinement that emphasizes the early identification and resolution of anomalies and issues. Our conversion approach reflects best practices and lessons learned from successful conversion of over 170 million accounts into our software from a wide variety of legacy applications and technology platforms.

DATA CONVERSION

The FAST conversion process entails the determination, extraction, transformation, load, and reconciliation of legacy data and its requirements. Data purification occurs iteratively throughout the conversion process. Our process leverages the actual GenTax system to load converted data. By performing multiple mock conversions, the project conversion team (comprised of FAST and agency personnel) performs the detailed and structured steps that are necessary to ensure legacy data is accurately converted into GenTax. The iterative stages of the FAST conversion process are illustrated in the following figure.

Iterative Stages of the FAST Conversion Process

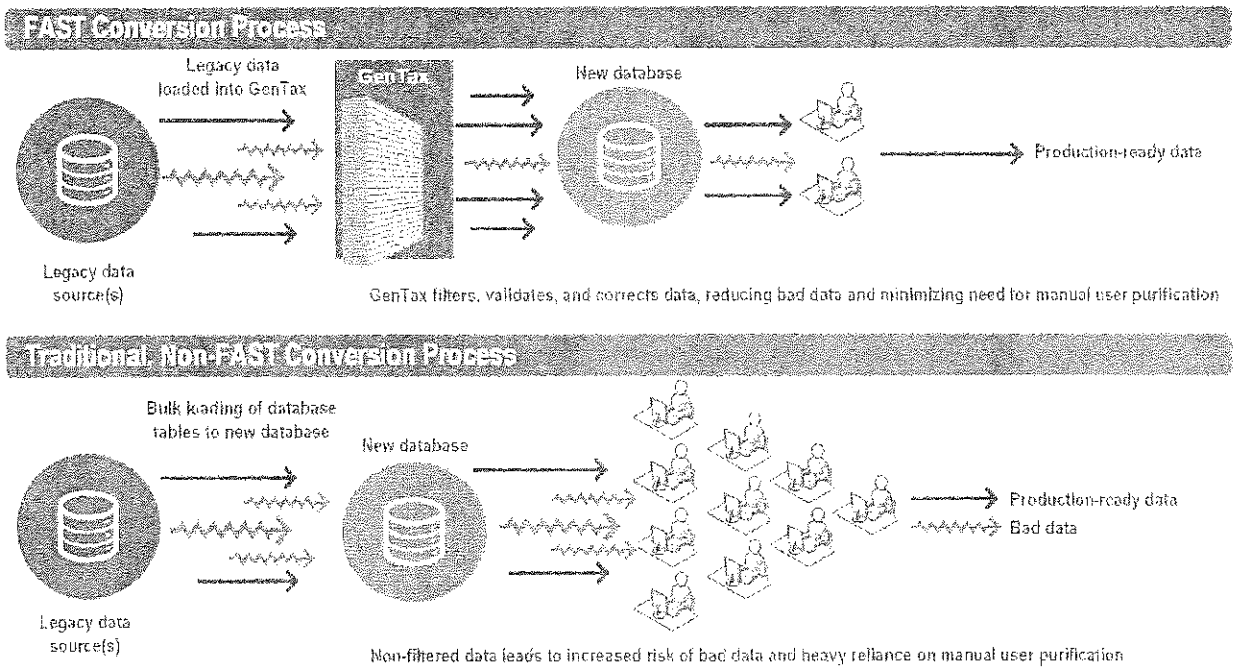


Conversion efforts are focused on providing the agency with the most important and reliable data, with priority assigned to data that has critical operational or financial impact.

Purification: an ongoing and iterative procedure during the FAST conversion process

Purification is an integral part of all conversions and is an iterative activity throughout the conversion process. It is conducted across multiple stages of the process to support the conversion of relevant, high-quality data. Whereas traditional data conversion efforts rely on bulk loading of database tables, which often results in a heavy reliance on users to identify even basic purification issues, our approach uses the GenTax application to load conversion data (see the following figure). By running the data through the application as part of the conversion process, data anomalies that would be problematic in the new system are identified. This permits rollout of the new system without carrying forward data problems that may have existed in legacy systems. It also provides important feedback to data purification efforts as the agency works to cleanse as much data as possible prior to conversion.

Fast Conversion Process versus Traditional Conversion Process



Data purification and/or consolidation can be done at several stages during the conversion process, such as:

- Programmatically prior to the extract – This involves development of one-time processes that employ legacy tools, file utility tools, or custom programs in the legacy environment. This is the preferred approach.
- Manually by users of the legacy system prior to the extract – This can be a labor-intensive approach if volumes are high, but may be the only alternative when human judgment is required.
- As part of the transformation process – The team can devise purification rules and apply them programmatically to the data in the load files or with SQL updates against the load staging tables. This method can add complexity to the reconciliation process and requires taking into account any repairs made after extract and before load.
- Programmatically after load and reconciliation – One-time data-fix programs or SQL updates are applied in the new environment. This approach should be used sparingly.
- Manually after the load and reconciliation – Performed manually by initial users of the new system. This approach can be time consuming and requires agencies to consider data volumes and staff workloads.

DATA CONVERSION

In our approach, most of the data purification and/or consolidation activities take place prior to data extraction on legacy hardware and software. Wherever possible, existing online and batch facilities provided by the legacy application are used to make the data corrections. The joint FAST/agency conversion team develops the data purification strategy early in the conversion process. Higher quality data results in a better user experience during production. Dedicating resources to the purification effort is well worth an agency's time.

The following tasks are part of data purification efforts. These tasks are conducted early in the conversion process but may be repeated throughout the process if issues arise.

- Identify each data anomaly and associated repair opportunity
- Determine the nature and frequency of each type of anomaly
- Determine how to resolve the anomalies
- Determine whether the data will be converted using an automated or manual process
- Select users to perform data purification activities
- Verify changes to resolve each anomaly

In some cases, it may not be possible to resolve all issues identified in the legacy data. This can happen when the legacy system does not have functionality available to resolve the issue, there are not enough resources available, or there is not sufficient time to address the issue. FAST recommends that data purification begin as early as possible during the project to quickly remedy substantial defects. When it is not possible to address an issue before conversion, impact analysis must be performed, risks associated with the issue must be identified, and steps must be taken to mitigate the effects of data issues following conversion.

Some of the solutions used in the past to address legacy data issues include:

- Adjusting the legacy extraction criteria to exclude the data (if appropriate).
- Conducting post-conversion manual cleaning in the new application, which can be implemented during conversion week or scheduled for cleaning at a later date.
- Adding indicators at the customer or account level to modify system behavior after conversion.
- Identifying and manually invalidating duplicate customers.

Typically, agency SMEs perform any needed post-conversion cleanup. No further data purification/transformation should occur to the data in the legacy system once the data extraction process has begun.

Stages of the FAST Conversion Process

FAST's conversion process involves the initial import of legacy data and the scrubbing and massaging of information from various data sources. The process also involves analysis of the conversion requirements necessary for converting data from legacy systems into our proposed GenTax solution. Following are descriptions of the Determine, Extract, Transform, Load, and Reconcile stages of our conversion process, which entail the analysis, initial import, and initial scrubbing and massaging of information from various data sources, as well as additional conversion activities.

Determine Stage

FAST Conversion Process – Determine Stage



Conversion scope is determined by a number of factors, including availability of legacy data, statutes of limitation, and prioritization of data that is used most often. These factors determine not only which customers or accounts to convert but also how much data should be converted for each record. The Determine stage (highlighted in the preceding figure) of the FAST conversion process is focused on defining these factors and the project's resulting conversion requirements. Some of the activities in this stage include:

- *Identifying data sources* – Identifying all legacy data sources is an early priority in this conversion stage since legacy data can be stored in a variety of independent and siloed systems. The degree to which existing legacy systems communicate with one another can introduce challenges to extracting and rebuilding the data into the integrated GenTax system.

- *Selecting and targeting conversion data* – Once all sources of legacy data have been identified, the conversion team determines the data that must be converted from each source and how far back in time to convert historical data. Development of conversion-selection criteria usually happens simultaneously at multiple levels.

  In addition, the conversion team may designate one of two targets for converted data based on how the data will support business functions in GenTax. Since many legacy data fields represent artifacts of the system architectures and designs that are being replaced, the data may not be applicable to GenTax. While this data may be useful for historical reference purposes, it is not necessary to convert it as live/operational data in the new system. The conversion team therefore

designates converted data for placement in one of the following two categories as needed:

- Live/operational data – Live/operational data is updateable data that is necessary for current system processes in GenTax. Examples include current demographic information or recent transaction activities.

- Reference/non-operational data – Reference/non-operational data is read-only data that is not necessary for current system processes. Although this data has no explicit operational need it may be loaded into a database for historical research purposes. Links, queries, and reports in GenTax can be configured to reference this data, supporting users' ability to access the data for research or review. Reference data can replicate the live data within its original context in order to provide a complete picture of the data as it existed in the legacy system(s).

  Reference data does not include all data from all legacy applications. Rather, it is reference data that is necessary to support a business need in the new system.

* *Developing the conversion plan* – A conversion plan is prepared to outline the strategy for successfully converting agency legacy data to GenTax. It is used to address topics and questions such as:
  - Data to be converted
    - What data is required by GenTax to provide the planned business functions?
    - Should inactive accounts be converted?
    - How much historical data is required to do business today and in the future?
    - Will any debits or credits be written off as part of conversion?

  - Data conversion approach
    - What data will be converted using automated processes?
    - What data will be converted using manual processes?
    - How will the project team resolve situations in which data that is required by GenTax is not available in legacy systems?

  - Conversion transformation
    - What criteria and transformations will be performed during the conversion process?
    - What are the customer, account, demographic, financial, compliance, and output mappings to be performed?

- Reconciliation approach
  - What are the data layouts to be used during data reconciliation?
  - What reconciliations will be used for each data type?
  - How are data anomalies, if found, addressed during reconciliation?

- *Data purification* – Incorrect or invalid data in the legacy system that can be repaired prior to conversion is documented (as are the mechanisms for repairing the data). If there is any legacy data that cannot be repaired, mechanisms for preventing this data from affecting the new system are also documented.

- *System cutover* – The point at which legacy-application processing ceases and processing in GenTax begins is determined, as is how work in progress will be handled during conversion.

Extract Stage

FAST Conversion Process – Extract Stage



Extraction involves the replication of data from a legacy system into a common file format, such as a CSV file. During the Extract stage of the FAST conversion process, the extracted flat file is mapped into conversion staging tables in a relational database prior to execution of loading programs. This approach allows greater flexibility when accessing, processing, and reporting on the legacy data and allows the legacy data structures to be tuned to maximize performance and efficiency.

We typically rely on agency IT personnel to extract data from legacy data sources due to their knowledge and experience with the data structures and content. These agency personnel, with support from FAST, usually rely on tools in the legacy environments to extract data as appropriate for the new system. Some legacy systems have built-in export functionality that can be used to extract data. Others may require programming in order to extract the data. Regardless, we will work with the agency to determine the most appropriate means for extracting the necessary legacy data from the agency's existing systems and to extract the data into specific flat file formats that are defined as record types. The conversion-extract process also provides control reports that detail the extraction process and are used to confirm the load processes.

Each record type has a detailed file layout. There will be a separate flat file format for each record type that will be loaded into our system. Layout descriptions include:

- Record type
- File name requirements
- Field name
- Field Type
- Field Length
- Description
- Reference data, when applicable (for example, the configuration table that contains valid values for the field)
- Site-specific additional columns are often added to help conversion personnel track the data, such as the source of the data and valid legacy values.

The extraction applications should also report on the totals of data elements and financial information extracted so that the results can be compared to the legacy report and to the load report once the conversion process is complete.

To support a more efficient and effective extract, the extract process should factor in conversion parameters defined during the preceding Determine stage. These parameters include:

- Data sources – the legacy systems from which the data will be extracted.
- Data items – the required legacy data that must be converted from each of the identified data sources.
- Data volumes – the amount of each legacy data item that must be converted, including timeframes for historical data.
- Data targets – designation of legacy system data as either live data or reference data.

Extract prioritization is then determined by using the following general principles:

- Data that is needed in GenTax for processing purposes or to satisfy the functional need of users is of the highest importance and should be converted. As a best practice, data that does not hold any clear value for processing and does not have and is not regularly required by the user community should not be converted.
- Only valid data should be converted. Data identified as invalid or under a similar status, such as 'deleted' or 'voided', should not be converted.

If feasible within the constraints of an agency's legacy systems, conversion parameters are applied to legacy data during the extraction process to limit the size of the dataset sent to conversion. This approach generally results in better efficiency for subsequent steps.

Transform Stage

FAST Conversion Process – Transform Stage



During the Transform stage, data from one or more legacy sources is brought together and restructured into a form that can be used by load processes. Legacy data is mapped into conversion staging tables used by the GenTax load process. This approach allows greater flexibility when accessing, processing, and reporting on the legacy data, and legacy data structures can be tuned to maximize performance and efficiency. Once in the conversion staging tables, legacy data is then transformed and adapted to functions in GenTax. If conversion parameters were not applied during extract they are applied at this stage. Additionally, data purification that cannot be implemented prior to extract can also be performed during the Transform stage.

While the data is in the staging tables, the FAST conversion team develops a set of queries to check data integrity, accuracy, and completeness. For instance, during this stage it is easy to test for missing or incomplete addresses, alpha characters in numeric fields, and negative debits or positive credits. Legacy data is then migrated (loaded) into GenTax from the conversion staging tables.

Load Stage

FAST Conversion Process – Load Stage



The Load stage includes functionality to:

- Validate the extract files
- Reformat and load the extract files into the new data structures

- Load data and measure performance statistics
- Produce conversion load-control and reconciliation reports detailing the validation and load process

Tools used in this step include spot checks, database queries, visual examinations, and database monitoring techniques as well as the core GenTax batch processing capabilities. Errors noted during this step are reworked in preceding stages as needed.

The conversion process relies on the same GenTax business objects used by the core application in production. Loading in this manner ensures that all converted data adheres to all configured business rules and that appropriate conditions are set up in the new system.

For bulk-loading flat files, the GenTax bulk-load tool populates flat-file data into the conversion staging tables prior to loading and processing in GenTax. The bulk-load tool makes use of the Bulk Copy Program utility, an executable application provided with Microsoft SQL Server, for making bulk copies of data from user-defined files and loading the data into database tables that match the file formats.

Through a series of mock conversions, the project team builds a database normalized for the new system. Using converted data, users run a sample of transactions in the new system based on work recently performed in the legacy system. The project involves use of both sample (mini) mock conversions and full mock conversions.

- Sample (mini) mock conversions – Conversion is not a one-time event. The team will perform mock conversions repeatedly across a subset of the data. Mock conversions are iterative with successive iterations incorporating more data than the previous mock conversion. To verify that legacy data converts correctly, the team uses control reports and visual examinations after every mock conversion. These reports provide the opportunity to confirm the approach, validate the extracts, and measure the performance and quality of the conversion process.

- Full mock conversions – The team runs multiple full mock conversions to provide the basis for user evaluation of converted data. A Reconciliation Document supports the validation and verification and describes how converted data is reconciled to its legacy source. Tools used in this step are spot checks, database queries, visual examinations, and reports.

Use of converted data in system testing, and as training data in environments below production, provides additional opportunities to validate that processing with the converted data works as expected. Testing also entails running a series of test scenarios with converted data. These tests provide further

verification of the conversion process.

As the cutover date approaches, the mock conversion activity involves optimizing the time it takes to convert the whole database so that conversion is completed during the allotted time. At cutover, the production database and feeder systems are converted according to the cutover plan so that conversion is conducted without conflict.

Reconcile Stage

FAST Conversion Process – Reconcile Stage



Data is first reconciled following extract from the legacy data sources and prior to load. During the Reconcile stage, data created in the conversion staging tables is reconciled with legacy data. Part of this stage is to verify that all the data was extracted, and that all data that was extracted was successfully loaded to the staging tables. This reconciliation stage is necessary to confirm that extracts are accurate and complete.

Data is also reconciled after load. The loaded and fully converted data can be reconciled with both the conversion-staging tables and with extracted data. Reconciliation at this stage is necessary to confirm that actual load and conversion processes were successful, and that no data was lost or transformed incorrectly. The scope and granularity of the reconciliation is dictated by availability of summary data from the legacy systems. An additional set of SQL Server queries, run after the conversion process, produce counts of the information loaded into GenTax. This information forms the basis of the conversion report.

The final step of conversion entails the creation of the reconciliation report. The reconciliation report is created by combining and comparing the extract, load, and conversion reports. The reconciliation report serves as the conversion record and is used to confirm that the applicable data was correctly extracted from the legacy systems and converted into GenTax.

Reconciliation is performed at each applicable level related to a customer, account, filing periods, receivables, and payables. Reconciliation is performed on full mock conversions, as well as selected mini mock conversions, and all discrepancies should be addressed before the final conversion (production

run) is performed.

Converted Data Verification

Converted data verification includes the visual inspection of data converted into the solution and the comparison of corresponding data in the legacy system. The conversion team develops data review checklists that testers use to perform validation. Testers review converted data with assistance from the conversion team. Defects found during converted data review are reported to and tracked by the conversion team.

The goal of converted data verification is to confirm that mock extractions and conversions are performed according to the data conversion plan and to identify additional anomalies in legacy data. Ultimately, the production cutover extraction and conversion activities should also occur according to the plan.

Converted data verification is therefore successful when:

- Extracted and converted data is complete and accurate, according to the data conversion plan
- Legacy data that is out of scope is not converted
- No new anomalies are found in legacy data

The methods used to perform converted data verification are defined below.

- Based on scope recorded in the data conversion plan, FAST summarizes the characteristics of legacy data to be extracted and of legacy data not to be extracted. The summary helps SMEs assess whether a particular data record should have been converted.

- Subject matter experts develop a checklist that describes which data records will be subject to change and the changes that will be applied to the records during extraction and conversion. This information comes from the data conversion plan. The checklist will represent the transformations to be performed upon qualifying converted data record.

- FAST identifies samples of data records in each of the categories described in the two preceding bullets. Subject matter experts also identify sample data records in each category. These two sets of samples, in part, are used to verify that data was extracted and converted according to the data conversion plan. During data verification, additional data records selected at random are also examined.

- After appropriate mock conversions, the conversion team releases data to the SMEs for verification. The SMEs visually compare data records converted into the solution with corresponding elements in the legacy systems. They examine the samples named above, along with randomly sampled data records, and verify whether the samples adhere to the scope and transformations stated in the data conversion plan.

- The SMEs communicate unexpected results to the conversion team for assessment. Unexpected results may include anomalies in legacy data, to be added to the data cleanup log, or they might provoke changes to the extract and conversion programming. It is critical in this step to determine if the new system correctly interprets and processes using converted data. This is accomplished by verifying that the converted legacy data is usable in the new system by executing business-testing scenarios.

During the Definition Phase of each rollout, conversion requirements will be discussed in detail. Once the various sources of legacy data have been identified, the next step is to identify which pieces of data are desired from each system, and how far back to go in time with that data. For example, if a customer has no ability to amend a return after four years, you may not need more than four years of return data converted operationally into GenTax. Of course, if a customer still has a balance, no matter the age, a record of that liability will need to be converted. Development of conversion selection criteria usually happens at the customer, account, and return level simultaneously.

Categories of Conversion Data:
Operational data is used to enable business processes and procedures, for example, current demographic information or recent financial activity. This data is converted into the operational database and may be updated in the GenTax application when needed.

Non-operational data is used for reference or research and may consist of historical detail or other older information. This data is converted as read-only and is generally made available in GenTax as an ad hoc Structured Query Language (SQL) query. The data may also be accessible from the Reporting Manager, or integrated into the period or return detail. This data may also be referenced in future business processes as needed. As is the case with operational data, there should be a supporting business need to justify the conversion of the non-operational data.

Operational Conversion:

What data will be used on a regular basis? This data would usually consist of recent filing periods. Some examples are: Filing periods in statute, filing periods likely to be filed or amended or filing periods with open cases such as audit or appeals. These filing periods make the foundation of your converted data. What data is needed, but will not be accessed as frequently? This data would include additional filing periods with debit and potentially credit balances. This data would be converted in addition to the above data.

Operational data typically includes, but is not limited to the following:

- Registration Demographics
- Customers
- Accounts
- Names
- Addresses
- ID's
- Payments
- Returns
- Transactions
- Collections
- Payment Plans
- Liens
- Audits
- Bankruptcy Cases
- Appeal Cases

Non-operational Conversion:

In addition to the operational data converted into GenTax, it is possible to import data from the legacy system into tables in the GenTax non-operational database. During this process, the tables are generally left in a similar structure as the legacy system. However, when appropriate the table structures can be changed, columns dropped, derived columns added or columns added to provide associations to operational data in GenTax.

This approach has several advantages including:

- Allows data to be loaded without association to GenTax entities (that is, Data for a customer out of scope for operational conversion).

- Seamless access to data from within GenTax.
- This provides a way to access legacy data, which may enable the legacy system shutdown.

Between operational and non-operational, all legacy data with supporting business needs will be converted to GenTax. The non-operational data is also accessible for future business processes as needed.

2.3.2.7 Analytics

"The agency has a desire to shift toward risk based processing, scoring, data driven decision making and management, agency dashboards, interactive reports, behavior modelling, and predictive modelling. The intent is to leverage analytics across audit, collections, customer service, returns processing and all operational areas within the agency. We expect that proposed solutions would include integration to standardize federal data sources and include discovery capability for non-filers and under reporters.

Please provide an overview of how your solution leverages analytics across operational areas. Include any tools or techniques that are included within your solution and how DOR will maintain these solutions post implementation.

Please provide the following documents with your proposal:

1) A description of how the Vendor's ITS solution collects, correlates, manipulates, stores, and presents data. In addition, the Vendor should provide sample standard reports that would support this functionality

Please note that updates to the original submission are identified in yellow highlight.

The Reporting subsystem provides facilities to create, implement, manage, and execute pre-programmed reports that adhere to an agency's formatting standards. Users can run reports on demand or they can be generated and distributed automatically in GenTax according to predefined schedules. Users can view, search, export, and print reports. Much of the information contained in traditional reports is available real-time in GenTax through online lists, searches, and analyses that can be viewed, exported, and printed. GenTax provides a means to quickly and precisely address specific reporting requirements and access and compile information for agency planning, analysis, and improvement of operations. These integrated reporting capabilities allow agencies to implement, manage, and execute pre-programmed reports and ad hoc queries or to efficiently configure reports that meet unique reporting requirements. Following are descriptions of the integrated GenTax subsystems used primarily for reporting.

- Reporting subsystem – provides facilities to create, implement, manage, and execute preprogrammed reports that adhere to an agency's formatting standards. Users can run reports on demand or they can be generated and distributed automatically in GenTax according to predefined schedules. Users can view, search, export, and print reports. GenTax contains a tool for developing reports that allows users to develop custom report templates using a drag-and drop interface and report layout editor. Report templates can be designed to use any combination of data in GenTax and the GenTax Data Warehouse, such as driver and vehicle

information, revenue collections, office metrics, and third-party information from the Warehouse.

- Data Mart subsystem – provides a view of data using a pivot table paradigm, allowing users to group, filter, sort, and summarize data in a data cube. More complex than ad hoc queries and more flexible than formal reports, data cubes allow users to visualize, analyze, and manipulate selected data to meet business-reporting needs. Data Mart provides users with numerous alternatives for viewing data. Users can quickly switch between multiple views of the same dataset to reduce the need to repeatedly manipulate information between instances of a data cube. Each view can be configured to display or hide specific subsets of data. In addition to the shared data cube views maintained by technical staff, users can save personalized views for frequently used data cubes. Saved views can be marked as public so they are available for all users.

- Query subsystem – allows authorized users to define, execute, and share ad hoc SQL queries. It provides business and technical users with raw data, without open access to databases, to ensure users can obtain information without sacrificing security controls. The My Searches function within the subsystem allows authorized users with no technical training to build and run their own queries through a point-and-click interface. Personalized queries are created through use of a pre-configured data navigation tree. Users select specific data items and specify selection criteria while traversing the tree. Query results are presented in a list window that allows users to further sort, group, and filter data results.

- Dashboard subsystem – presents information in graphical form and allows users to choose to display information in multiple chart formats, including pie chart, bar chart, line chart, and stacked bar chart. This provides users with a highly interactive and intuitive tool to view and analyze data and will provide management with key statistics on items such as total accounts receivable, work item backlogs, and other key performance indicators.

2) Vendor must provide a list of proposed analytical and reporting tools (e.g. Master Data Management, ETL, Visualization, etc.) used to support the proposed solution's data, reporting, and analytic capabilities.
- Describe how each tool is utilized to meet DOR's reporting and analytics needs

GenTax provides various reporting tools to support management and data analysis. The GenTax Report Manager is responsible for the following high-level functions:

- GenTax List Windows

- Ad hoc Queries
- Formal Reports
- Data cube
- Distribution
- My Searches
- Dashboard

Options for GenTax Reporting

GenTax List Windows

In many cases, the information users need to make decisions is available in GenTax on a core GenTax basic list window. Unlike many legacy systems, GenTax takes advantage of integration across audit, collections, customer attributes, and returns to provide access to information. Users employing information on GenTax list windows may sort, filter, group and outline the information and may also export the data to either Microsoft Word or Microsoft Excel. Once exported, users can manipulate the data as desired and include the data in external documents or programs as necessary.

Any GenTax list screen has an option to change the order and visibility of the columns. Filtering, grouping, and outlining can also be saved under a user's personal profile. Each time that particular list is accessed the list will be retrieved with those settings. These setting may be removed or changed at any time.

Ad hoc Queries

GenTax provides a convenient ad hoc query function that allows users to generate lists based upon input parameters. Developers, or specifically designated and properly trained users, create and store queries in advance, based upon typical business questions. When using a query, the input parameters entered by the user help to narrow the focus of these questions so the resultant data set matches the user needs. For example, a basic query provides access to return batch information. When a user accesses the query, they specify a data range for the batches of interest. When the user initiates a query, it uses information from GenTax to populate values in the results.

GenTax displays the results of ad hoc queries in list windows. Users employing information on GenTax list windows may sort, filter, and export the information to either Microsoft Word or Microsoft Excel. Security can be configured for queries to restrict data to groups of users as needed. Queries can be placed in GenTax flows as well and should be considered as an alternative to formal reports in many situations. If the data is needed simply for internal management, the Query functionality works well;

however, there will be some instances where users may need to create more formal reports to send to external agencies.

GenTax Formal Reports

Report Template Development

GenTax provides functionality to create report templates using a graphical user interface. The developer can drag and drop data fields onto the template, resizing and formatting them as necessary. Since GenTax employs a relational database developers can pull any of the items stored in GenTax for reporting. Common areas of formal reporting contain refunds, revenue, and yearly summaries. GenTax reports can include text, text boxes, images, watermarks, bar codes, shapes, and lines.

Developers, or specifically authorized and properly trained users, can create report templates. Most reports use data from GenTax databases extracted by using a SQL query. GenTax will then produce the requested data in a predefined format. For more difficult data requests, developers can create site-specific code to extract and arrange the data needed for the report. GenTax provides the ability to connect site-specific code with in the GenTax Reports subsystem for reports that may be more complex. Developers can create GenTax templates that employ user-entered parameters or reports that run automatically based upon given dates or events. Developers can use the GenTax Reports subsystem to create a page that acts as a cover letter and provides basic summary information.

The GenTax Reports subsystem includes an approval mechanism so developers can work on changes to reports currently in use in production without affecting current reporting needs. Specific users with proper security can approve reports for production.

Running Reports

Developers can configure GenTax to run reports immediately or queue reports for processing in batch during the nightly batch stream. Because of the sensitivity of aggregate data, GenTax allows configuration of security to restrict user access to specific reports. In general, reports created in batch are those reports that require excessive resources or exclusive access to the database.

Immediate Reports

A GenTax user can request a report to be run and printed using customized data. GenTax retrieves the data for a report and stores it in the database for viewing and printing. Users can view reports online, print them from GenTax, or save them in a separate location for extended distribution.

Report Distribution

GenTax produces reports in Portable Document Format (PDF). This file format captures all the elements of a printed document as an electronic image that you can view, navigate, print, or forward to another person. PDF is a universal file format that preserves the fonts, images, graphics, and layout of any source document, regardless of the application and platform used to create it. Users can view or print the report using an integrated reader such as Adobe PDF Reader.

GenTax electronic report distribution is available for internal or external distribution. GenTax provides methods to distribute reports electronically to subscribers. With configuration, GenTax can also deliver generated reports to remote file locations. The recipient of a report can view or print the report as needed. GenTax can also distribute reports to e-mail accounts. Authorized users can associate a report with an email address in GenTax. Each time the report is generated, all e-mail addresses associated with the report will receive a copy.

Report History

GenTax maintains a history of all generated reports. All reports are available for reprint or backup if a user misplaces their printed report or needs this information again for any reason. Security can be configured to restrict access to queries, reports, data cubes, My Searches, and dashboards.

Data Cube

GenTax Data Cubes provide the capability to visualize and analyze subsets of the GenTax databases. Department supervisors, analysts, and upper-level managers use this capability to conduct trend and statistical analysis. Properly configured data cubes can also help users make business decisions or quickly report the answers to "on-the-fly" questions. Employing the Data Cubes, users can discover relationships by looking at the same data in many different ways.

GenTax Data Cubes provide a robust on-line analytical processing (OLAP) function as a key tool for statistical analysis. Using OLAP technology, GenTax generates compact files for persistent storage of data and metadata. GenTax stores these snapshots of data; if the question needs to be asked again in a slightly different way about the same set of data, there won't be a need to extract the data from the database again.

GenTax developers or selected users will need to establish only the first instance of any data cube. Once created, users can manipulate the data in a cube, take another snapshot of the data to create a new refreshed cube, or review previous data cubes.

Users can create, modify and save their views of data. This allows them to view the data in the manner they prefer immediately, without the need to manipulate the standard view first. Based on individual configuration for each data cube we can set the maximum number of saved cubes, or set saved cubes to expire after a certain length of time.

My Searches

"My Searches" is a functionality that allows users with the proper security to run their own customized queries to retrieve production data. The basis of My Searches is a predetermined set of data that is commonly utilized and configured in the Reference Database as a query that returns a specific dataset. It is not necessary for users to know the technical details of joining tables to use My Searches. The work of the joins and retrieval of properly versioned data is configured prior to the use of My Searches in a set of GenTax reference tables.

My Searches will run against the Reporting Database Application tables because the customized queries could affect the Production users; however, there is the capability to configure a maximum time that a query could run if it is necessary to process in real time. The reporting database will be a recent copy of the Production Application Database.

Dashboard

The Dashboard provides high-level managers with a graphical display of pre-defined metrics such as total refund amounts to date for the month or returns processed for the month. The user may choose which type of graph they wish to view the data (pie, bar, line, stacked bar) as well as providing the capability to spot trends by displaying year-over-year data. Each dashboard chart is linked to a data cube which provides the user with the ability to drill down deeper into the data if they desire.

Due to the ease and speed of configuration of the integrated reporting tools in GenTax, we do not place a limit on the number of reports, performance measures, or dashboards that we provide to our client agencies during a project. Instead, GenTax reporting and data analysis tools are configured to generate a specialized and focused set of reports and performance measures that meet our agency clients' specific needs and requirements. FAST will provide DOR with all reports necessary to support the proposed GenTax implementation.

When using GenTax, there is no need to create a reporting and analysis database structure separate from the transactional database. Consistency is assured with the integrated and centralized reporting capabilities in the GenTax Information module. GenTax enables DOR to use a common set of tools for

reporting and analysis of all data captured by the system. The Information module provides authorized users access to information stored in:

- the application databases for real-time data;
- the reporting databases containing information specifically replicated for reporting needs;
- and other databases used to maintain GenTax.

GenTax allows agencies to implement, manage, and execute pre-programmed reports and ad hoc queries or to efficiently configure reports that meet unique reporting requirements. The software supports a variety of graphical displays, including pie charts, line and stacked line charts, and bar charts. This provides users with a highly interactive and intuitive tool to view and analyze data and will provide management with key statistics on items such as total accounts receivable, work item backlogs, and other key performance indicators. Every user and system action is logged and can be included in audits and reports.

Analytics Manager

The GenTax Analytics Manager provides advanced analytics capabilities that are fully integrated with GenTax. Full integration ensures sufficient data history and data detail is available to successfully support model building. Full integration also allows for models to be directly deployed into GenTax business processes.

The following predictive modeling algorithms are supported in the Analytics Manager:

- Association Rules
- Binary Classification
- Boosted Decision Tree
- Decision Tree
- K-Nearest Neighbors
- Lasso Logistic Regression
- Linear Discriminant Analysis
- Logistic Regression
- Neural Net
- Quadratic Discriminant Analysis
- Random Forest
- Ridge Logistic Regression
- Support Vector Machine

The following statistics are generated for each of these predictive modeling algorithms, allowing for a user to determine model effectiveness, as well as being able to compare model results across all algorithm types:

- Predictive Power
- Model Variance
- R-Squared
- Adjusted R-Squared
- False Positive Rate
- False Negative Rate
- Lift Chart

The following analytics support capabilities are available in the Analytics Manager:

- Descriptive Statistics:
  - This includes min, max, mean, median, standard deviation (1-3), outlier counts (based on multiple outlier tests), normality test, histograms and other charts to show data distributions, skewness, kurtosis, and an overall 'Data Quality' for each field in the data set.
- Correlation Matrix
  - This will automatically discover all fields that are correlated with each other (with emphasis on fields that are highly correlated).
- Data Mining:
  - The Additional Data capability automatically scans data in GenTax to discover other data that could be added to a model to boost model performance.
  - The Features capability automatically discovers combinations of data (x/y, a = True AND b = True, etc.) that when used together are more predictive then the data field by itself.
  - The Segments capability automatically discovers partitions in the data that will allow for better models to be built on various segments of the data.
- Network Analysis
  - This automatically discovers data clusters/networks in the data source.
- Apply Model
  - This allows for model scores to be viewed against the learning data set as well as alternative data sets.

The GenTax Fraud Manager is not add-on. The optional Fast Data Services referenced in our submittal primarily relate to the incorporation of public records that are accessed through GenTax based on an annual agreement and fee structure between FAST and a third-party public-records company. These public records can be used to supplement the included ID theft quiz functionality and provide additional information to support agency efforts in areas such as collections and audits.

The Fraud Manager subsystem is core subsystem of GenTax and provides the following high-level functions:

- Identify incoming fraudulent tax returns
- Score returns using a combination of analytic models and business rules
- Provide taxpayer identification methods for potential fraud cases
    - Identity quiz
    - PIN letter
- Manage fraud cases and workflow
- Fraud case dashboard and statistical views
- Provide detail views and scores on tax returns in GenTax

Implementation of an identity confirmation is part of the core implementation. Agencies can fully control all aspects of online identity quizzes and other customer-validation processes managed through GenTax. GenTax allows agencies to add questions from their own internal databases and other systems with which the agency interfaces to significantly improve quiz effectiveness and security. This may include the use of third-party identify validation vendors like LexisNexis, although many FAST clients benefit from easier maintenance with the fully integrated Fast Data Services. Authorized users can also make real-time adjustments to multiple aspects of the online quizzes to accommodate agency-specific requirements.

Income confidence is a gauge of how much of the income claimed on the return can be verified in the data warehouse. Warehouse sources will include employer submitted W-2s, 1099s, and wage reporting. Income confidence levels are available as fraud rules and can influence which actions are taken on the return. The score is also shown on the return along with a detailed breakdown of how the confidence level was determined.

3) Vendor must provide a list (with short descriptions) of all standard reports to be part of the proposed solutions. DOR will review these reports as part of the evaluation and determine whether the standard reports meet DOR reporting needs or whether additional reports are needed.

Due to the ease and speed of configuration of the integrated reporting tools in GenTax, we do not place a limit on the number of reports, performance measures, or dashboards that we provide to our client agencies during a project. Instead, GenTax reporting and data analysis tools are configured to generate a specialized and focused set of reports and performance measures that meet our agency clients' specific needs and requirements. FAST will provide DOR with all reports necessary to support the proposed GenTax implementation.

The Reporting subsystem provides facilities to create, implement, manage, and execute preprogrammed reports that adhere to an agency's formatting standards. Such reports, in PDF, are typically created only for reports that are sent outside of the agency – for example, federal reporting or reports for other state organizations. Users can run reports on demand or they can be generated and distributed automatically in GenTax according to predefined schedules. Users can view, search, export, and print reports.

Query functions in the Reporting subsystem allow authorized users to define, execute, and share ad hoc SQL queries. It provides business and technical users with raw data, without open access to databases, to ensure users can obtain information without sacrificing security controls.

Although GenTax contains many standard queries in out-of-the-box list windows, Query functions in the Reporting subsystem allow users to easily develop custom queries to retrieve and display data that supports specific business needs. Custom queries developed in the Reporting subsystem are fully integrated in GenTax, and displays of these query results are virtually indistinguishable from those displayed in out-of-the-box list windows.

Queries can be run in real time and query definitions and results can be saved for use by other users, providing easy access to data used to answer on-the-fly questions.

The query subsytem does not preclude the agency from interfacing with third party applications. Access to the data is at the discretion of the agency, but all data is available for export if desired. The export may be completed using:

- Online export from standard GenTax lists. The data may be exported to Microsoft Word, Microsoft Excel, XML or other OpenDocument file formats.
- A business object (that is, creation of a file interface)
- Web Services
- Direct export from the database

4) Provide samples of scorecards the proposed ITS solution uses for managerial reviews

Management Dashboard

GenTax provides built-in reporting tools that our project teams use to develop reports that are relevant to each agency. While there are some similarities between GenTax client agencies, the leadership of each agency is typically focused on the data points and challenges that are specific to their agency. Because of this, no two GenTax implementations use the same management dashboard. We will be happy to show the dashboard during our system demonstration.

Dashboard functions in the Reporting subsystem enable users to view information at a glance, see historical trends in data, and highlight areas that merit closer attention. Dashboards provide agency managers and executives with current and historical key performance indicators, allowing them to monitor process performance and quickly identify problem areas.

Once business users identify areas of the system that are to be monitored, metrics are defined in the Dashboard. Metrics can be created for any type of information in the system, but are often focused on revenue collection, production volume, accuracy metrics, and organizational efficiency.

Dashboard information is presented in graphical form, and users can choose to display information in pie, bar, line, and stacked bar chart format. Depending on the purpose for the information, a metric can provide detail on current operations or a comparison (for example, year over year) to facilitate trend analysis.

Agency users investigate trends or anomalies identified in a dashboard by accessing the data cube that underlies a dashboard chart. Data cubes provide the detail behind the dashboards for users to track down issues. Once a data cube is accessed, the full data analysis functionality of the subsystem is available to support advanced inquiry and research. For example, if a quick glance at a suspended tax return dashboard indicates that the number of suspended tax reports is increasing, a user can access the underlying data cube for further investigation. Research can then determine whether the trend was due to an unanticipated increase in the volume of tax reports, the effect of a newly-added business rule, or some other action.

GenTax can restrict user access to the dashboard itself or to specific tabs within the dashboard. For example, users handling customer service phone calls may only be allowed to see information related to payments and billing, not audits.

5) A response to each requirement with details on how the Vendor will deliver the requirement.

FAST's response to each requirement can be found in Tab B.3 Att F3 – Project Related Req.

6) Describe any differentiators of the Vendor's proposed reporting and analytics solutions as well as describe any additional features not covered as part of this RFP.

ANALYTICS

The GenTax Data Warehouse supports non-filer and under reporting through a broad range of views, data matching, and query capabilities. Users can search a taxpayer identities, names, addresses, and other demographic information. Conducting a search returns results of associated taxpayer information from all data stores within the warehouse. Users can then drill down for additional detailed information.

FAST offers a fully integrated Data Warehouse solution as part of GenTax. Operational data stores are integrated with the data warehouse, allowing data to be routinely refreshed multiple times a day. The GenTax Data Warehouse subsystem loads and manages data that an agency obtains from sources outside of GenTax. Sources can include other systems within an agency and external systems managed by different agencies and third-party organizations. Discovery subsystem can leverage data from the data warehouse to support compliance, reporting, identification and discovery process within GenTax.

Data mining tools help users to understand the data in the repository, an important capability when researching criteria to create effective selection plans. Data from any data store can be compared to data in all GenTax databases, to data in other data stores, or to user-supplied values. Users can build queries dynamically to analyze and view data in the data warehouse. Query results are displayed in list form, allowing further manipulation such as sorting, filtering, and exporting. Reports and data cubes can be run on data in the data warehouse.

GenTax supports case prioritization and selection by assigning scores to items related to cases and audits. The strength of these scores is greatly improved through use of information in the Data Warehouse. For non-filer audits, for example, information in the Data Warehouse can be used to determine the number of periods in which there was no filing. Data from forms filed with external parties can be also pulled from the warehouse to obtain more current contact information for customers. GenTax can also prioritize the order of task assignments based on agency-specific business rules, so items with higher analytics scores (or other factors used to match a selection with a particular business process) are prioritized.

7) Describe how the vendor's proposed solution will leverage predictive analytics to drive business insight for future operations

Please see RFP Attachment P - Project Related Requirements Detail for additional information."

The Data Mart subsystem provides a view of data using a pivot table paradigm, allowing users to group, filter, sort, and summarize data in a GenTax data cube. Data cubes represent snapshots of data that are relevant to specific business areas or data categories. They support business intelligence and executive

decision-making by providing agency financial analysts, economists, managers, and other users with the information necessary to spot trends, develop answers to spontaneous questions, and create graphical displays of key statistics and other information. More complex than ad hoc queries and more flexible than formal reports, data cubes allow users to visualize, analyze, and manipulate selected data to meet business reporting needs.

Data cubes can be configured to use any combination of data, including outside data sources. They are created by defining and maintaining SQL queries or by defining a data access object. Pre-defined, dynamic data cubes can be configured for access from within other subsystems. Like ad hoc queries, these data cubes are accessible through security-controlled navigation tabs or action buttons.

The Analytics subsystem allows users to create, run, refine, and store predictive models in GenTax. It provides a user-friendly interface for compiling and organizing large sets of current and historical data for use in creating models. The subsystem provides trained statisticians with advanced modeling options, yet it is designed to allow users who do not have a background in statistics or mathematics to identify and predict trends, risks, and opportunities.

Once built, models can be deployed throughout GenTax to provide practical modeling results. Managers are able to incorporate result data into organizational planning and executive decision-making activities, communications campaigns, fraud initiatives, and more.

The Analytics subsystem leverages integration with other GenTax subsystems. Models can be integrated within GenTax Data Warehouse, Discovery, Collection, Non-Filer, Returns, and Audit subsystems to improve the effectiveness of business processes through activities such as:

- Incorporating predictive models into new or existing audit selection programs tailored for specific tax types, industry classifications, estimated recoverability, and other program criteria.
- Identifying fraudulent refunds by leveraging and improving existing fraud rules, return data, wage data, and other information.
- Evaluating effectiveness of return suspension rules to reduce workloads and error rates.
- Analyzing taxpayer customer services, workflow, correspondence, and other business processes to develop and prepare taxpayer-education campaigns.

PROJECT TEAM EXPERIENCE

2.3.2.8 Project Team Experience

"The experience of the project team is required to appropriately identify and resolve project risks and issues, actively monitor the ongoing implementation, and confirm that DOR is able to appropriately leverage the capabilities of the COTS solution. DOR reserves the right to approve any replacement or project manager or project lead.

Please provide the following documents with your proposal:

1) Names and relevant qualifications of all team members in key roles including their role (i.e. Tax Project Leader, Configuration Resource, etc), percentage of their time that will be devoted to this project plus date range each of them will be onsite at DOR during the project. The key roles should be a subset of roles identified in the Staffing Plan Template. The qualifications should highlight years of experience, number of previous similar states projects, professional certifications, and other areas the vendor deems relevant to demonstrating that the appropriate team is in place for a successful implementation. Please provide an organizational chart consistent with staffing and project plan and a rate chart for all roles and responsibilities represented in the staffing plan.

Please note that updates to the original submission are identified in yellow highlight.

Resumes for the following proposed key personnel are provided in this section. Their resumes highlight their relevant qualifications, years of experience, number of previous projects, and professional certifications.

- Tax Project Manager – Myles Larson
- Senior Project Manager – Jeffrey Egan
- Tax Technology Architect – Andy Ribits
- Tax Configuration Expert – Damien Olenslager
- Senior Tax Test Lead – Brittany Frye
- Senior Tax Training Lead – Dani Millican

The key personnel listed above are 100% committed to the project and will be on site for the duration of the implementation.

FAST's project team will vary between 20-25 personnel who will work full time in DOR's facilities co-located with DOR project personnel. We also have specialists in specific aspects of GenTax (such as fraud and identity verification and data warehousing) and taxation that can be brought in to assist as needed. These FAST resources can potentially be assigned to the project on a full-time or part-time basis, working on site or remotely, to provide added assistance and support as needed.

Myles Larson

Tax Project Leader

Career Profile

Myles Larson is a FAST project director with over twelve years of GenTax experience. Since joining FAST in 2005, Mr. Larson acquired in-depth knowledge of FAST's GenTax integrated tax software and implementation methodology through his work on five FAST implementation projects for state governments. He served as project manager or project director on GenTax implementation projects for the South Carolina Department of Revenue, West Virginia Department of Revenue, and the North Dakota Office of the State Tax Commissioner.

Major responsibilities with FAST include:

- Project management on enterprise-level GenTax implementations for state tax agencies
- Consultant and senior subject-matter expert on GenTax, change management, and tax agency best practices
- Project oversight and client relations
- Project and resource planning, work execution, contract management, and progress reporting
- Guiding implementation leads in the coordinated implementation of multi-faceted project plans
- Managing production-support efforts and planning for future product support

FAST Experience

South Carolina Department of Revenue
Gentax Implementation Project
August 2014 – Present
Role: Project Director

Mr. Larson has served as the project director of FAST's GenTax implementation project for the South Carolina Department of Revenue since the project's inception. He has ultimate responsibility for the success of the effort to replace the department's numerous legacy systems, including an Accenture transfer system, with GenTax. He is overseeing the implementation of 51 legacy tax programs into GenTax, including sales, withholding, corporate income, and individual income.

Major responsibilities include:

- Resource and timeline planning
- Agency and stakeholder reports
- Communication planning

- Risk mitigation and strategic planning
- Ensuring the implementation is maintainable and upgradable in the future
- Serving as chairman of the Project Steering Committee
- Overseeing the implementation of DexFraud
- Assisting the agency in the transition to e-Services to promote customer self-service

North Dakota Office of State Tax Commissioner
GenTax Production Support Project
March 2014 – July 2014
Role: Project Manager
Mr. Larson served as a manager for the Version 9 upgrade at the North Dakota Office of the State Tax Commissioner. His team's primary responsibilities consisted of upgrading the GenTax Registry, Returns, Payments, Imaging, Refunds, and Work Management subsystems. He executed and managed the project plan, prepared and delivered the contract deliverables, and managed the implementation team's rollout efforts. He ensured that knowledge-transfer activities between FAST and agency personnel were successful. He provided revenue industry best practices and change-management services and assisted in the implementation of IRS Safeguard and security best practices.

West Virginia Department of Revenue
GenTax Production Support Project
November 2010 – February 2014
Role: Project Manager
As the FAST project manager at the West Virginia Department of Revenue, Mr. Larson led a team responsible for production support, maintenance, and implementation of GenTax product upgrades. An upgrade to GenTax Version 8 was completed in 2011 and an upgrade to Version 9 was completed in 2013. Mr. Larson coordinated implementation of project upgrade plans and managed the support and upgrade activities of functional, conversion, testing, training, and technical teams. He managed maintenance efforts for over 50 production taxes and 40 online taxes, as well as implemented the State Reciprocal Program (SRP).

Minnesota Department of Revenue
GenTax Implementation Project
December 2009 – October 2010
Role: Implementation Specialist
For nine months, Mr. Larson served as an implementation specialist on the Minnesota Department of Revenue's GenTax implementation project. His responsibilities included building interfaces between

GenTax and external state agencies, installing and converting data into the Treasury Offset Program (TOP), and implementing new tax types in GenTax.

North Dakota Office of State Tax Commissioner
GenTax Production Support Project
July 2007 – November 2009
Role: Project Manager
Mr. Larson managed the GenTax production-support team for North Dakota's GenTax project. This team was responsible for bug and maintenance fixes, installation and configuration of service packs, interface implementation, resolving system issues, configuring business and legislative changes, and coordinating with the FAST Development Center. He also led the implementation of the latest version of the GenTax Discovery subsystem.

North Dakota Office of State Tax Commissioner
GenTax Implementation Project
July 2005 – June 2007
Role: Implementation Consultant
Mr. Larson worked with multiple GenTax subsystems and was responsible for configuring refunds, returns, interfaces, letters, reports, and data marts. In addition to gaining experience working with multiple GenTax functions and subsystems, he also gained experience in implementing 18 tax types, including sales and use, withholding, estate, motor fuel, individual income, corporate income, and liquor taxes. Mr. Larson also worked closely with agency business and technical staff to evaluate business requirements and accommodate them in GenTax.

Technical Experience
FAST core software architecture and FAST software tools, C, C++, C#, Java, Visual Basic .NET, HTML, Adobe Photoshop, Microsoft Office Suite, Windows, SQL Server Management Studio

References
Mario Alvarez
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Sherry Blizzard
Communications and Production Support, South Carolina Department of Revenue

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(803) 898-5467

Hartley Powell
Agency Director, South Carolina Department of Revenue
Hartley.Powell@dor.sc.gov
(803) 898-5040

Education & Certifications

Bachelor of Arts, Computer Science
University of Jamestown
Jamestown, North Dakota

Project Management Professional (PMP) – April 2014

Jeffrey Egan

Senior Project Manager

Career Profile

Jeffrey Egan is a FAST team manager with over nine years of management and development experience in implementing and configuring FAST's commercial off-the-shelf (COTS) software for government organizations. He is currently the team manager for the Illinois Department of Employment Security's FastUI-based project. Mr. Egan's knowledge of the FAST Implementation Methodology, along with his functional experience developing and integrating GenTax, has contributed to the success of FAST projects for the revenue agencies of Finland, Poland, and Minnesota. His experience includes project planning, development, testing, training, technical support, business area expertise, business and systems analysis, and quality assurance.

Mr. Egan's major responsibilities with FAST include:

- Project Architect
- Team Manager
- Site implementation and consulting
- Product development, maintenance, and support specialist

FAST Experience

Illinois Department of Employment Security
FastUI Implementation Project
August 2016 – Present
Role: Team Manager

Mr. Egan currently serves as a team manager on the Illinois Department of Employment Security's FastUI-based solution for administering unemployment insurance tax. His team manages the implementation of refunds, billing, collections (including automating liens, levies, and personal liability assessments), the Treasury Offset Program, bankruptcy, and audit. He also managed the coordination with the other teams to ensure return processing, financial transactions, and billing worked together seamlessly as a complete solution. A unique aspect of this project is that it is being implemented in the Illinois Department of Revenue's existing GenTax-based integrated tax project.

Finnish Tax Administration
GenTax Implementation Project
June 2016 – July 2016
Role: Implementation Consultant
Mr. Egan spent a month on a short-term assignment assisting the Finnish Tax Administration with their GenTax-based integrated tax project. During this time he worked on a process for recording, maintaining, and reconciling large amounts of taxable transaction source data against returns.

Poland Ministry of Finance
GenTax Implementation Project
February 2013 – June 2016
Role: Project Architect
Mr. Egan served as the project architect and was responsible for managing all aspects of the implementation and development teams. The Poland GenTax implementation project transitioned 400 independently operating tax offices, each with their own IT infrastructure, into a single, federal, centralized solution. His various responsibilities in nearly three and a half years on the project include:

- Providing leadership and guidance to developers in the implementation of payments, refunds, revenue accounting, and financial transactions
- Refund configurations and processes, payment configurations, development of revenue models, and development of a penalty and interest engine
- Supporting site-specific enhancements and project recommendations to FAST's project partner personnel
- Managing the overall implementation design
- Implementation review to confirm all standards and best practices are followed
- Oversight and management of all changes made to the production environment

Minnesota Department of Revenue
GenTax Implementation Project
May 2008 – February 2013
Role: Team Manager
Mr. Egan held a number of responsibilities on the Minnesota Department of Revenue's GenTax-based integrated tax project, including team manager, implementation specialist, and developer. His responsibilities included implementing the department's ACH bank interface for ACH debit and credit payments as well as issuing direct-deposit refunds. He was responsible for implementing the federal government's State Reciprocal Program (SRP) and State Appellate Defender Office (SADO) programs. He

analyzed and configured site-specific components, provided production support, managed client development teams, designed user interfaces, trained developers and technical staff, and planned and participated in all aspects of development and delivery of GenTax.

Technical Experience

FAST core software architecture and FAST software tools, C, C++, C#, Java, Visual Basic .NET, HTML, Microsoft Office Suite, Windows 95/98/ME/2000/XP/7/8, UNIX/Linux

References

Lois Cuevas
Revenue Manager, Illinois Department of Employment Security
Lois.Cuevas@illinois.gov
(312) 793-1919k

Artur Zaremba
Project Manager, Sygnity (FAST's partner in Poland)
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Education

Bachelor of Science, Computer Science
University of Minnesota
Minneapolis, Minnesota

Andrew Ribits

Tax Technology Architect

Career Profile

Andrew Ribits is a FAST technical lead with over eight years of experience as a technical team member with FAST's commercial off-the-shelf (COTS) software for government organizations. Mr. Ribits has been the technical lead on Vermont's GenTax implementation project for over three years. Additional FAST experience includes technical roles on GenTax projects for the states of Utah and Montana, as well as a technical role on the FastDS-VS project for the state of Utah. As a technical team lead, Mr. Ribits works closely with the joint FAST and agency infrastructure team to provide project environment setup, environment maintenance, database security, IT training, and performance tuning.

Mr. Ribits' major responsibilities with FAST include:

- Set up and maintenance of the FAST database, servers, networking, and security
- Database performance tuning
- Providing technical support to FAST and client developers
- Ensuring adherence to technology standards and IT best practices

FAST Experience

Vermont Department of Taxes
GenTax Implementation Project
January 2014 – Present
Role: Technical Lead

Mr. Ribits is currently serving as the site's technical lead. In this role, he manages 37 virtual Windows servers during implementation of the state's GenTax project, including 9 SQL Server instances. Some of his various responsibilities on the project include:

- Administration of Windows Server OS and SQL Server instances for GenTax
- Installation, configuration, and maintenance of GenTax services
- Managing an internal network firewall protecting GenTax servers
- Providing guidance to developers in the implementation of the GenTax
- Supporting site-specific enhancements and project recommendations to state personnel
- Coordinating implementation of FAST sync packs with the FAST Development Center
- Supporting and coordinating external interfaces for a multitude of external processes
- Knowledge transfer and guidance to state personnel

PROJECT TEAM EXPERIENCE

Utah State Tax Commission
FastDS-VS Implementation Project
February 2013 – December 2014
Role: Technical Team Member
Mr. Ribits served on the technical team for Utah's initial implementation of FAST's vehicle titling and registration software solution, FastDS-VS. This solution is based on the same core software architecture of GenTax. He assisted with the initial setup of servers, worked closely with developers to plan and performance tune database queries, and helped train state database administrators. In addition to the FastDS-VS implementation, Mr. Ribits maintained the primary GenTax installation in Utah. He worked with developers to upgrade GenTax modules and to increase performance of associated processes.

Montana Department of Revenue
GenTax Production Support Project
September 2012 – February 2013
Role: Technical Team Support
Mr. Ribits assisted the Montana Department of Revenue's technical team in converting the existing GenTax implementation from an Oracle database platform to a SQL Server 2012 database platform. He trained the state technical team to performance tune the GenTax application in a SQL Server environment.

Utah State Tax Commission
GenTax Implementation Project
February 2009 – August 2012
Role: Technical Team Lead and Technical Team Member
As a technical team lead since December 2011, Mr. Ribits led a team of state database administrators through three GenTax production rollouts and a hardware refresh. These rollouts exposed him to multiple versions of the GenTax architecture and gave him extensive experience in implementing, upgrading, and maintaining the GenTax application and database servers. He managed the security of the application by configuring GenTax to use Microsoft's Active Directory.

Technical Experience
FAST core software architecture and FAST software tools, Visual Basic .NET, HTML, Microsoft Office Suite, Windows 7/8.1/10, Windows Server 2008R2/2012R2, SQL Server 2008R2/2012, VMWare vCenter, VMWare vShield

References
Tom Buonomo

Director of Information Services, Vermont Department of Taxes
Tom.Buonomo@vermont.gov
(802) 828-3758

Michael Steves
Information Security Analyst, Vermont Department of Taxes
Michael.Steves@vermont.gov
(802) 828-6437

Douglas Stuart
Database Administrator, Utah State Tax Commission
dstuart@utah.gov
(801) 297-2745

Education
Bachelor of Science, Computer & Information Technology
Purdue University
West Lafayette, Indiana

Damien Olenslager

Tax Configuration Expert

Career Profile

Damien Olenslager is a FAST team lead with over seven years of developer and management experience with the GenTax commercial off-the-shelf integrated tax solution. Since January 2016, he has led a joint team of FAST and state developers in the implementation of GenTax for the Massachusetts Department of Revenue. In this role, he has managed the implementation of taxpayer registration, returns processing, and e-Services. Additional FAST experience includes a position as an implementation consultant on the GenTax projects for the Georgia Department of Revenue and the Royal Malaysian Customs Department.

Mr. Olenslager's major responsibilities with FAST include:

- Team lead
- Product development, maintenance, and support specialist
- Providing leadership and guidance to developers in the implementation of GenTax
- Project-specific analysis and implementation of GenTax and e-Services

FAST Experience

Massachusetts Department of Revenue
GenTax Implementation Project
January 2015 – Present
Role: Implementation Lead, Implementation Consultant

Since January 2016, Mr. Olenslager has served as the site's implementation lead over production support. Other duties include a role as implementation consultant from January 2015 – December 2015. Some of his various responsibilities in his multiple roles over nearly three years on the project include:

- Providing leadership and guidance to FAST and state developers in the implementation of the GenTax e-Services (web-based taxpayer self-services), Registration, and Returns Processing subsystems
- Implementing a new design for the GenTax e-Services portal
- Transitioning the site from an implementation-based project to support and maintenance
- Implementing Modernized e-File for the department's income taxes
- Coordinating annual and special legislative updates
- Coordinating development of interfaces with various paper return sources

PROJECT TEAM EXPERIENCE

Georgia Department of Revenue
GenTax Implementation Project
June 2010 – September 2012, October 2013 – January 2015
Role: Implementation Lead, Implementation Consultant
Mr. Olenslager served as both an implementation lead and an implementation consultant on this GenTax-based project. He guided FAST and state developers in the implementation of the GenTax e-Services and Registration subsystems. He implemented and tested new functionality and core architecture changes as a result of the upgrade from GenTax Version 8 to GenTax Version 9. He also analyzed and configured site-specific components, provided production support, and managed state developers.

Royal Malaysian Customs Department
GenTax Implementation Project
September 2012 – October 2013
Role: Implementation Consultant
As an implementation consultant, Mr. Olenslager gathered requirements and implemented new tax types for the client. He developed the Returns and Payments processing subsystems and trained client developers.

Technical Experience
FAST core software architecture and FAST software tools, Java, Visual Basic .NET, HTML, CSS, SQL, Microsoft Office Suite, Windows 98/ME/2000/XP/7/10

References
Erin Botelho
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(617) 887-5182

Lawrence Modestow
Business Architect, Massachusetts Department of Revenue
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(617) 887-6053

Henry Rutherford
Senior Manager, Georgia Department of Revenue

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(404) 417-6497

Education

Bachelor of Science, Management Information Systems
Brigham Young University
Provo, Utah

Brittany Frye

Senior Tax Test Lead

Career Profile

Brittany Frye is a FAST testing lead with over three years of testing and training experience. Since July 2014, she has facilitated training and testing efforts for the Oklahoma Tax Commission for the GenTax and FastDS-VS projects. In addition, Ms. Frye worked at the FAST Development Center on core training and testing documentation and assisted the Alabama Department of Revenue in optimizing their long-term testing approach.

Ms. Frye's major responsibilities with FAST include:

- Testing team lead
- Developing and executing testing programs
- Online Help and documentation specialist

FAST Experience

Alabama Department of Revenue
GenTax Production Support Project
April 2017 – Present
Role: Testing Lead
Ms. Frye is currently serving as the site's testing lead. She provides leadership and guidance in all testing efforts, trains testers in test management procedures, facilitates recommended testing improvements, and delivers materials for long-term testing maintenance. She is involved in the planning phases of testing for FAST Sync Packs, serves as the liaison between the client testing team and FAST project team, and manages the resolution of reported issues.

Oklahoma Tax Commission
GenTax and Fast DS-VS Implementation Projects
July 2014 – April 2017
Role: Testing Lead and Training Coordinator
Brittany Frye held a number of responsibilities at the Oklahoma Tax Commission for both the Gentax and FastDS-VS solutions. She first served as a Training Coordinator, which created a foundation of knowledge and experience for GenTax and FastDS-VS. Then, she transitioned into the testing lead role while working on training responsibilities simultaneously. During that time, she oversaw two Version 10

upgrades for both solutions as well as a motor fuel tax implementation rollout. For these, she planned and participated in all aspects of test management for each phase of testing.

References

Deborah McIntyre
Project Director, Oklahoma Tax Commission
dmcintyre@tax.ok.gov
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Ginger Hulsey
Revenue Administrator, Oklahoma Tax Commission
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Theodora Davis
Assistant Project Director, Alabama Department of Revenue
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(334) 242-9828

Education

Bachelor of Applied Science, Writing, Rhetoric and Technical Communications
James Madison University
Harrisonburg, Virginia

Associate of Arts and Sciences, General Studies
Lord Fairfax Community College
Middletown, Virginia

Dani Millican

Senior Tax Training Lead

Career Profile

Dani Millican is a FAST training manager with over ten years of training program and security implementation experience with the GenTax commercial off-the-shelf integrated tax solution. Ms. Millican has developed and delivered on-site and online training courses and coached over 90 GenTax trainers through FAST's Train-the-Trainer Academy. She has supported and provided training for over 55 tax types, licenses, and fees, and has significant experience employing FAST's three-tiered structure for user training. Since 2007, her demonstrated expertise in technical training and change management has contributed significantly to the successful GenTax implementations for state tax agencies in Alabama, Oklahoma, and South Carolina. Additionally, Ms. Millican has provided support to numerous agency users during the initial production rollout of FAST's software solutions for the California Unemployment Insurance and New York City Tax projects.

Ms. Millican's major responsibilities with FAST include:

- Leading training, testing, and security efforts on FAST projects
- Training and mentoring new FAST trainers
- Planning, development, and delivery of FAST Training Lead Conferences
- Course development and delivery of FAST's New Trainer Training

Prior to joining FAST, Ms. Millican spent more than 15 years working in instructional design and development in the information technology industry. She worked with a variety of customers while at technology start-up organizations. She was also a course designer for Intel's Networking Certification Program.

FAST Experience

South Carolina Department of Revenue
GenTax Implementation Project
August 2014 – Present
Role: Training, Testing, and Security Manager
As training manager for the South Carolina Department of Revenue's GenTax-based project, Ms. Millican provides GenTax training to state personnel throughout various stages and rollouts of the implementation project, including all agency business project representatives and testers. She designs training courses, documents training procedures, and provides training to agency personnel through

FAST's train-the-trainer methodology. In addition to her training role, Ms. Millican leads project testing by developing testing schedules, leading testing scenario development meetings, and working with state team leads to ensure all testing schedules are met. Ms. Millican also oversaw the implementation of GenTax application security and assisted with procedures and training of DOR staff.

Oklahoma Tax Commission
GenTax Implementation Project
May 2011 – August 2014
Role: Training and Security Lead
As training manager for the Oklahoma Tax Commission's GenTax-based project, Ms. Millican worked closely with state trainers to ensure consistent training by developing, coordinating, and evaluating the project's training approach, materials, and delivery. She led training workshops and developed site-specific resources and materials to meet custom training needs. Ms. Millican oversaw the implementation of GenTax application security by identifying different agency roles and job functions, creating separation of duties within the application, training staff about security maintenance, and documenting different security groups and functions.

Alabama Department of Revenue
GenTax Implementation Project
March 2007 – April 2011
Role: Training and Security Lead
Ms. Millican served as training manager for the Alabama Department of Revenue's GenTax implementation project. In this role, she developed, coordinated, and evaluated the project's training approach, materials, and delivery, and oversaw training efforts for hundreds of agency users. As part of her training role, Ms. Millican led the training of all testing participants. Training in Alabama spanned six production rollouts across more than 40 tax, license, and registration account types, including sales and use, individual income, corporate income, oil and gas production, lodging, and cigarette stamp taxes.

Other Professional Experience
From 2005 to 2007, Ms. Millican held positions as a project manager and events coordinator. She dissected and coded data into communication channels and developed reports and queries for her clients to support communications to customers and stakeholders.

From 1993 to 2005, Ms. Millican worked for several technology companies in the areas of marketing, training, and technical writing for hardware and software products. She also organized pre-sales systems

engineering teams, installation and support teams, and training and consulting teams, and provided writing and technical expertise for a variety of IT projects.

Published Works

Book – McGraw Hill, 1998
Network Resource Planning

Article – UNIX Review, 1996
Network Resource Planning

Technical Experience

FAST core software architecture and FAST software tools, Captivate, and Microsoft Office Suite including Publisher

References

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Education

Bachelor of Science, Management Information Systems
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PROJECT TEAM EXPERIENCE

Project Organization

We will fulfill staffing needs with our proposed project team comprised of personnel experienced in implementing our software for other client agencies. We are committed to providing the proper staffing levels for successful project completion. With over 1,200 full-time employees around the world that have contributed to the success of over 300 production rollouts of our software, FAST has the requisite employees to provide experienced and capable project team members.

FAST uses a strong partnership approach to project staffing by employing an organizational structure designed around teams comprised of FAST and agency employees. This approach is built to help ensure project success and is incorporated into all processes, practices, and plans. The close day-to-day working relationship between FAST and DOR will enable joint management and control of the project and ensure knowledge transfer is occurring throughout the duration of the project.

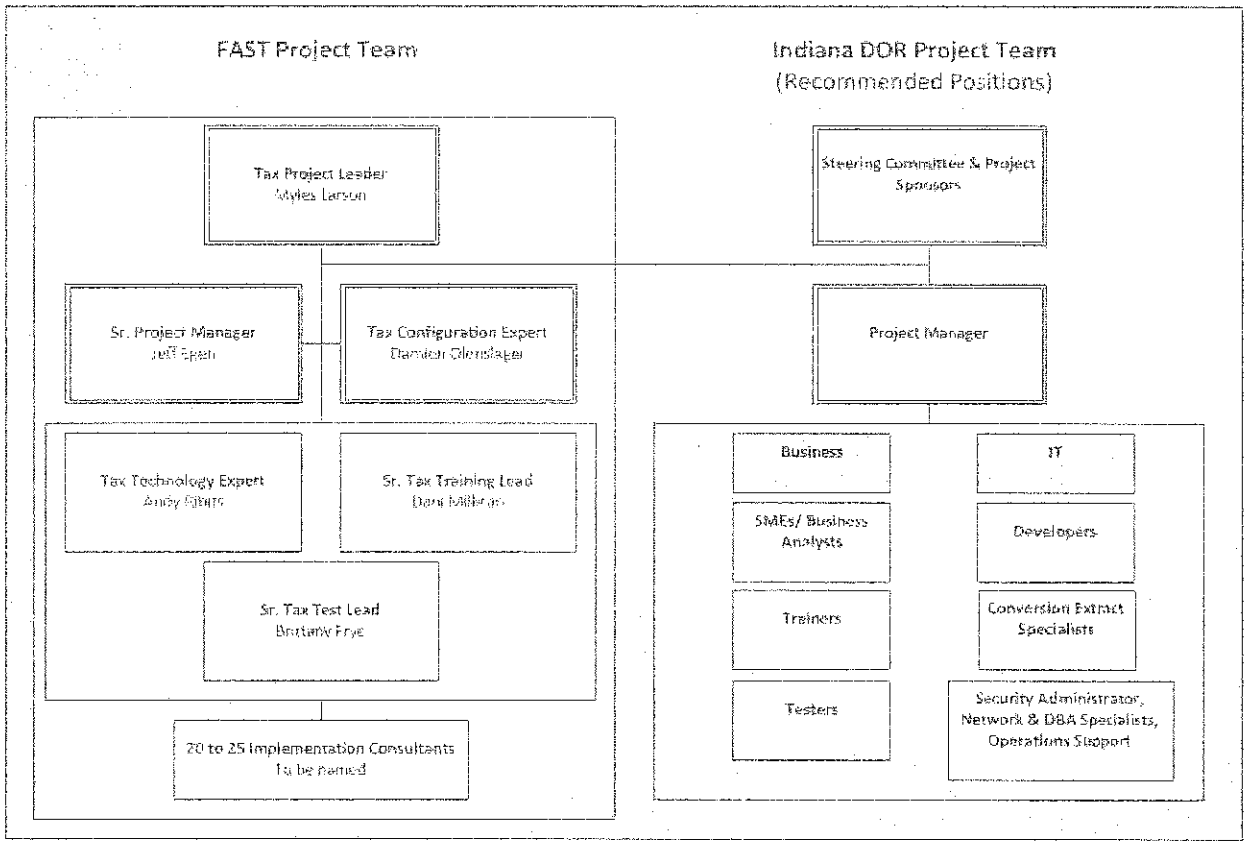
To support this structure, project leadership should strive to create a project work environment that:

- Supports open, unrestrained, and frequent exchange of information and ideas.
- Encourages knowledge transfer in all areas needed to run GenTax.
- Provides each team with the resources (for example, tools, information, guidance, and training) needed to keep moving their area of responsibly forward.
- Clearly defines lines of communication and authority.
- Provides a process for identifying and defining decisions and ensuing quick responses.
- Supports addressing problems in a quick and positive manner.

One of the underlying principles of the FAST Implementation Methodology is to utilize DOR staff to the maximum extent practical. DOR's active engagement fosters ownership of the system. The goal is to create an environment for DOR and FAST staff that is positive and productive and one where everyone is committed and working toward a common goal.

Following is a preliminary, high-level organizational chart for the RMITSS project which highlights FAST key personnel and their assigned roles, as well as recommended roles for DOR.

PROJECT TEAM EXPERIENCE



FAST and DOR Roles and Responsibilities

The following table provides a description of the roles and responsibilities of FAST's key project personnel and implementation consultants. Please note that all FAST personnel assigned full time to the project team will live in the Indianapolis area during their duration on the project.

FAST projects are managed by a core group of on-site FAST project personnel. Additional support can be provided to these personnel through our FAST Development Center and, as necessary, a pool of FAST specialists who hold expertise in specific functional areas of GenTax (such as fraud and identity verification and data warehousing). These FAST resources can potentially be assigned to the project on a full-time or part-time basis, working on site or remotely, to provide added assistance and support. Use of these specialists and part-time personnel is included in our fixed priced cost and our client agencies do not incur additional charges if these resources provide support to the project. Our projects are therefore not based on detailed estimates of labor hours.

We understand that the state may have specific concerns related to staffing roles, responsibilities, and

labor hours and we would ask to discuss these issues with the state in person once we have a greater understanding of, and additional information related to, these concerns. For ease of reference, we provide the following table from our proposal which provides a high-level overview of the key roles and responsibilities of our proposed key personnel.

FAST Project Personnel – Key Roles and Responsibilities

Role	Responsibilities
Project Director/Project Leader	FAST's project director is responsible for managing all FAST resources, developing and maintaining the overall project plan, and serving as the senior FAST project liaison to the project's steering committee and management. Responsibilities include, but are not limited to: • Assuming ultimate responsibility for the overall software architecture of the solution. • Managing the schedules, quality, and functional/technical requirements of the project. • Managing the overall budget for the project. • Reviewing adherence to the project contract. • Assuming overall responsibility for ensuring that the delivered solution meets agency business requirements while ensuring the project follows best practices. • Serving as a senior FAST subject matter expert on the project. • Providing guidance and support to FAST functional project managers and other FAST project personnel.
Functional Project Managers (Project Manager and Configuration Expert)	Responsible for directly supporting the FAST project director, as well as: • Ensuring that individual implementation consultants conduct work in a manner that conforms to the design criteria, standards, constraints, and interface/integration requirements established for the project. • Working closely with team managers to manage the day-to-day workings of the project as it relates to the solution design. • Ensuring related standards and policies are followed where applicable. • Reviewing and approving final configurations and subsystem integrations. • Reviewing Decision Requests related to new development or modification of site-specific code. • Controlling migrations and updates into and between environments to ensure quality control. • Leading the execution of project tasks and overseeing deliverables

PROJECT TEAM EXPERIENCE

Role	Responsibilities
	as outlined in the project plan. • Leading software configuration and the development of site-specific components. • Working with agency SMEs to ensure the solution meets the needs of users.
Technical/Security Manager (Tax Technical Expert)	FAST's technical/security manager is responsible for implementation of the data models and database schemas for site-specific design extensions, as well as for tuning and optimizing performance and throughput of the solution as it pertains to GenTax. Additional responsibilities include: • Monitoring the configuration, tools, and repositories to ensure quality processes are maintained. • Overseeing implementation of security measures and providing support to agency security administrators. • Providing technical support to the project team. • Assisting technical staff with procurement, installation, and support of the hardware and software platform. • Assisting technical staff in maintaining the hardware during implementation. • Ensuring adherence to technology standards and IT best practices • Supporting the FAST and agency conversion teams in the organization, management, and execution of the conversion process to move legacy data into GenTax. • Designing and implementing the solution environments. Oversees adherence to related security and technical standards/policies.
Training Manager	The FAST training manager is responsible for managing training activities, including: • Overseeing training plans and supporting agency SMEs. • Working with business and technical leads to develop training curriculum and materials. • Monitoring the overall effectiveness of training activities • Overseeing and delivering train-the-trainer sessions. • Assisting in the management and production of the agreed-upon site-specific training documentation. • Reviewing training evaluations and implementing improvement plans. • Ensuring user and technical training is scheduled and performed. • Creating a desk-side-support plan and leading desk-side-support teams.

PROJECT TEAM EXPERIENCE

Role	Responsibilities
	• Assisting with the coordination of testing. • Working closely with agency SMEs to ensure the solution meets the needs of users.
Testing Manager	The FAST testing manager is responsible for managing system test activities, including: • Managing overall test procedures, including development of test plans and test scripts and scenarios. • Training system testers. • Setting up and supporting integrated FAST testing tools. • Managing incident reporting and correction and regression testing. • Monitoring effectiveness of testing. • Reporting test results.
Implementation Consultants • Development/functional team • Technical team • Conversion team • Training team/trainers • Testing team	FAST implementation consultants support the project and FAST's team managers. They may serve as team leads or team-support personnel on the various project teams. Primary responsibilities include: • Executing tasks and producing deliverables as outlined in the project plan and directed by the project manager and other team managers. • Performing configuration and development of site-specific components. • Assisting in creating deliverables. • Supporting technical and conversion activities. • Working closely with agency SMEs to ensure the solution meets the needs of users. • Supporting the development, technical, conversion, and training and test teams. • Working with subject matter experts in technical matters related to the software functional design. • Creating Decision Requests related to new developments or modification of site-specific code. • Performing code reviews and validating unit testing results for code changes and new code development. • Supporting testing, including assisting in the development of test scripts/scenarios for demonstrations and testing. FAST implementation consultants are also assigned as trainers responsible for various training activities, including: • Working with agency trainers to develop training curriculum and materials.

PROJECT TEAM EXPERIENCE

Role	Responsibilities
	• Delivering train-the-trainer sessions. • Assisting in the production of the agreed-upon site-specific documentation. • Supporting user and technical training as planned. • Participating in desk-side-support teams.

Recommended DOR Project Personnel

Listed in the following table are recommended DOR staffing resources based on our experience in implementing GenTax for projects of a similar scope and scale. We have found, however, that agency staffing levels similar to those recommended in the table provide our client agencies with the greatest opportunity for reduced risk, knowledge transfer, and the ability to support the application over the long term.

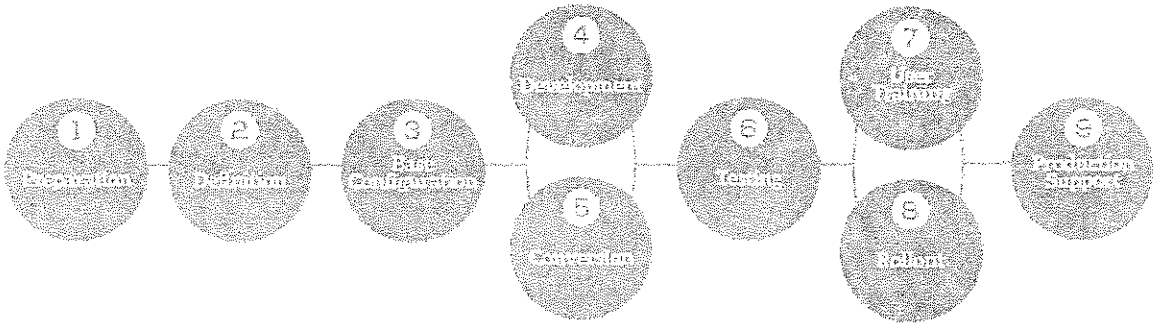
We list in the following table recommended State staffing resources based on our experience in implementing GenTax for projects of a similar scope and scale. It is important to note that our proposed implementation schedule is not dependent on the recommended number of State IT personnel to complete the project on time and on budget. We have found, however, that agencies that commit similar IT staffing resources typically experience improve IT knowledge transfer and the ability to internally support the application over the long term.

Please note that the "Duration" column in the table references some of the phases of the FAST Implementation Methodology illustrated in the following graphic. For many of the roles we provide a range of estimated number of state personnel. The final number of state personnel is based on a number of factors, including the phase of the project, the number of available state resources, the tax types and functionality being implemented, and other project-scope considerations. A more precise estimate of staffing hours can be provided once we have had the opportunity to discuss with you the state's expectations related to staff availability, scope requirements and priorities, schedule and start-date adjustments, and other project considerations.

Please note that the "Duration" column in the table references some of the phases of the FAST Implementation Methodology illustrated in the following graphic.

PROJECT TEAM EXPERIENCE

Phases of the FAST Implementation Methodology



Recommended DOR Project Personnel – Key Roles and Responsibilities

Role	Responsibilities	Staffing Level (FTE)	Duration
Executive Sponsor	Responsible for securing resources for the project. Acts as a vocal and visible champion, legitimizes the project's goals and objectives, keeps abreast of major project activities, and is a decision-maker for the project. Provides support for the project manager; assists with major issues, obstacles, problems, and policy conflicts.	1	Project duration (part-time)
Project Manager	The project manager functions as a project decision maker. The project manager champions the project, removes any barriers, and acts as the key point person for all issues regarding the project. The project manager also provides any necessary support to the project and signs off on all deliverables. The project manager works closely with FAST project management to manage day-to-day project activities. The project manager also oversees the agency's resources (both functional and technical) assigned to the project and resolves business decisions and issues arising within the agency's administration.	1	Project duration (full-time)
Subject Matter Experts (SMEs)/ Business Analysts	Provide business knowledge expertise and contribute significantly to the implementation by describing current and desired outcomes. Make decisions regarding the configuration and escalate decisions requiring senior management resolution. Perform configuration	6-12	Rollout duration (full-time)

PROJECT TEAM EXPERIENCE

Role	Responsibilities	Staffing Level (FTE)	Duration
	verification. Create system testing (user acceptance) and end-to-end testing scenarios. Perform converted data verification testing. Make detail-level decisions on behalf of the agency in a timely manner on a day-to-day basis. Review training material for completeness and accuracy. Provide project solution expertise to users.		
Developers	Participate in software configurations. Develop site components. Configure and create letters and reports. Develop interface code. Support the team in the analysis and resolution of batch processing issues.	5-10	Project duration (full-time)
Conversion Extract Specialist(s)	Support conversion activities. Provide legacy system knowledge base. Code automated data cleansing jobs, if practical. Code conversion extracts and programs. Coordinate with staff performing data cleansing. Perform legacy and extract reconciliation.	2-3	Project duration (full-time)
Testers	Execute system test scenarios. Document any issues found. Perform regression testing as needed.	20-30	Testing Phase (part-time to full-time during relevant testing periods) Note that testers will test functionality that is specific to their business units, so individual testers will not need to serve in a full-time test role for the entire Testing Phase
Trainers and OCM	Attend train-the-trainer sessions. Work with FAST to create the job-specific training material and data. Deliver job-specific user training (Tier 3). Modify online help to accommodate agency-specific functionality. Perform desk-side support. Share coordination of testing logistics with FAST counterpart. Schedule agency staff to attend training. Lead and support OCM activities and analysis.	10-20	A few months after start of the Training Phase and through the first weeks of the Production Support Phase (full-time)

PROJECT TEAM EXPERIENCE

Role	Responsibilities	Staffing Level (FTE)	Duration
System Administrator/ Network Specialist/ Database Administrator	Provide network and platform support for the project team and users. Provide printing, storage, and hardware support. Participate in environment setup, support, validation, and maintenance. Perform database backups and recoveries. Support performance and end-to-end testing. Maintain database configurations, monitor the health and performance of the database. Assist in tuning and optimizing data layouts.	2	Project duration, and continues as ongoing support (part-time)
Security Administrator	Assist in defining application security. Load and validate access rules. Grant and revoke user access to system functions. Manage security levels and investigate access and permission requests.	1-2	Starts in Testing Phase and continues as ongoing support (part-time)
Operations Support	Schedule and monitor batch processing and printing. Perform first level trouble shooting on batch processing issues. Raise and track problem reports.	1-2	Rollout Phase, and continues as ongoing support (part-time)

Rate Chart

For information related to cost and staffing, refer to Tab C.1. Attachment D – Cost Proposal.

2) References from other state tax agencies for the above team members, where the proposed team members directed a project of similar size, scope and complexity.

References are included in the key personnel resumes located above in this document.

3) A response to each requirement with details on how the Vendor will deliver the requirement.

For a detailed response to each requirement, refer to Tab B.3. Attachment F3 – Project Related Requirements, 7. Project Team Experience.

4) Any additional information not covered as part of this RFP that the Vendor deems relevant to increase the likelihood of a successful implementation."

FAST has no additional information to add at this time.

2.3.2.9 Maintenance, Support and Upgrades

"DOR intends that the selected ITS will be a multi-generational solution. Ongoing maintenance, support and upgrade services are key areas of focus both internally within the agency and externally amongst stakeholders. DOR intends to specify standards related to software maintenance, resolution of defects, onsite support, ongoing annual and legislative changes, and upgrades. This RFP requires maintenance, support and upgrade proposals and costs for a 10 year period and will include caps on percentage increases allowable on a bi-annual basis (to align with Indiana's budgeting process).

Please provide the following documents with your proposal:

1) An overview of the maintenance, support, upgrade models available to DOR including those proposed in your proposal.

GenTax, now in its tenth version, is upgradeable via a program of regular new releases. We continually expand and enhance our software to support government agencies' business functions. We also keep up with technology trends and the latest versions of hardware, operating systems, mobile platforms, web browsers, database management systems, and network infrastructure through ongoing product enhancements and periodic product upgrades. New release are not customer specific.

Our FAST Development Center in Denver, Colorado, maintains the core software code that is used by all sites. Software updates available from the FAST Development Center can appear in one of the following three forms.

- Hot Fixes – We may recommend applying critical changes to a core component as soon as possible. Critical changes are those required for a client to continue doing business in a reasonable fashion. Hot fixes contain documentation, components, and scripts for any associated database changes. We release hot fixes on an as-needed basis.
- Service Packs – We change core components periodically (typically on a quarterly basis). These changes take the form of service packs. Service packs contain documentation, components, and scripts for any associated database changes.
- New Versions – New versions (upgrades) of the core product are released periodically. A new version typically includes both functional enhancements and changes that leverage the evolution of the implementation platform technology—for example, new versions of operating systems and database management systems. We do not require clients to upgrade to new versions of our software. FAST continues to support all clients and client software versions for agencies that subscribe to annual maintenance. We do suggest that clients avoid falling behind by more than two releases of the software since most enhancements within service packs pertain to the latest versions of the application.

Post Implementation Maintenance and Support Levels

FAST offers three options for maintenance and support after the implementation period. They are:

Level 1 - Annual maintenance only. No on-site FAST resources. This includes items such as:

- Access to service packs
- Access to new versions of GenTax
- Access to new and revised documentation
- Phone support
- Defect repair - We will provide fixes to GenTax core code bugs at no cost to DOR

An agency can supplement this level with on-site support as needed on a time-and-materials basis.

Level 2 - In addition to what is included in Level 1, this level provides on-site FAST personnel to ensure that defects in site code, extensions, and configurations (defects not covered by Level 1 Maintenance) are resolved. In effect, this level provides a continuing warranty.

Level 3 - In addition to the activities that are included in Levels 1 and 2, this level provides on-site FAST personnel to ensure that service packs and new versions of GenTax are installed.

This level ensures that DOR will always run the latest version of our products. FAST provides this level of support to many of our clients. We know of no competitor in this market space that has been consistently accomplishing this (i.e., implementing new major upgrades of their software at a pre-determined fixed price).

Our bid includes the cost for this level of support during the 10-year support period. DOR can supplement these services with additional on-site resources to implement modifications or enhancements to the system (such as implementing new case types/flows), or to implement legislative changes.

We strongly encourage our clients to view a new system as a significant undertaking that warrants continued investment to ensure the system keeps up with the business and technology landscape. One of the primary advantages of utilizing a COTS solution is that it provides an agency with the opportunity to keep its system up to date and to avoid the expensive and time consuming build-and-replace cycle that has been the norm for large, complex IT systems.

Time and Materials Support

Some agencies also choose to retain additional FAST support staff on a time-and-materials basis to assist with tasks such as:

a. Prioritization and management of solution requests
b. On-call production support
c. Coordination with the FAST Development Center
d. Configuration assistance
e. Application development
f. Best practices recommendations
g. Implementation of legislative/business changes
h. Implementation of system modifications and enhancements
i. Performance tuning
j. Database maintenance, analysis, and review
k. Supplemental user, developer, or operator training
l. Other consulting and services as requested

2) A response to each requirement with details on how the Vendor will deliver the requirement.

FAST's response to each requirement can be found in Tab B.3 Att F3 – Project Related Req.

3) Any additional information not covered as part of this RFP that the Vendor deems relevant to increase the likelihood of a successful implementation."

FAST has no additional tasks to add at this time.

ON-SITE FACILITIES

2.3.2.12 On-Site Facilities

"Please provide a list and description of on-site facilities requirements that will be needed for the Vendor, Vendor-Partner and Third-Party team members in the scope of your ITS implementation."

We anticipate that DOR will provide accommodations for the project team including:

- Work area to accommodate about 50-60 people (actual number will depend on number of DOR resources assigned to the project who are not already seated in or near the project space)
- 24x7 access to project work space by FAST and DOR resources assigned to the project
- Two offices for FAST project management
- Use of meeting rooms / conference rooms
- Phones, stationery, offices supplies, white boards, chairs, desks
- A PC conforming to developer workstation specifications for each DOR and FAST team member
- Monitors, keyboards, pointer devices, network connections, electrical outlets, and electrical extension cords
- Two black and white network printers (HP LaserJet Enterprise 600 M602dn or equivalent), ink, paper, and other consumables
- One color network printer (HP LaserJet Enterprise 700 M775dn 30 ppm Color Multifunction Printer or equivalent), ink, paper, and other consumables
- LAN infrastructure and support
- Photocopier, shredder, facsimile machine
- Network connection at each workstation
- Two data projectors (Epson PowerLite 1985WU, 4800 lumens, 1920x1080 max resolution or equivalent)
- Project administration support

Ideally, the project office space should be co-located with DOR. Although a separate workspace is acceptable, we have found that the co-location approach greatly facilitates involving business experts not otherwise assigned to the project in the discussions and decisions related to the new system.

Please note that the project will also require a testing space (to accommodate about 12-15) and 3-5 training spaces (each able to accommodate about 15-20). These spaces should be equipped with desks, chairs, PCs connected to the LAN, whiteboards, and other office items.

OTHER CAPABILITIES

2.3.2.13 Other Capabilities

"Please provide a list and description of innovative capabilities that we be included in the scope of your ITS implementation."

The following optional software and services, which provide additional value-added benefits, are included for the agency's consideration. These optional and supplementary services have been utilized by a number of our GenTax state client agencies. We are happy to further discuss the benefits and costs of these services as part of contract negotiations.

Fast Data Services, LLC

Fast Data Services, LLC (FDS), a sister company to FAST, provides advanced data analytics for fraud mitigation and public-records information. FDS services seamlessly integrate with GenTax. This integration eliminates the need for the interfaces or separate environments associated with third-party systems. FDS offers:

- Advanced fraud scoring (analytics as a service) integrated with the GenTax Fraud Manager allowing DOR to combine it's own fraud rules and analytics with a leading multi-state fraud analytics service.
- Automated and manual public records access, allowing DOR to integrate this data directly into it's business processes and analytics.

FDS subscription includes dedicated remote support from the FDS team in Denver, CO.

11 state agencies that use GenTax for the administration of multiple tax and revenue programs also subscribe to FDS for fraud and identity-theft mitigation services that include advanced fraud scoring and access to public records advanced analytics. There is an annual subscription fee for FDS. All services and data are included on an unlimited use basis.

Cashiering

While not in scope, the optional Cashiering subsystem provides tools to accept and record over-the-counter payments made by cash, check, credit card, or other payment method. Cashiering supports teller-style service, cash drawers, and reconciliation for payments received at a front counter. Integration with customer and account information provides the ability to view detailed transaction data for liabilities associated with a payment.

It allows transaction-level balancing, end of day reconciliation, receipt printing, allows users to void an item when needed, and accepts payments for multiple accounts in one transaction. Additionally, if a

taxpayer brings in a payment voucher generated by GenTax, the unique media number can be used to ensure that the payment direction is automatically applied. This should result in fewer payment posting errors, thus minimizing the need for payment corrections downstream.

Audit Standalone

Audit Standalone (ASA) functionality in the GenTax Audit subsystem enables users to download audit information to a computer than can be taken into the field and used offline. Using (ASA) auditors securely access account records for the audit and complete working paper caluclations in a completely disconnected mode. Information from GenTAx and the Data Warehouse that is needed for the audit can also be identified to be included in the ASA extract. Once the auditor reconnects to the agency network, changes made during offline mode sync up with the GenTax database.

Collections Standalone

The Collections Standalone (CSA) application equips users with the necessary tools to complete collection work while disconnected from the network. CSA is designed for portability and is easily run on standard laptops and tablets.

CSA enables users to download collection cases including the most up-to-date data. Once in the field, users can use CSA to prepare correspondence, map locations, add attachments, and update data. All work completed in the field is uploaded to GenTax once the user reconnects to the network.

2.3.2.14 Other Requirements

Please provide a list and description of requirements not listed in this RFP that will be included in the scope of your ITS implementation.

FAST has provided responses to the requirements listed in Attachment F1, F2, and F3 and has no additional requirements to add at this time.

C. Cost Proposal Summary

FAST's Cost Proposal includes:

- C.1 Attachment D Cost Proposal - FAST
- C.2 Cost Template Narrative - FAST, and
- C.3 Cost Assumptions, Conditions and Constraints.

The attachments and narratives are completed following the instructions in this section and within the attachments.

Cost Proposal

RFP 17-082 Attachment D - Cost Proposal Template

Instructions for this Workbook

General Cost Proposal Instructions
This Cost Proposal should include Fixed-Bid Costs to implement all requirements committed to be met in Attachments F1, F2, F3 and H.
Prices must be ALL INCLUSIVE, including any and all delivery costs, destination fees and inflation. Prices must include the full ten (10) years of Support, Maintenance and Upgrade support
This Cost Proposal must include all non-infrastructure and non-hardware product and service costs required to fully implement and operate the solution represented in the proposal durir implementation.
Each Cost Summary line item should be described fully in the corresponding worksheet for the appropriate cost category (i.e. Solution Product And Services). The descriptions should incl and services including licensing. For instance, if the price for a product license is for up to 600 concurrent users, that must be specified in the description for that line item. The lack of de without limits.
Additional information can be provided beyond what is included in the Cost Proposal worksheet descriptions. The additional information must be referenced in the specific worksheet lin agreement is included in the Cost Proposal Worksheet "Support Products And Services" and there is a document that provides all the details for the support agreement, the line item in th attachment.
All costs in the Cost Proposal should be consistent with the strategy and approach described in Attachment G1 - Implementation Proposal - Approach Definition Template and all other su Approach.
The "TOTAL BID AMOUNT" cell (bright red shading) in the Costing Summary worksheet must include all costs for the implementation and 10 year post-implementation period and will be proposed services.
DOR reserves the right to contact proposers on price and scope clarification at any time throughout the selection process and negotiation process.
Do NOT use "To Be Determined" or similar annotations in the Cost Proposal worksheets. Assumptions should be stated in the Cost Proposal Assumptions worksheet or in worksheet for
All worksheets in the Cost Proposal should be thoroughly and accurately completed.
Rows can be added or removed to support your level of detail, however, major categories (i.e. Solution Products And Services) cannot be changed and the overall format of the workshee
Cost Proposal Formatting Information
The light blue shaded cells indicate information Vendors are expected to provide (i.e. Cost Summary Worksheet, Cell D5).
All red text shown in light blue shaded cells represent SAMPLES and/or EXAMPLES (i.e. Cost Summary Worksheet, Cell D5). The provided red text SAMPLES and EXAMPLES should be repl Proposal.
Major column and row headings in each worksheet have comments, when needed, defining the required information.
The description cells in the Cost Proposal worksheets should be limited to 300 words.

Dollar amounts should always be rounded to the nearest whole dollar.

Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Vendor, Vendor-Partner and Third Party Instructions

Where costs for products or services are referred to as Vendor, Vendor-Partner or Third-Party:

Vendor products or services are defined as:

Costs for Vendor owned products or services that are solely the responsibility of the Vendor, are fully integrated in their solution, are committed in the Vendor proposal and will be contr

Vendor-Partner products or services are defined as:

Costs for Vendor-partner products or services that are the primary responsibility of the Vendor, are fully integrated in their solution, are committed in the Vendor proposal and will be co providing resources, including Women, Minority and Veteran Owned business partners, must be considered Vendor-Partners.

Third-Party products and services are defined as:

Costs for third party products or services that are not the responsibility of the Vendor, may be fully integrated in their solution, are included in the Vendor proposal as estimates only and

All products and services in this Cost Proposal must be clearly defined as Vendor (V), Vendor-Partner (VP) or Third-Party (TP).

All Vendor-Partners and Third-Parties must be thoroughly defined in this Cost Proposal and must be included in the Business Proposal.

DOR strongly prefers to have very few, if any, Third-Party products or services!

Brief Cost Proposal Worksheet Descriptions

Cost Summary - A phase-by-phase, year-by-year summary of all costs required to fully implement the proposed IPS solution and fully maintain and support it for 10 years after full implem be consistent with those described throughout your proposal including Attachments G1, G2 and G3.

Cost Proposal Assumptions - A full description of any assumptions that are not specific to a Cost Proposal section.

Payment Schedule - A month-by-month schedule of payment triggers and payment amounts based on the proposed project plan in Attachment G2. NOTE: One of the first implementati off on the base installation of the proposed solution meeting all security requirements. The final implementation related payment trigger must be the final sign-off of complete implemer the one-time implementation costs.

Solution Products And Services - A full description of each cost item in the Solution Products and Services section of the Cost Summary worksheet including any assumptions.

Implementation Services - A full description of each cost item in the Implementation Services section of the Cost Summary worksheet including any assumptions.

Other OT Products And Services - A full description of each cost item in the Other OT Products And Services section of the Cost Summary worksheet including any assumptions.

Maintenance Products And Services - A full description of each cost item in the Maintenance Products And Services section of the Cost Summary worksheet including any assumptions.

Support Products And Services - A full description of each cost item in the Support Products And Services section of the Cost Summary worksheet including any assumptions.

Upgrade Products And Services - A full description of each cost item in the Upgrade Products And Services section of the Cost Summary worksheet including any assumptions.

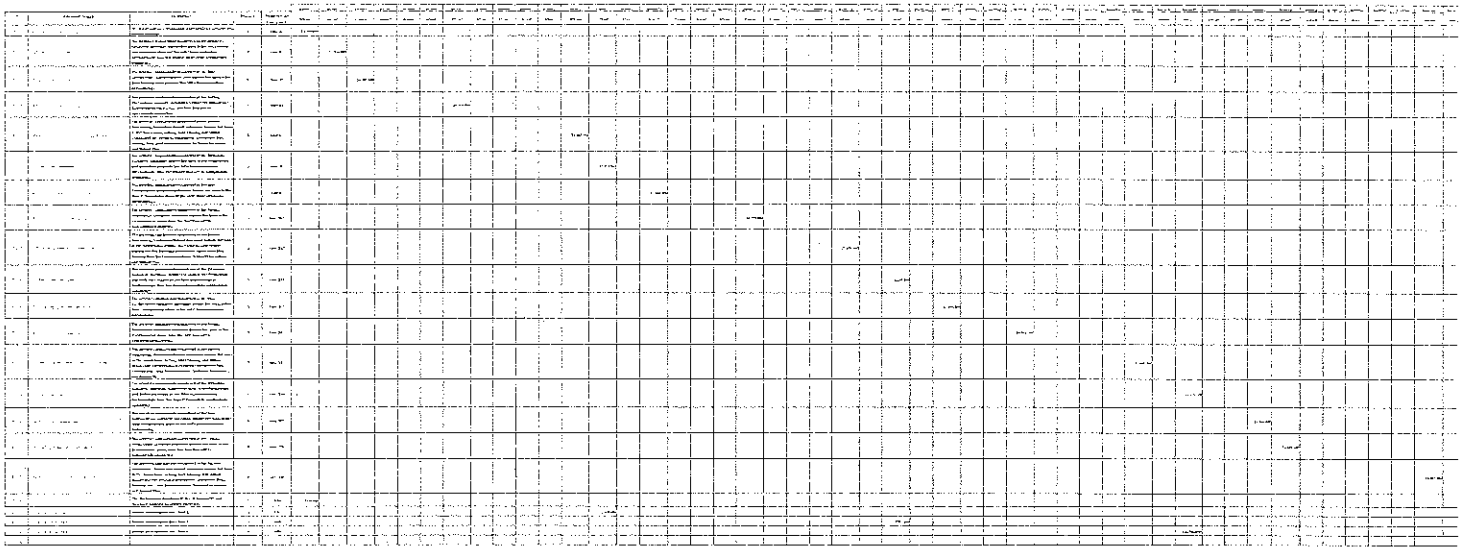
Other Rec Products And Services - A full description of each cost item in the Other Recurring Products And Services section of the Cost Summary worksheet including any assumptions.

ONE-TIME IMPLEMENTATION PRODUCTS AND SERVICES	Vendor Vendor-Partner Third-Party	Cost Summary ID	TOTAL	Phase 1	Phase	Phase	Phase 4	Phase 5
Timeline (Beginning - Ending Months)				[illegible]	13-18	24-33	34-42	N/A
1. Solution Products And Services								
[illegible]	[illegible]	C5 - 1	7,000,000	7,000,000				
			0					
SUBTOTAL		C5 - 7	7,000,000	7,000,000	0	0	0	0
2. Implementation Services								
[illegible]	[illegible]	C5 - 8	13,000,000	13,000,000				
[illegible]	[illegible]	C5 - 4	15,000,000		15,000,000			
[illegible]	[illegible]	C5 - 5	14,000,000			14,000,000		
[illegible]	[illegible]	C5 - 6	10,000,000				10,000,000	
			0					
SUBTOTAL		C5 - 7	50,000,000	13,000,000	15,000,000	14,000,000	10,000,000	0
3. Other One-Time Products and Services								
			0					
SUBTOTAL			0	0	0	0	0	0
[illegible]		C5 - 8	57,000,000	20,000,000	15,000,000	14,000,000	10,000,000	0

RECURRING PRODUCTS AND SERVICES	Vendor Vendor-Partner Third-Party	Cost Summary ID	TOTAL	Phase 1	Phase	Phase	Phase 4	Phase 5	Post-Project Year 1	Post-Project Year 2	Post-Project Year 3	Post-Project Year 4	Post-Pr Year
Timeline (Beginning - Ending Months)				1 - 12	13-23	24-33	34--	N/A					
4. Maintenance Products And Services													
[illegible]	[illegible]	C5 - 10	20,280,000	250,000	500,000	750,000	1,250,000		1,600,000	1,600,000	1,675,000	1,675,000	1,75
			0										
SUBTOTAL		C5 - 11	20,280,000	250,000	500,000	750,000	1,250,000	0	1,600,000	1,600,000	1,675,000	1,675,000	1,75
5. Support Products And Services													
			0										
SUBTOTAL			0	0	0	0	0	0	0	0	0	0	
6. Upgrade Products And Services													
[illegible]	[illegible]	C5 - 12	38,540,000						3,500,000	3,500,000	3,670,000	3,670,000	3,84
			0										
SUBTOTAL		C5 - 13	38,540,000	0	0	0	0	0	3,500,000	3,500,000	3,670,000	3,670,000	3,84
7. Other Recurring Products And Services													
			0										
SUBTOTAL			0	0	0	0	0	0	0	0	0	0	
		C5 - 14	58,820,000	250,000	500,000	750,000	1,250,000	0	5,100,000	5,100,000	5,345,000	5,345,000	5,59
[illegible]		C5 -15	115,820,000	20,250,000	15,500,000	14,750,000	11,250,000	0	0	0	0	0	

TOTAL BID AMOUNT 115,820,000

Assumption Description
Please see our assumptions, conditions, and constraints included in the Cost Notes section of C.2. Cost Template Narrative.



Cost Summary ID	Cost Summary Item Name	Descriptions
Please see our assumptions, conditions, and constraints included in the Cost Notes section of C.2. Cost Template Narrative.		

Cost Summary ID	Cost Summary Item	Descriptions
Please see our assumptions, conditions, and constraints included in the Cost Notes section of C.2. Cost Template Narrative.		

Cost Summary ID	Cost Summary Item	Descriptions
N/A		

Cost Summary ID	Cost Summary Item	Descriptions
Please see our assumptions, conditions, and constraints included in the Cost Notes section of C.2. Cost Template Narrative.		

Cost Summary ID	Cost Summary Item	Descriptions
N/A		

Cost Summary ID	Cost Summary Item	Descriptions
Please see our assumptions, conditions, and constraints included in the Cost Notes section of C.2. Cost Template Narrative.		

Cost Summary ID	Cost Summary Item	Descriptions
	N/A	

COST PROPOSAL NARRATIVE

Cost Template Narrative

The Respondent should provide a brief narrative in support of each Cost Template summary line item in the appropriate worksheets for each cost category (i.e. Solution Products And Services). The narrative should be focused on clarifying how the proposed costs correspond directly to the Respondent's Implementation Alternative Proposal. For example, evaluators will expect detailed explanation of each Solution Product And Service to satisfy the requirement responses in the Proposal.

Please note that updates to the original submission are identified in yellow highlight.

Introduction

Fast Enterprises, LLC (FAST) is pleased to present this Best and Final Offer (BAFO) response to the State of Indiana's Request for Proposal (RFP) 17-082, Revenue Modernization Integrated Tax Systems and Services (RMITSS). We propose implementation of our GenTax® software, the first commercial off-the-shelf (COTS) software for tax and revenue administration, to meet the State's functional, technical, and project-related requirements articulated in the RFP. We are providing a complete proposal including software licensing, implementation services, maintenance, and support services.

This BAFO price consists of:

Pricing Summary	
Cost	**Description**
$7,000,000	Software License Fees
$50,000,000	Implementation Services
$2,750,000	COTS Software Maintenance Fees
$59,750,000	*4-year Implementation Project Subtotal*
$17,530,000	COTS Software Maintenance Fees (Years 5-14)
$38,540,000	Production Support Costs (Years 5-14)
$115,820,000	Total Proposed Cost

COST PROPOSAL NARRATIVE

Pricing Information

Our proposal will remain valid for a minimum of ninety (90) days after the BAFO submission date. FAST's response to *Attachment D, Cost Proposal* is included in sections C.0 – C.3.

As noted in our technical proposal and in the Project Schedule section below, we have proposed completing the implementation work in 4 years as opposed to the 5 years allowed for in the RFP. We are confident that this shorter schedule will help the State reduce costs, realize a quicker return on investment, and provide users with a proven solution in a shorter timeframe. Several of the cost spreadsheets have been changed to accommodate this schedule as allowed by the instructions.

FAST's cost proposal is based largely on the terms and conditions in the RFP. We have noted exceptions which are included in the *Contract Revisions* sheet within section *A.1. Attachment E - Business Proposal.* We believe our requested changes are reasonable and in line with industry standards.

We strongly believe it is in the interest of both parties to create a collaborative team environment. As such, we look forward to a discussion of our proposal including contractual terms and conditions. We believe our proposal, approach, methodology, and philosophy for contracting and for delivery are integral to our success, as well as reasonable, achievable, and in line with the terms and conditions that we have at similar state agencies.

Please note that a lower price might be possible if contract terms are favorable regarding items such as the use of third-party vendors for IV&V, OCM, and other activities, limitation of liability, and other items that we have noted. However, also note that the cost may be increased depending on the specific service levels/credits agreed upon.

Cost Notes

We are providing 14-year pricing as follows:

- 4-year implementation period
  - January 8, 2018 through Decemeber 6, 2021
- 10-year support period
  - Decemeber 6, 2021 through Decemeber 5, 2031
- GenTax software license and associated maintenance fees for the implementation and 10-year post-implementation periods
- Travel and other out-of-pocket expenses

GenTax Initial License

The GenTax Initial License fee is a one-time cost for a perpetual site license which covers all GenTax modules and components included in the project scope. The license will allow DOR to use GenTax to administer the tax and fee programs listed in our proposal. Additional programs outside of this scope, such as unemployment insurance tax, may require additional license fees.

There is no restriction on the number of client desktops, valid users, concurrent users, application servers, database servers, or DOR office locations. The license is valid for all environments (development, test, training, production, etc.). GenTax documentation is also covered by the license.

The Initial License is invoiceable once GenTax is installed on project hardware. This will be the first task undertaken by the project team, and we expect this task to be complete by January 26, 2018. Therefore, we will invoice the initial license fee ($7,000,000) and the initial annual maintenance fee ($250,000) on or before January 26, 2018.

Project Scope

A clear understanding of scope will help ensure that both DOR and FAST benefit from the business partnership. In order to manage functional scope, we propose using the following guiding principles:

- GenTax will support the technical and functional requirements listed in the RFP and as responded to in our technical proposal.
- GenTax will also provide, at a minimum, the same business capabilities that are currently provided by the legacy systems being replaced. GenTax will often exceed the capabilities of the legacy applications. However, to help ensure successful delivery, business capabilities beyond those of the legacy applications and not called for in the RFP will be accommodated at the discretion of DOR and FAST project management.

- Our proposal is based on taking advantage of the many functions, features, and processes native to GenTax. It is not our intention to replicate legacy application logic on a new platform. While business capabilities of the legacy applications will be maintained or enhanced by GenTax, the specifics of how those business capabilities are supported are apt to be different. The goal is to take advantage of GenTax, not rebuild it.
- Our proposal does not address hardware not listed such as scanning equipment, data capture software, mail opening equipment, image storage, etc.
- We do not place a limit on the number of inputs or outputs included in our cost. Reports, letters, notices, and interfaces that are reasonable and necessary to administer the in-scope tax programs will be provided.

Project Schedule

FAST has created a preliminary schedule for the project, which is divided into the key project milestones by tax types. We are proposing a 47-month implementation of GenTax through four rollouts, the first for corporate taxes (11 months); the second for sales and withholding taxes (12 months); the third for personal income tax (12 months); and the fourth for special and miscellaneous taxes (12 months).

Each rollout will include the full spectrum of relevant in-scope GenTax functionality for full tax administration processing. This approach minimizes data-synchronization risks, is less disruptive to external business partners and internal operations, and ensures consistent customer service across the organization. It is important to note that the GenTax installation will be completed within the first weeks of project initiation, allowing project personnel to begin working with GenTax immediately.

Proposed Project Schedule Indiana Revenue Modernization Integrated Tax Systems and Services

Key Project Milestone	Start Date	Completion Date	Duration
Project Start	January 8, 2018		
GenTax Installation	January 8, 2018	February 2, 2018	1 month
Project Rollout 1 Corporate	January 8, 2018	December 10, 2018	11 months
Project Rollout 2 Sales, Withholding	December 10, 2018	December 2, 2019	12 months
Project Rollout 3 Income, Fiduciary	December 2, 2019	December 7, 2020	12 months
Project Rollout 4 Special Tax Types	December 7, 2020	December 6, 2021	12 months
Maintenance & Support	December 6, 2021	December 5, 2031	10 years

Our proposed project schedule by tax-type groupings, is included in the following table. Please note that the proposed tax-type groupings can be adjusted to accommodate DOR needs and preferences.

Proposed Tax Types by Rollouts

Rollout 1	
• Aeronautics Excise, Business	• Corporate Income
• Aeronautics Excise, Individual	• Employment Agency
• Aeronautics Registration	• Financial Institutions
Rollout 2	
• Consumer Use	• PPD Sales On Gas. Repeal '14
• Controlled Substance	• Sales
• County Admissions	• Tire Fee
• County Innkeeper	• Utility Receipt Tax
• Firework Public Safety Fee	• Utility Services Use Tax
• Food & Beverage	• Wireless Prepaid Cards
• Indianapolis Motor Speedway	• Withholding
• Out of State Use	
Rollout 3	
• Fiduciary	• Racino Fees
• Gaming Excise Tax	• Racino Wagering
• Individual Income	• Riverboat Admissions

• Inheritance Repealed '13	• Riverboat Wagering
• Pari-Mutuel Admissions	• Supplemental Wagering Tax (eff '18)
• Pari-Mutuel Wagering	• Type II Gaming Tax
Rollout 4	
• Alcohol Tax	• Other Tobacco Products
• Alternative Fuel User	• Oversize/overweight MH
• Aviation Fuel Tax	• Petroleum Severance
• Cigarette	• Rail; Commuter or Electric
• Diesel Inventory Tax (eff'17)	• Special Fuel
• Gasoline Use Tax	• Terminal Operator
• Motor Fuel	• Transporter
• Motor Vehicle Rental Excise	

Post Implementation Maintenance and Support Levels

FAST offers three options for maintenance and support after the implementation period. They are:

Level 1 - Annual maintenance only. No on-site FAST resources. This includes items such as:

- Access to service packs
- Access to new versions of GenTax
- Access to new and revised documentation
- Phone support
- Defect repair - We will provide fixes to GenTax core code bugs at no cost to DOR

An agency can supplement this level with on-site support as needed on a time-and-materials basis.

Level 2 - In addition to what is included in Level 1, this level provides on-site FAST personnel to ensure that defects in site code, extensions, and configurations (defects not covered by Level 1 Maintenance) are resolved. In effect, this level provides a continuing warranty.

Level 3 - In addition to the activities that are included in Levels 1 and 2, this level provides on-site FAST personnel to ensure that service packs and new versions of GenTax are installed.

This level ensures that DOR will always run the latest version of our products. FAST provides this level of support to many of our clients. We know of no competitor in this market space that has been consistently accomplishing this (i.e., implementing new major upgrades of their software at a pre-determined fixed price).

Our bid includes the cost for this level of support during the 10-year support period. DOR can supplement these services with additional on-site resources to implement modifications or enhancements to the system (such as implementing new case types/flows), or to implement legislative changes.

We strongly encourage our clients to view a new system as a significant undertaking that warrants continued investment to ensure the system keeps up with the business and technology landscape. One of the primary advantages of utilizing a COTS solution is that it provides an agency with the opportunity to keep its system up to date and to avoid the expensive and time consuming build-and-replace cycle that has been the norm for large, complex IT systems.

Time and Materials Support

Some agencies also choose to retain additional FAST support staff on a time-and-materials basis to assist with tasks such as:

a. Prioritization and management of solution requests
b. On-call production support
c. Coordination with the FAST Development Center
d. Configuration assistance
e. Application development
f. Best practices recommendations
g. Implementation of legislative/business changes
h. Implementation of system modifications and enhancements
i. Performance tuning
j. Database maintenance, analysis, and review
k. Supplemental user, developer, or operator training
l. Other consulting and services as requested

Payment Schedule

Our proposal is based on the payment schedule included in *Attachment D, Cost Proposal*. The milestones and payments we are proposing are based on tasks and documents in the FAST Implementation Methodology. We are also providing the following payment schedule which shows the same information in a format we have found easy to understand.

COST PROPOSAL NARRATIVE

Milestone Payment Schedule		
Payment Milestones	Estimated Invoice Date	Invoice Amounts
GenTax License Installation	January 26, 2018	$7,000,000
Rollout 1		
R1 Definition Complete	February 26, 2018	$1,950,000
R1 Base Configuration Complete	April 6, 2018	$1,300,000
R1 Testing Preparation Complete	August 17, 2018	$4,550,000
R1 System Acceptance, Production Rollout	December 10, 2018	$5,200,000
Rollout 2		
R2 Definition Complete	January 18, 2019	$1,950,000
R2 Base Configuration Complete	March 22, 2019	$1,300,000
R2 Testing Preparation Complete	July 19, 2019	$4,550,000
R2 System Acceptance, Production Rollout	December 2, 2019	$5,200,000
Rollout 3		
R3 Definition Complete	January 17, 2020	$2,100,000
R3 Base Configuration Complete	March 13, 2020	$1,400,000
R3 Testing Preparation Complete	June 19, 2020	$4,900,000
R3 System Acceptance, Production Rollout	December 7, 2020	$5,600,000
Rollout 4		
R4 Definition Complete	January 15, 2021	$1,500,000
R4 Base Configuration Complete	April 9, 2021	$1,000,000
R4 Testing Preparation Complete	May 21, 2021	$3,500,000
R4 System Acceptance, Production Rollout	December 6, 2021	$4,000,000
GenTax Maintenance Fees		
Maintenance - Year 1	January 26, 2018	$250,000
Maintenance - Year 2	January 26, 2019	$500,000
Maintenance - Year 3	January 26, 2020	$750,000
Maintenance - Year 4	January 26, 2021	$1,250,000
4-year Implementation Total		$59,750,000

Milestone Definitions:

- The activities substantially completed at the *Definition Complete* milestone include the tasks in the Preparation and Definition phases of the FAST Implementation Methodology. Also, the Project Plan will be substantially completed.
- The activities substantially completed at the *Base Configuration Complete* milestone include the tasks in the Base Configuration phase of the FAST Implementation Methodology.
- The activities substantially completed at the *Testing Preparation Complete* milestone include the tasks in the Development phase. Also, the Test Plan will be substantially completed.
- The activities substantially completed at the *System Acceptance, Production Rollout* milestone include the tasks in the Conversion, Testing, User Training, and Rollout phases and the following documents: Conversion Plan, Training Plan, User Documentation, Technical Documents, and Rollout Plan.

Hardware and Third Party Software

Hardware necessary for GenTax is described in *B.1. Attachment F1 - Technical and Service Level Requirements*. The hardware includes shared resources (database servers, application servers, file servers, storage). The hardware list does not include individual user, developer, and training workstations; printers, scanners, mail processing equipment, and other such items.

Third-party software necessary for GenTax is also described in *B.1. Attachment F1 - Technical and Service Level Requirements*. Third-party software costs include some items that are for individual developer workstations. For example, we have included Microsoft Visual Studio which is needed on developer workstations. We have not included the Microsoft Windows operating system, or Microsoft Office which is installed on individual user workstations.

We have been liberal in our sizing of hardware. For example, we have allowed for database growth that should accommodate DOR needs for at least the first seven years of the contract period.

Technical Infrastructure Requirements and Other Assumptions

FAST assumes the technical infrastructure will meet, exceed, or contain the following:

- 100/1000 MB (1GB) Ethernet for client workstations.
- 10000MB (10GB) Ethernet for servers, connected to enterprise-level 10GB network switches configured with multiple VLANs and/or security zones for isolation.
- Routing and firewall services.
- Security and Intrusion Prevention System.

- Network devices configured for high-availability.
- Sufficient power, rack space, airflow, and cooling.
- Secured facility to house hardware for the primary and disaster recovery sites.
- Tape Backup Library or other modern enterprise backup solution. FAST assumes the new system will use DOR's existing backup solution.
- Anti-virus software not included. FAST assumes the new servers will use DOR's existing anti-virus and security software solution.
- Windows Client Access Licenses (CAL). FAST assumes the State already has sufficient Windows CALs to access the new servers.
- Network Load Balancing (NLB) - recommend F5 or other enterprise-level NLB solution.
- The communication link used to synchronize and/or replicate disaster recovery data should have a minimum of 1GB available bandwidth. A 10GB bandwidth connection is preferred and recommended (if available) based on data replication requirements.
- Security Information and Event Management (SIEM) tools not included. FAST assumes the new system will use the DOR's existing SIEM tool(s).
- Remote office connections to the Internet should have bandwidth to support a minimum of 10.0 Mb per 25 people. Example: 50 people using the application at a remote office location would require a minimum 20 Mb connection.
- Printing: our solution typically utilizes our client's existing high-volume printer(s) for batch printing. If our client does not currently have a high-volume printer, we recommend using the Xerox DocuTech 128 HighLight Color printer rated at 128 pages per minute. Printer models are also dependent on specific site needs and demand.
- Storage Area Network (SAN): The SAN and disk storage configuration must meet or exceed performance requirements of 50,000 IOPS Random Reads (8K pages), and 30,000 IOPS Random writes (8K pages) verified by the DiskSPD IO utility against 4x256GB data files using a single instance of Microsoft SQL Server. The DiskSPD tool must be configured with a 30% random write workload.
- Virtualization hypervisors are not oversaturated and sufficient virtual server resources are dedicated to the proposed solution for optimal performance.

Project Office Space

We anticipate that DOR will provide accommodations for the project team including:

- Work area to accommodate about 50-60 people (actual number will depend on number of DOR resources assigned to the project who are not already seated in or near the project space)
- 24x7 access to project work space by FAST and DOR resources assigned to the project

- Two offices for FAST project management
- Use of meeting rooms / conference rooms
- Phones, stationery, offices supplies, white boards, chairs, and desks
- A PC conforming to developer workstation specifications for each DOR and FAST team member
- Monitors, keyboards, pointer devices, network connections, electrical outlets, and electrical extension cords
- Two black and white network printers (HP LaserJet Enterprise 600 M602dn or equivalent), ink, paper, and other consumables
- One color network printer (HP LaserJet Enterprise 700 M775dn 30 ppm Color Multifunction Printer or equivalent), ink, paper, and other consumables
- LAN infrastructure and support
- Photocopier, shredder, and facsimile machine
- Network connection at each workstation
- Two data projectors (Epson PowerLite 1985WU, 4800 lumens, 1920x1080 max resolution or equivalent)
- Project administration support

Ideally, the project office space should be co-located with DOR. Although a separate workspace is acceptable, we have found that the co-location approach greatly facilitates involving business experts not otherwise assigned to the project in the discussions and decisions related to the new system.

Please note that the project will also require a testing space (to accommodate about 12-15) and 3-5 training spaces (each able to accommodate about 15-20). These spaces should be equipped with desks, chairs, PCs connected to the LAN, whiteboards, and other office items.

General Cost Information

1. During the implementation project period, the number of FAST resources dedicated to the project will vary between 20 and 25. The average team size will be about 22.
2. There will be a core group of FAST resources who work full-time in Indianapolis. There will be additional FAST resources who work in Indianapolis for short periods. There may also be FAST resources who contribute to the GenTax implementation for DOR while working from a FAST development center.
3. Our bid price is inclusive of our consulting expenses, moving expenses, parking, meals, etc.

4. FAST will expect payment within 45 days of DOR receiving an approved invoice, after which FAST will apply interest at the rate allowed by state statue. Fast may suspend services in the event uncontested invoices remain unpaid 90 days after payment is due.
5. Services may be delivered by an affiliated Fast company or branch.
6. FAST will pay taxes for which it is responsible such as income taxes, withholding taxes, unemployment insurance, and so on. We have not estimated or included any taxes that are required to be paid by a buyer of goods, such as sales tax. Taxes that are required to be paid by a buyer of goods, such as sales tax, will be paid by DOR (if any, and assuming DOR is not exempt).
7. Our bid price only includes items listed and does not include other items such as additional staff that DOR may need to hire, DOR operational costs, expenses for DOR employees, other hardware, etc.
8. Most of FAST's services will be performed in Indianapolis at the project office. Some work may take place in FAST development centers. DOR will allow off-site FAST personnel working on project deliverables to access DOR computers remotely through a Virtual Private Network (VPN). Costs associated with any travel that may be required for FAST employees to and from FAST development centers will not be billed to DOR and are included in our prices.
9. A small number of FAST experts will require administrative access to the databases and servers.
10. Once a year, all FAST employees are required to attend the FAST Annual General Meeting (AGM). The AGM typically lasts 3 days. FAST employees may be away from the project longer than the 3 days to allow for travel. FAST will inform DOR at least 60 days in advance of these dates and will work with the agency to minimize the impact.
11. FAST understands that IV&V services are required by the State of Indiana and believes that traditional IV&V services can add value to a project. However, the number and time IV&V contractors are dedicated to the project must be limited. FAST's experience is that increased IV&V involvement directly translates to increased risk of schedule slippage, budget overruns, and quality degradation. FAST proposes that IV&V contractors may participate on the project but that the total time dedicated to any DOR work of all IV&V contractors will be limited to the equivalent of one full-time employee or 37.5 hours per week. The role of IV&V contractors must also be limited to ensure that they are only providing traditional verification and validation functions and not expanding the scope of their role. This includes reviewing project material, conducting interviews, and observing (not participating or directing) project work such as meetings, testing, or training, to verify that the project plan is being followed and that the project is proceeding according to schedule. They may not make any attempt to influence, affect, or change the FAST Implementation Methodology that the project is following beyond the identification of projects risks and concerns within their reports

to project leadership. DOR will address or provide any reports or deliverables that are required by the State and/or DOR and that are not produced as part of the FAST Methodology. Further, neither FAST nor DOR staff shall expend any effort to train individuals providing IV&V services in DOR business, GenTax, or the FAST Implementation Methodology.

Additional Cost Considerations

If FAST is selected, DOR will be joining a family of agencies that use a common solution to administer their tax and revenue programs. This contributes to our ability to leverage best practices and lessons learned across a multitude of jurisdictions. Agencies using GenTax are also able to help each other and learn from each other directly. Toward that end, we suggest reserving funds to send DOR employees on site visits to other GenTax customer locations and to send them to FAST user conferences.

Summary

We at FAST are proud of our ability to provide clients with an up-front implementation cost and then to deliver at that cost. We have accomplished this in every one of our implementations. We do not subscribe to the notion of incremental cost "adjustments" via change requests or any other means. We do not begin projects with a study in order to confirm our understanding of scope and then present the "real" implementation costs later. If a client wants to come in on budget, then we make that happen. Moreover, we do so while delivering a quality system that exceeds expectations.

Cost Assumptions, Conditions and Constraints

The Respondent should list and describe as part of its Cost Proposal Assumptions worksheet in the Cost Proposal Template any special cost assumptions, conditions, and/or constraints relative to, or which impact, the prices presented in the Cost Proposal Template. It is of particular importance to describe any assumptions made by the Respondent in the development of the Respondent's Proposal that have a material impact on price. It is in the best interest of the Respondent to make explicit the assumptions, conditions, and/or constraints that underlie the values presented on the Cost Proposal Template. Assumptions, conditions or constraints that conflict with the requirements responses are not acceptable.

Please see our assumptions, conditions, and constraints included in the Cost Notes section of Tab C.2. Cost Template Narrative - FAST.

D. Implementation Proposal Summary

FAST's Implementation Proposal includes:

- D.1 Attachment G1 - Implementation Approach ,
- D.2 Attachment G2 - Implementation Project Schedule, and
- D.3 Attachment G3 - Implementation Staffing Plan.

The attachments are completed following the instructions in this section and within the attachments.

Implementation Proposal

RFP 17-082 Attachment G1 – Strategy and Approach Template

Instructions for this Document

DOR is requesting a multi-phased implementation strategy, approach and plan. The Respondent should thoroughly describe their implementation strategy and approach below in this template including why it would be the best approach from timeline, costs, benefits and risk perspectives. The strategy and approach, including the scope and timeline for each phase, must be consistent with other parts of your proposal including Attachments D, G2 and G3.

The specific scope of each phase, including tax types and processes to be implemented, should be defined based on the Respondent's knowledge of Integrated Tax Systems and DOR's technical, functional and project related requirements presented in Attachments F1, F2 and F3.

This section should demonstrate to DOR that the Respondent has attained a high level of ITS software implementation expertise, a high level of ITS knowledge and an excellent understanding of the way state revenue departments operate. The Respondent should demonstrate to DOR they have an implementation approach and strategy that will drive project success and provide maximum benefit to DOR.

Vendor Strategy and Approach Definition:

Please note that updates to the original submission are identified in yellow highlight.

GenTax Consists of Seven Fully Integrated Modules and Subsystems

GENTAX

Customer
- Registry
- e-Services
- Correspondence
- Licensing

Revenue
- Returns
- Payments
- Billing
- Refunds
- Accounting
- Appeals

Workflow
- Work Management
- Case Management

Information
- Analytics
- Dashboard
- Reporting
- Data Mart
- Query

Compliance
- Data Warehouse
- Discovery
- Audit
- Non-Filer
- Collection
- Bankruptcy
- Enforcement

Management Studio
- Help
- Business Rules
- Implementation Toolkit
- Operations Support
- Security
- Interfaces

Special Functions
- Imaging
- Inventory Management
- IRA*
- IFTA*
- Escheating*
- Unclaimed Property*

* Not in scope

The modules and subsystems represented in the table serve as a visual representation of major categories of functionality provided by GenTax. While these categories are organized, for descriptive purposes, as an integrated collection of modules and subsystem, in reality they are not discrete software components, modules, or subsystems that must be integrated during a project to meet specific agency requirements. Rather, all functionality represented in the table is inherent to our single and comprehensive GenTax software.

As such, GenTax provides all the functionality for core business functions and support processes, as well as built-in tools used to manage the software implementation process. Alternative vendor offerings based on multiple, peripherally integrated, third-party applications can unnecessarily increase system complexity, maintenance and support burden, interface development, upgrade and training requirements, and overall system cost. In contrast, our objective has always been to restrict the use of third-party add-ons. Aside from a handful of ancillary support applications for special purposes, there are few additional applications necessary for implementing and maintaining GenTax.

The primary third-party applications used for implementing and maintaining GenTax include Windows Server software for infrastructure management, Microsoft Visual Studio Professional software for the development of site-specific code, and VMWare's virtualization hypervisor for server virtualization (Microsoft Hyper-V is also supported).

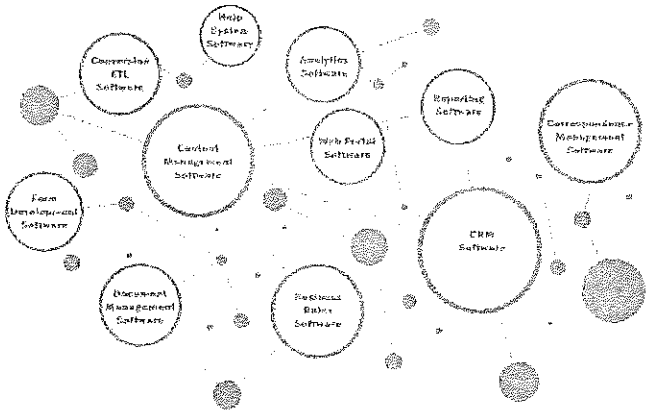
Although not required for implementing and maintaining GenTax, many of our projects also use Adobe Captivate for the creation of training materials and interactive simulations and Red Gate Software's ANTS Profiler Professional for system-performance monitoring.

COTS GenTax Architecture versus Peripherally Interfaced ("Best of Breed") System Architectures

GenTax is a single, unified COTS software solution that provides inherent functionality for all core administration functions.



Many alternative systems consist of a collection of third-party applications that have been peripherally interfaced to meet multiple core administration functions.



All core functions are integrated in GenTax and available in base-configuration mode when the software is installed at the beginning of the project. Through configuration, these core functions will be tailored to meet the DOR's specific requirements, providing full GenTax functionality upon production rollout of each of group of taxes in the respective four rollouts. Our proposed 47-month project schedule will deliver corporate taxes in the first rollout, sales and withholding taxes in the second rollout, individual income and fiduciary taxes in the third rollout, and special and miscellaneous taxes in the fourth rollout.

This approach eliminates the need for parallel system processing and should make transition to the new system essentially transparent to taxpayers, while also posing little to no impact on previously implemented taxes. Rollout of all functions also reduces risk by building interface touch-points once, rather than requiring multiple changes and regression testing for interfaces. Focusing on specific

business-area functionality during each of the rollouts also minimizes impact on agency staffing and operations resources.

Our experience indicates that approximately 80% to 90% of an agency's tax administration functions can be implemented in GenTax through configuration. Virtually every aspect of GenTax is configurable, from small items such as tax rate changes, to more complicated activities such as implementation of a new case to support a multi-step business process. Code sets, calculations, lookups, edits, validations, user interfaces, window flows, and security structures are examples of features that can be implemented and maintained without programming. This configurable GenTax architecture minimizes development time and allows project resources to focus on tailoring business processes to meet individual agency goals and business and technical requirements. All of our projects include knowledge-transfer activities to support agency users and information technology personnel in their ability to maintain GenTax on an ongoing basis. Agency personnel at many FAST project sites are involved in configuring our software to accommodate legislative changes, which can be implemented in a fraction of the time required under our clients' legacy systems.

While the need to develop custom code is minimal on most GenTax projects, there are three areas in which site components are more prevalent:

- Interfaces – In some cases, custom coding is required to implement interfaces between the solution and other automated systems within, and external to, an agency. Straightforward reformatting to enable a scheduled batch interface can usually be accomplished through configuration.
- Specialized letters, notices, and other outbound correspondence – Although a variety of correspondence items are provided by GenTax, most agencies have unique requirements that cannot be satisfied by pre-existing templates. Specific letter, notice, and correspondence needs that are based on user requirements are identified during implementation. Simple correspondence typically requires only a template and a few configuration rules related to security, requesting, and printing. More complex items may require program code.
- Highly complex or unique reports – A variety of mechanisms are available to obtain information from the system, including core product searches and list windows, configurable query-result list windows, and configurable data cubes, as well as formal reports. For reporting requirements that cannot be satisfied through configuration, development of a site-specific component may be required during implementation.

GenTax is built on a VB.Net platform. As such, all development of custom components is built on the same platform and undertaken using the Microsoft Visual Studio Integrated Development Environment (IDE). FAST has created a number of add-ins for the IDE that enable developers to create business objects that inherit and reference the appropriate GenTax architectural components. This enables the efficient creation and testing of custom components that conform to FAST development standards and seamlessly integrate with the core GenTax product.

An Implementation Approach based on the FAST Implementation Methodology

As previously stated, the FAST Implementation Methodology was designed for the implementation of our commercial off-the-shelf (COTS) software and provides a structure for successful implementation. It also facilitates work by providing a common and consistent language, by leveraging existing examples of work products, and by building on a repository of best practices and lessons learned.

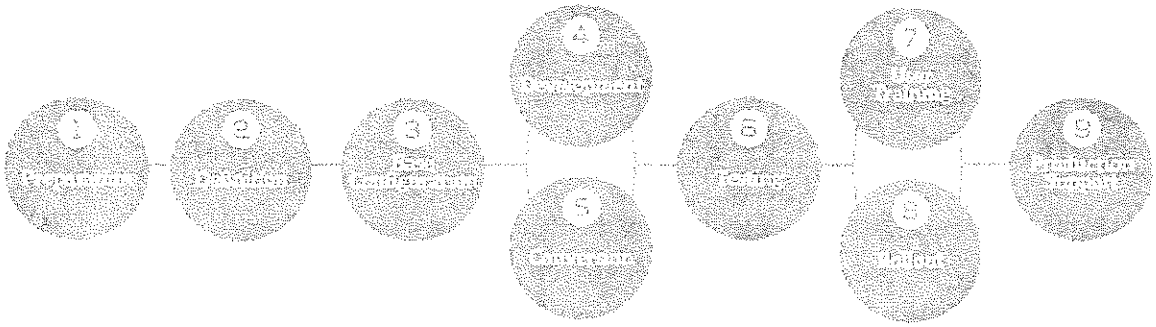
A recurring theme in the methodology is the use of iterative cycles to complete tasks. The underlying philosophy is to perform small increments of work, submit those for review and verification, incorporate the feedback from the reviews into the next small increment of work, and continue in this manner until the work products are deemed acceptable. This approach ensures that incremental adjustments or changes required to stay on track can be made without retracing too many steps.

The FAST Implementation Methodology:

- Emphasizes working with actual system components rather than on documents describing the components.
- Acknowledges that in systems implementation, change is inevitable, and communication of process changes increases user acceptance.
- Involves users early and often in an intensely collaborative project environment.
- Empowers project participants to make decisions. A bad decision can be corrected; no decision translates to zero progress.
- Allows for project phases (shown in the chart) to be executed out of sequence, to overlap, and to run in parallel.

The FAST Implementation Methodology is comprised of the nine phases shown in the following diagram.

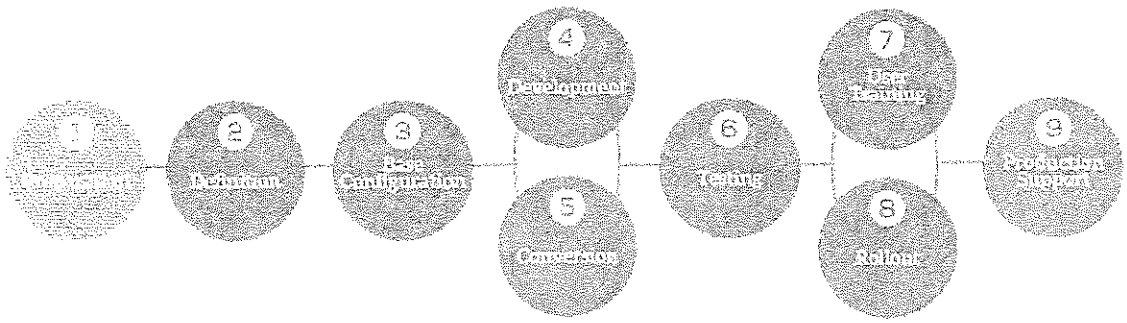
FAST Implementation Methodology



1. The Preparation Phase develops the roadmap that defines the execution of the GenTax implementation project.
2. The Definition Phase is the first step each team takes in defining the work to deliver the scheduled group of tax and revenue programs/lines of business.
3. The Base Configuration Phase structures and implements the starting point for the rollout. Once the baseline is in place, the system supports basic navigation and business function processing.
4. During the Development Phase, the project team uses definition items identified in Definition Phase to produce work packages that specify parameters, establish options, define thresholds, and perform other types of configuration or development of site-specific extensions
5. The Conversion Phase provides the new system with a base set of data with which the business functions operate.
6. The Testing Phase ensures that the production system can meet the business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues.
7. During the User Training Phase, user documentation is prepared and users receive training on use of the system. This includes organizational change management activities, which start early in the project to transition the organization for acceptance and use of the solution.
8. The Rollout Phase delivers the lines of business to production.
9. The Production Support Phase provides desk-side support and solution-specific help-desk support during the initial production period, and operates and maintains the solution in production over the long term.

Following is an overview of each of these nine FAST Implementation Methodology phases and the high-level activities that are conducted in each phase.

1. Preparation Phase



The Preparation Phase involves the installation of our software and the importing of standard configurations. Additional primary implementation activities include identifying, documenting, and communicating project objectives; developing the project communication plan, system overview, and business profiles; finalizing the scheduling of general timelines for release of the various lines of business; confirmation of project infrastructure; inventory of inputs and outputs for the various lines of business; and resource identification and assignment. These high-level Preparation Phase activities are outlined in the following graphic and text.



1.1 Install FAST Software – The FAST software and its initial configuration will be fully installed during the first weeks of the project. During installation, the technical team runs various tests and diagnostics

to verify that the software is operational and to identify and resolve any issues. Since the FAST software is a browser-based application, a desktop browser shortcut can be pushed to project team members' workstations at this point.

1.2 Project Objectives – In this step, the project management team confirms the project objectives and confirms those aspects of the agency's strategic objectives that may be impacted by the project. In addition, the project management team conducts additional preparation activities for the project. These activities include:

- Reviewing the project charter, confirming the project plan, and establishing the project timeline
- Identifying internal and external stakeholders and conducting initial communications about the State's new system and its ability to support the State's objectives.
- Establishing project procedures, standing meetings, and reporting mechanisms.

1.3 Communication Plan – The communication plan provides a framework to use when communicating the system's impact and benefits to stakeholders. The team analyzes each stakeholder and determines the mode, method, medium and timing for specific communications. The team consults and follows the plan when changes to processes, procedures, or functions affect stakeholders.

1.4 System Overview – Team managers provide an introduction of the System functional capabilities. The team demonstrates the core functions of each in-scope module to State team members. Participants develop a common understanding of the approach and begin harmonizing terminology. In addition, the FAST team provides an overview of the integrated FAST Workbench. The Workbench provides functions for creating, organizing, and managing the implementation project.

1.5 Business Profiles – The team prepares a business profile that defines the high-level scope of work that will be implemented. The business profile contains high-level statistical and processing information that the team will use in future decision making for the work. In addition, the team performs an early assessment of the organization's capability to make changes. The assessment includes a high-level review of relevant laws, regulations, and standard operating procedures to identify any potential needs or obstacles that may affect the project's acceptance. Issues identified in this stage are resolved through the change-management-analysis process, which may result in the need for a decision request to agency leadership.

1.6 General Timeline – The project team confirms the high-level start and end dates for the project rollouts. Project schedules are created within the Fast Delivery Workbench. A high-level project schedule that contains detailed schedules for conversion, testing, and training is created for each

rollout.

1.7 Confirm Infrastructure – This step validates that the proposed infrastructure can be configured successfully for incorporation into the current technical infrastructure. Working together, the FAST technical manager/lead and agency IT personnel develop the strategy and timing for the use of existing inventory and/or new purchases. The project technical team works with the agency's technology personnel to ensure server-level hardware and operating systems are configured to function properly with the FAST software. Confirmation includes a review of the existing network, hardware, operating system, storage capacity, storage types, desktop software, and associated logistics.

FAST and agency technical personnel need access to install, configure, and maintain the FAST software on the dedicated servers for the project. We work with our clients to develop installation plans that support the security policies of a jurisdiction's infrastructure.

During the confirmation of the infrastructure, the team will review the following areas.

- Hardware installation and configuration:
  - Physical server installation/hardening
  - Switch and routing
  - Virtualization
  - Firewall
  - Security
- Application Servers -- OS installation and system load-balance configuration
- Database servers – OS and SQL Server installation and configuration
- Web service and file servers -- File/folder security and web service configuration
- Disaster recovery planning and installation

1.8 Inventory Inputs and Outputs – Each implementation requires site-specific forms, letters, and interfaces. For each rollout, the team will create or add to the inventory of inputs and outputs. The inventory includes all current items identified by the agency and affected by the rollout. The inventory displays the purpose, description, and disposition of each identified item. For the new system, some items are retired, some items are modified, and others are implemented in a manner that mimics the legacy environment.

1.9 Resource Identification – The roles needed for the rollout are identified and documented in a Resource Plan. The project manager organizes and assigns teams by function across all lines of in-scope business. When resources are available, each application team ideally includes a respected subject

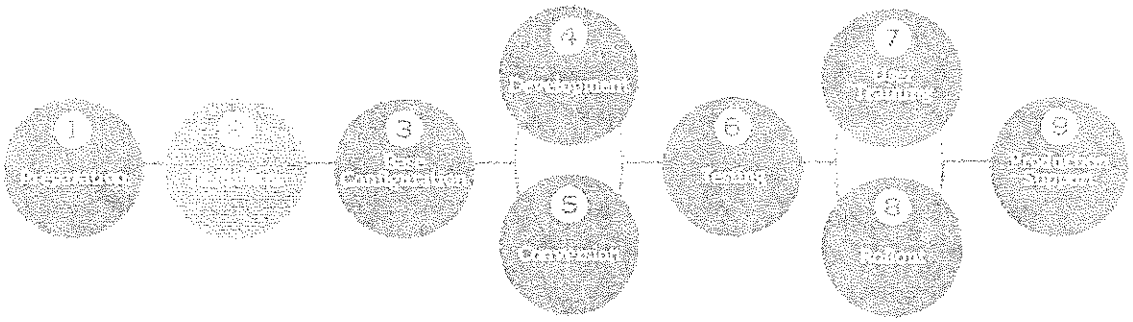
matter expert (SME) from the business area, who works side-by-side with a FAST team manager. The ideal team also includes one to five FAST developers and one or more State developers. The ideal team functions as a unit to identify State business practices and then to configure GenTax features and functions accordingly. The ideal team provides the opportunity for SMEs and State developers to learn how to make site-specific modifications to the implementation when necessary.

In addition to the application teams, support teams are formed to address the following aspects of implementation across all phases and business lines:

- Conversion
- Security Administration
- Training and Documentation
- Organizational Change Management
- Functional and technical support

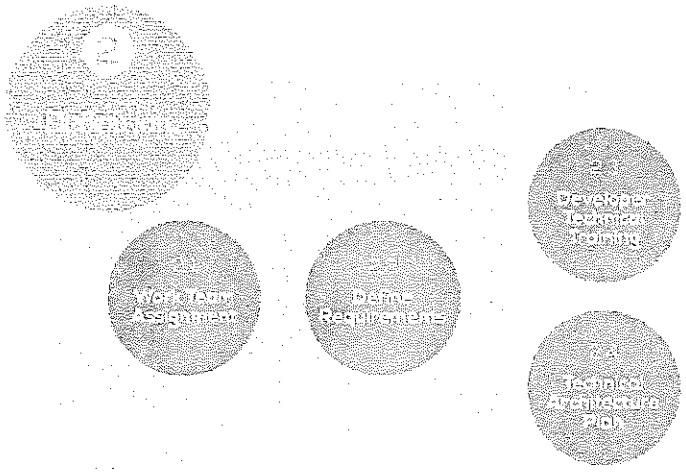
Implementation Plans – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan

2. Definition Phase



The Definition Phase focuses on defining work necessary to deliver the system functions. This phase includes multiple project definition activities. Some of these activities include assigning personnel to teams, gathering requirements, training developers, creating the technical environments, and finalizing the technical architecture plan. The following graphic and text outline the high-level activities of the

Definition Phase.



2.1 Work Team Assignment – The project managers assign project personnel to teams. Please also see the preceding paragraph 1.9.

2.2 Define Requirements - The project team holds definition meetings to define the requirements and work to be done in subsequent phases. These meetings provide the details for how the FAST software will be implemented to meet the agency's business needs. The results of the definition meetings are documented in a meeting minute template within the FAST Workbench. Business process changes, conversion and development tasks, and action items are then associated with the meeting minutes.

- Business-process changes will be used by the training team for planning and communication.
- Conversion tasks will be incorporated into the conversion schedule.
- Action Items establish the scope of work via the tasks that will be performed in the Development Phase.

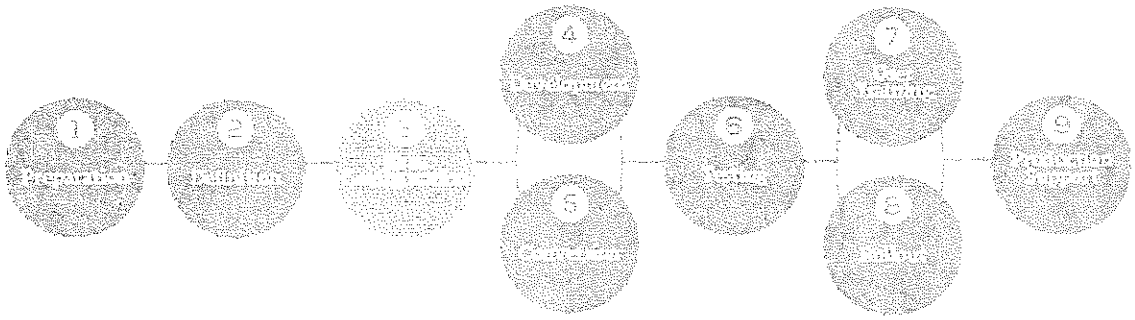
Many requirements will be reflected directly in the software configuration rather than through interim paper documents. Together, the gathered requirements and the base configuration of our software form the starting point for iterative configuration work during the Development Phase of the project.

2.3 Developer Technical Training – Agency developers assigned to the project are trained in the solution's development and configuration environment and tools. In some circumstances, it is possible to begin technical training for developers in the Preparation Phase.

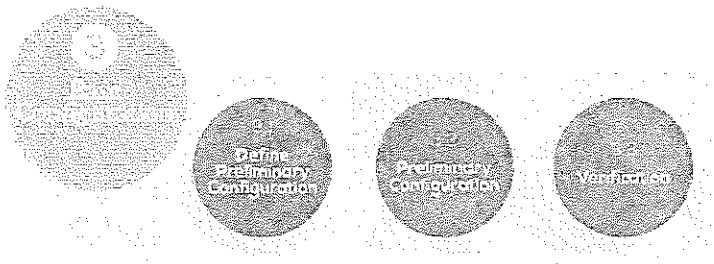
2.4 Technical Architecture Plan – The technical architecture plan provides the final design of the project environments including both production, and if applicable, disaster recovery environments. The technical architecture plan depicts the final design including zone designations and installation validation procedures.

Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material

3. Base Configuration



The Base Configuration Phase is the phase in which the system begins processing the high-level requirements for a given project rollout. Once the baseline is in place, the system will support basic navigation, key functional areas, and account-type processing. High-level activities of this phase are outlined in the following graphic and text.



3.1 Define Preliminary Configuration – Using the requirements gathered in the Definition Phase, a subset of items are identified that will be implemented as the baseline. The baseline normally consists of items that do not require enhancements or programming but such activities may be included, particularly if they are high profile or critical to business operation.

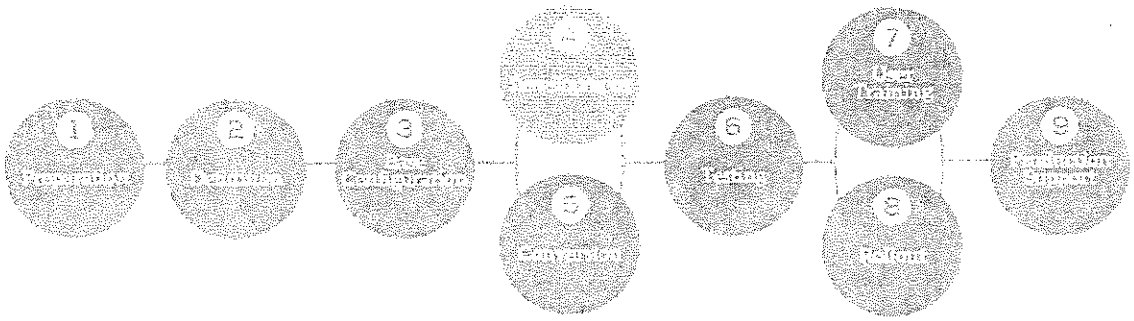
3.2 Preliminary Configuration – The project teams carry out the design and configuration tasks for the items identified in the Define Preliminary Configuration step.

3.3 Verification – At this point, user team members get their first hands-on exposure to their installation of the solution. The Verification step is both a communication and revision mechanism for the teams. At this time, the system is not yet complete and instabilities should be expected.

It is important to remember that the goal of this step is not to present a complete, robust, production-ready system, but rather to confirm the direction being taken using an iterative design-confirm-review approach. Verification, along with the Business Process Changes identified in the Definition Phase, provides the Training and Organizational Change Management team with a foundation of the major areas that will be affected by the implementation of the solution. This understanding helps them prepare the best course of action for a smooth transition of the workforce.

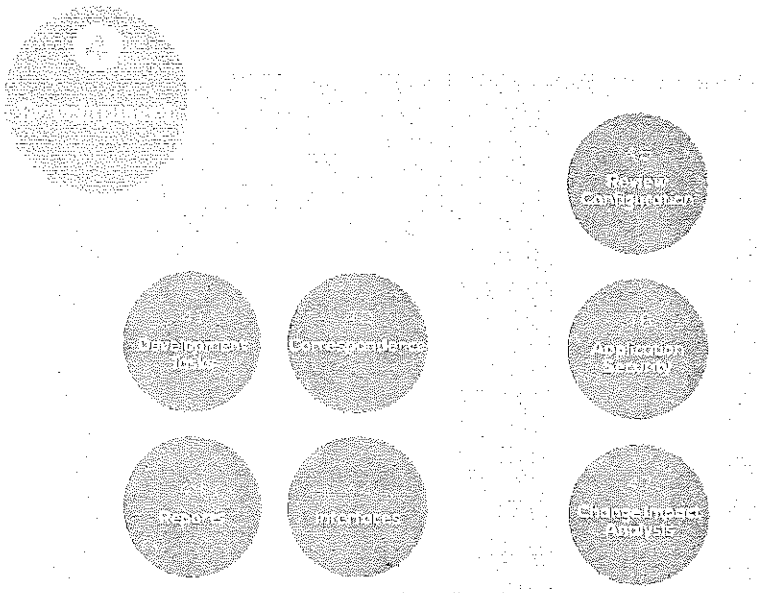
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items	• Preliminary Configuration & Verification • Updated Definition Items

4. Development Phase



Many aspects of development take place in virtually all phases of the project. During the formal Development Phase, however, the gathered requirements are used to produce work packages for developers that are used for specifying parameters, selecting options, defining thresholds, and performing other types of configuration, enhancements, or programming. Work in this phase consists largely of developing correspondence, reports, interfaces, and site-specific programming, as well as reviewing configurations and establishing application security requirements and configuration.

The work packages mentioned above are defined, assigned, and tracked within the FAST Workbench. Developers can then access either a Gantt chart or calendar view of assigned tasks to help manage their workload along with easy tracking by management of task assignments and their associated statuses. High-level activities of this phase are outlined in the following graphic and text.



4.1 Development Tasks – Development Tasks entail the completion of the identified configuration and site-specific programming tasks needed to meet the requirements identified in the Definition Phase. This activity involves the completion of configurations, the development of necessary site-specific programs, and the confirmation of these tasks. Maximum flexibility is a primary design goal of the software, but not every aspect of the solution is configurable. Some truly unique variations may require programming to support specialized functions. Site components are programmed during the Development Phase and can be maintained, enhanced, or augmented by the agency over time. Site components work seamlessly within the software while minimizing the impact to future product upgrades. They are transparent to the user—a single, consistent, and integrated solution makes the user unaware of when they are accessing a core product or site-specific function.

FAST software is built on the VB.Net platform. Consequently, all custom components are developed on the same platform using the Microsoft Visual Studio Integrated Development Environment (IDE). FAST has created a number of add-ins for this IDE that enable developers to create business objects that inherit and reference the appropriate architectural components of our software. This enables the efficient creation and testing of custom components that conform to FAST development standards and seamlessly integrate with the core software product.

4.2 Correspondence – The project team performs the configuration and development necessary to implement the in-scope correspondence. Although a variety of correspondence items are provided as

core product models, most agencies have unique business needs that cannot be satisfied by pre-existing templates. Simple correspondence typically requires only a template and a few configuration rules related to security and printing. Items that are more complex may require the team to create site-specific extensions during this phase.

4.3 Reports – The project team performs the configuration and development needed to implement the in-scope reports and confirm the configuration. A variety of mechanisms are available to obtain information from the system, including core product searches and list windows, configurable query result list windows, configurable data cubes, and formal reports. For business reporting needs that cannot be satisfied through configuration, development of a site-specific extension may be required.

4.4 Interfaces – The project team performs the configuration and development needed to implement the in-scope interfaces. Configuration and development are based on the completed Interface Design Documents (IDDs) linked to the interface development task in the Delivery Workbench. The IDDs identify each interface, the data required, the interfacing organization, and other key factors. The team evaluates the required interfaces during the Development Phase and selects an appropriate approach given the source, platform, and volume of data.

Our software architecture is designed for ease of interface implementation. The software includes a number of tools and standard configurations the team can use to implement interfaces for a wide array of transfer protocols and data formats. In addition, our software can be configured so that FAST core objects are exposed as web services.

4.5 Review Configuration – Prior to completing the Development Phase, each confirmed module is made available to the users to allow hands-on review and configuration verification. This iterative practice allows the project team to quickly identify and remedy issues prior to the start of formal business testing.

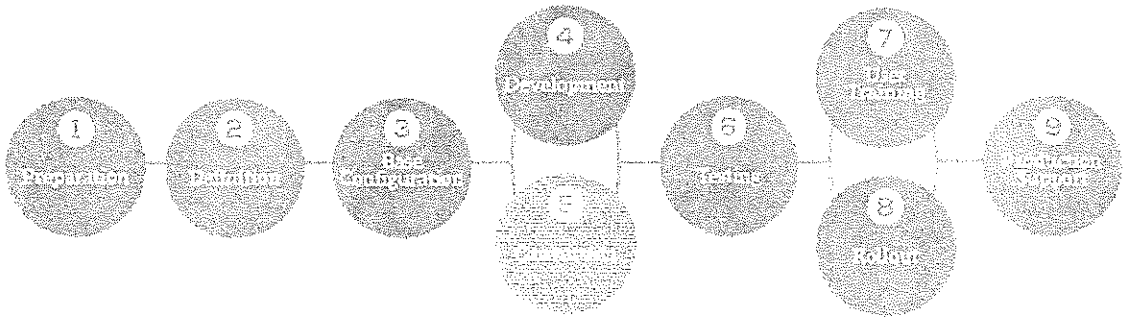
4.6 Application Security – A security implementation strategy, structure, and plan are developed. The agency begins to gather user functional access requirements.

4.7 *Change-Impact Analysis* – Throughout the implementation, the team constantly identifies, assesses, and plans for the potential impact of organizational changes associated with the software implementation. For each significant change identified, the team, with the assistance of agency management, determines affected stakeholders, how they will be affected, known resistances to the change, and the most effective methods of assimilating each change into the organization. Project

managers will work with agency managers to determine who will implement the change-management methods identified during the implementation phases (assignments may be both internal and external to the project team).

Development Phase – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Interface Design Documentation • Configurations • Site code • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan

5. Conversion Phase

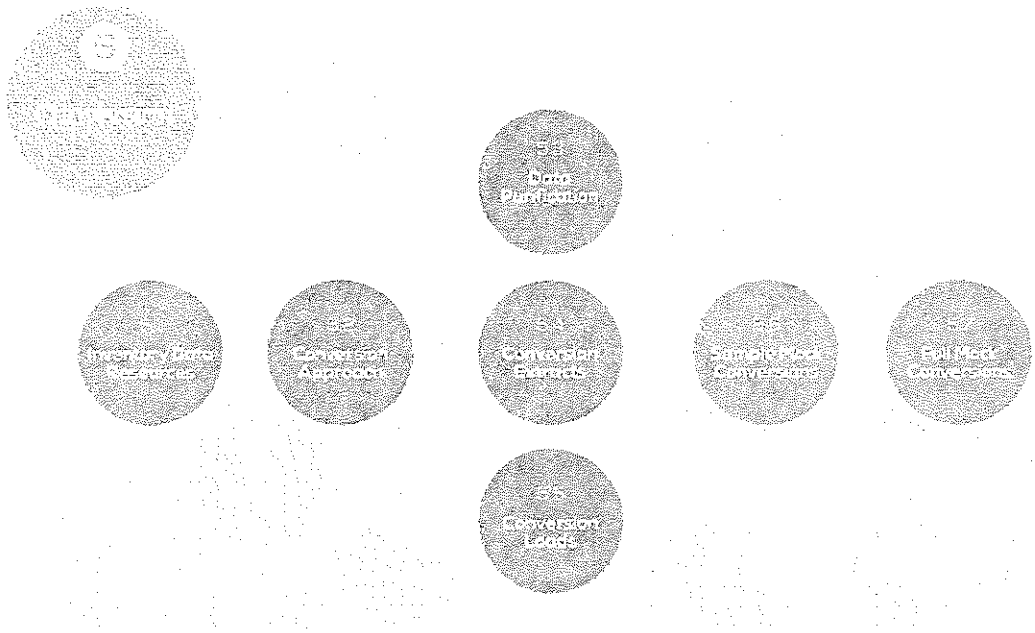


Conversion is an iterative process to extract, convert, purify, verify, and reconcile legacy data for use in the new system. In the Conversion Phase, legacy data from various sources is converted into the target database of our software. Final conversion to the production environment happens once per rollout.



Through a series of mock conversions, in environments separate from the production environment, the project team builds a database optimized for the new system. The conversion process starts early in the project to allow time for purification and to allow a fully converted database to be used during end-to-

end testing. As the cutover date approaches, the mock conversion activity includes optimizing the time it takes to convert the whole database, so that conversion is completed in the time allotted during cutover. At cutover, the production database and feeder systems are addressed according to a cutover checklist so that conversion can be conducted without conflict. The following graphic and text outline the high-level activities of the Conversion Phase.



5.1 Inventory Data Resources – Existing data sources are inventoried for each rollout. The inventory of data sources is used to define the scope of agency data that is available to the conversion process. Each data source is reviewed for integrity and quality.

5.2 Conversion Approach – The conversion approach work product defines how the business data will be converted and includes details on items such as:

- Manual versus automated processes
- Customer information
- Approach to historical data
- Number of years of financial data
- Financial detail versus summaries
- Approach to work in progress
- Impact on new system processes and organizations
- Interim conversion manual or automated processes

The team creates a conversion schedule for timing of key activities. In addition, the team creates a conversion task list that provides an inventory and schedule for completing the conversion tasks.

5.3 Data Purification – Prior to the execution of the conversion, the team inspects the data from each legacy source to determine if there are inconsistencies in the data. These inconsistencies are resolved by developing and executing strategies to purify the data prior to (the preferred option), during, or after conversion.

5.4 Conversion Extracts – Conversion extract processes are developed and led by agency IT staff to access conversion data sources and create standard extract files. The conversion-extract process also provides control reports that detail the extraction process and are used to confirm the load processes.

5.5 Conversion Loads – Conversion loads include functionality to:

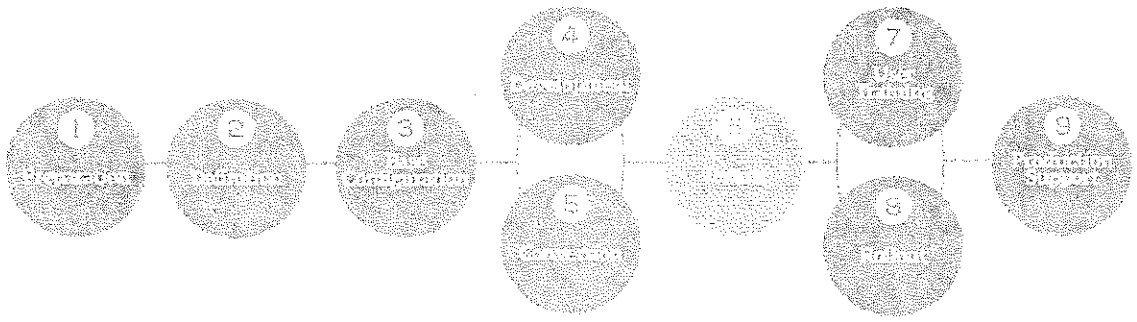
- Validate the extract files
- Reformat and load the extract files into the new data structures
- Produce conversion load control reports detailing the validation and load process

5.6 Sample Mock Conversions – The conversion team practices extracting and converting data multiple times through mock conversions. With each mock conversion, more data and more functions are added to the process until the full complement of data is extracted, purified, and formatted. The team makes available sample sets of converted data from early mock conversion for users to perform verification and comparison back to the legacy sources.

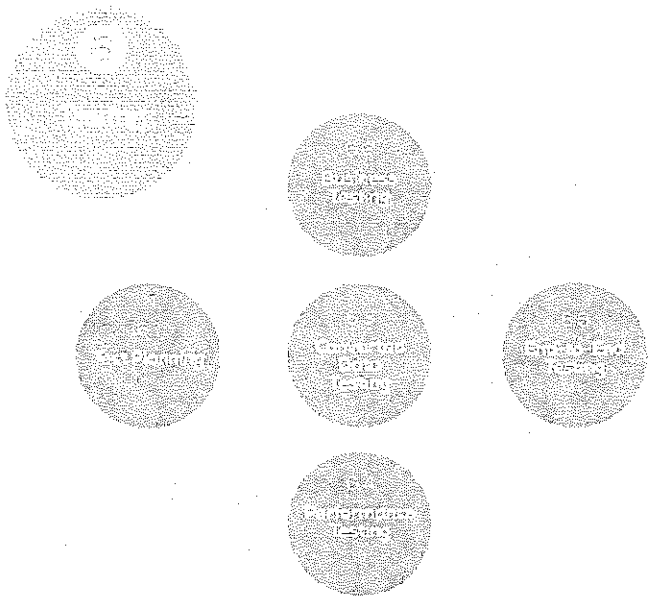
5.7 Full Mock Conversions – One or more complete mock conversions are performed to provide the basis for the timing and user verification of the converted data. Verification is supported by a reconciliation document that describes how converted data is reconciled to its legacy source.

Conversion Phase – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation

6. Testing Phase



The Testing Phase ensures that the production system is able to meet the business needs in a robust and stable manner. This includes identification of system and specification instabilities or issues. High-level activities of the Testing Phase are outlined in the following graphic and text.



6.1 Test Planning – This step begins while the configuration is being confirmed and verified by developers and business staff toward the end of the Development Phase. Testing is focused on testing business functions and outcomes as opposed to individual screens or background processes. The test plan identifies:

- Business test conditions

- Business test cycles
- Approach to executing business testing
- Modules targeted for performance testing
- End-to-end testing approach
- Acceptance criteria

6.2 Business Testing – The purpose of business testing is to ensure functions in testing meet the agency's business needs. Agency business analyst/subject-matter experts and the implementation teams jointly create test cases and scenarios. The business test scenarios are executed per the test plan. Anomalies identified during testing are recorded and tracked to resolution in the FAST Workbench. During this step, agency testers may identify additional high-impact business-process changes that can be addressed within the change-impact analysis.

6.3 Converted Data Testing – When the system goes live, it will be operating on converted data. Converted data testing is performed to confirm that new system processes execute correctly on the converted data and users can perform the functions necessary to manipulate the converted data.

6.4 Performance Testing – A selection of high-volume items, both online and batch, are selected and used to:

- Plan background processes
- Ensure response times
- Validate network throughput

6.5 End-to-End Testing – End-to-end testing is the final step in the FAST Testing Phase. End-to-end Testing is conducted in the staging environment with an agency's converted data from full mock conversions. This test is often performed in parallel with the final steps of converted-data testing. This testing activity uses the full functionality of the system to replicate daily business activities with converted data. End-to-end testing has the following objectives:

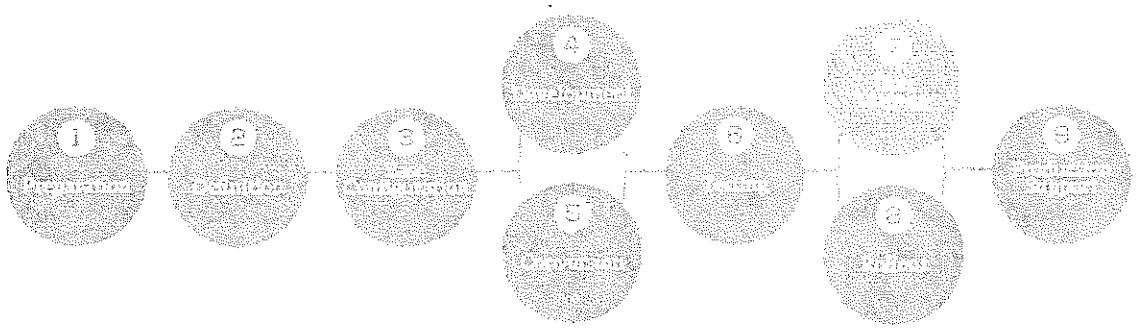
- Ensure that the system correctly executes business functions.
- Ensure that the system correctly executes external interfaces (inputs and outputs).
- Ensure that system functions triggered by a production job correctly execute required functionality.
- Ensure that database adds, reversals, modifications, and tracing are correct.

During end-to-end testing, an emphasis is placed on testing interfaces. The FAST team manager(s)

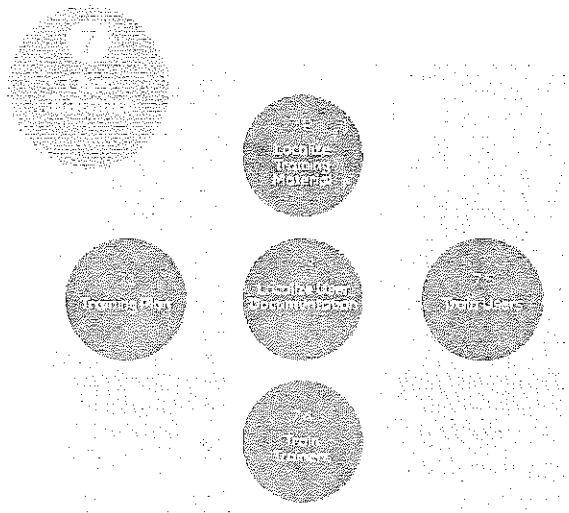
responsible for handling interfaces on the project works closely with the agency to ensure the full participation of the agency's business partners in the testing process. Note that business testing and end-to-end Testing constitute what is commonly referred to as user-acceptance testing.

Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results

7. User Training Phase



The purpose of the User Training Phase is to prepare users to navigate the software and complete their assigned business functions using the new tools and software. During this phase, most business users are provided hands-on, instructor-led exercises that allow them to become acquainted with new or modified business processes. The materials prepared during this phase may include step-by-step instructions, concept guides, functional flow diagrams, videos, or other creative learning materials. Trainers design and create these materials to help users understand how to accomplish their tasks using the software. Additionally, this phase may include the creation or process documentation and Help topics for new or changed processes. The following graphic and text outline high-level activities of the User Training Phase.



7.1 Training Plan – The Training Plan lays out the approach to training, including:

- Identifying trainers and trainees
- Selecting the training venue and equipment
- Deciding on the format – presentation versus hands-on
- Coordinating with testing activities
- Analyzing the impact of training on day-to-day operations and scheduling
- Preparing the training schedule – a delivery schedule for the training modules

7.2 Localize Training Material – In this step, trainers prepare site-specific exercises to accompany core e-training modules and face-to-face training workshops. There is often a need to customize classroom training modules and exercises to reflect the agency's configuration and changed business processes.

7.3 Localize User Documentation – During this step, the team defines the user documentation needed, translates core documentation as needed, and creates additional documentation as necessary. Trainers may deliver documentation to users through multiple mediums, such as online text, videos, and paper. Trainers serve on the front lines and are therefore in the best position to be made aware of issues regarding documentation. As soon as process changes are identified, they must be analyzed for their impact on the organization as a whole or on specific departments or personnel classifications. The change-impact analysis step helps identify additional documentation needs.

7.4 Train Trainers – The train-the-trainer approach is FAST's preferred approach to training. The goal in training trainers is to prepare agency personnel to deliver training to agency business users. When

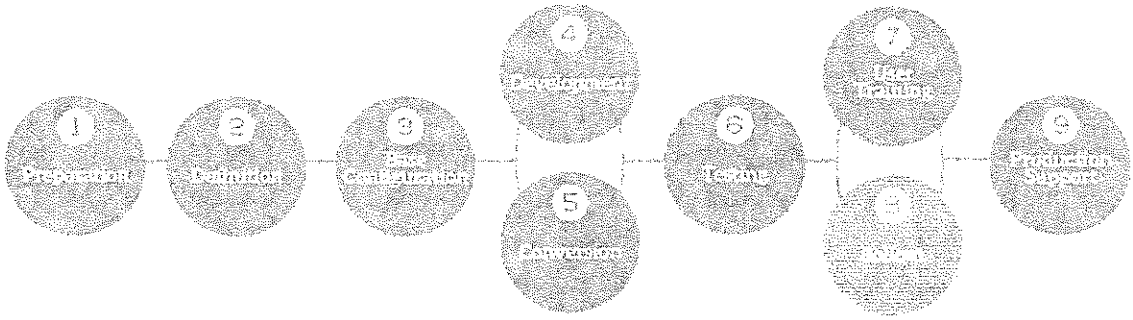
successful, this approach provides an in-house capability the agency can leverage for training new personnel. Selecting the right person to train is critical to this approach. Employees selected need to want the job. They need to take the extra time to learn more than their peers and must have the desire to help their peers be successful.

7.5 Train Users – Typically, users are trained by agency trainers with coaching and assistance from FAST trainers. FAST implementation consultants and agency project personnel support the trainers by providing technical assistance and specialized instruction during training delivery.

User Training Plans – Scheduling Considerations			
Rollout 1	Rollout 2	Rollout 3	Rollout 4

• Training Plan
• Training Schedule (trainers)
• Training Schedule (users)
• Training Material
  ○ Training Material – Tier 2
  ○ Training Material – Tier 3
• Training Results
• User Documentation and Aids
	Rollout-specific updates, as necessary, to:
	• Training Plan
	• Training Material
	  ○ Training Material – Tier 2
	• User Documentation and Aids
	
	New
	• Training Schedule (trainers)
	• Training Schedule (users)
	• Training Material
	  ○ Training Material – Tier 3
	• Training Results
		Rollout-specific updates, as necessary, to:
		• Training Plan
		• Training Material
		  ○ Training Material – Tier 2
		• User Documentation and Aids
		
		New
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 3
		• Training Results
			Rollout-specific updates, as necessary, to:
			• Training Plan
			• Training Material
			  ○ Training Material – Tier 2
			• User Documentation and Aids
			
			New
			• Training Schedule (trainers)
			• Training Schedule (users)
			• Training Material
			  ○ Training Material – Tier 3
			• Training Results

8. Rollout Phase

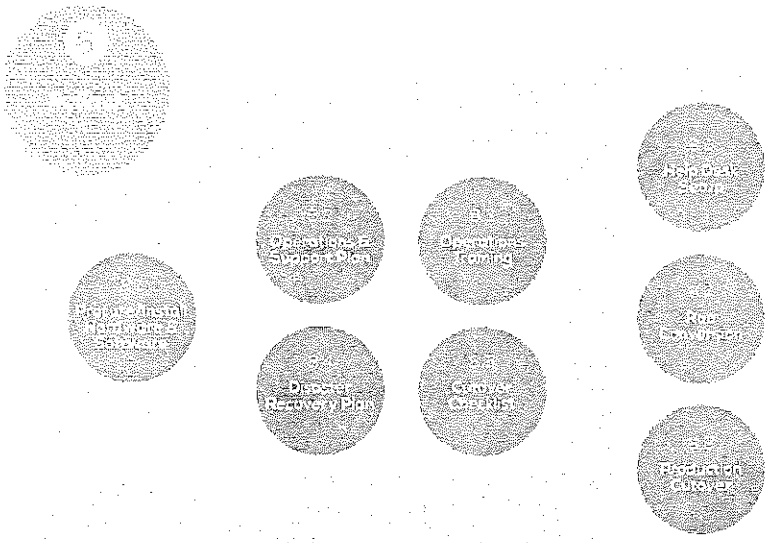


Preparations for the rollout are captured in a series of cutover checklists created and managed within the FAST Workbench. Cutover checklists provide a list of interrelated steps and activities that must be

coordinated to ensure a smooth and successful rollout. Examples include which systems to shut down and when shutdown should take place, which batch jobs to run or cancel, and which external interfaces to redirect. Checklists also contain the steps to perform final data conversion and reconciliation. The communication plan is updated to keep all project team members, management, and other stakeholders aware of progress toward cutover.

Upon completion of the final conversion into production, selected users enter real transactions into the production system to verify that key transactions can be completed. This is the final verification by business users that the system is ready for production. Upon successful completion of all steps in the cutover checklists, the system is declared ready for production.

During the first week or so of production, the project team deploys to strategic locations around the agency to perform desk-side support to assist users and bolster their confidence. If users encounter issues, the project team members take action to ensure they capture details about the issue. All issues are reported, analyzed, and resolved. When completed, the team ensures the affected stakeholders learn about the change. The project team logs all issues requiring team action in the FAST Solution Manager. The team resolves logged issues according to the project plan. The following graphic and text outline the high-level activities of the Rollout Phase.



8.1 Procure/Install Hardware & Software – The hardware and software for the production platform are purchased, installed, configured, and tested. Normally, this step will take place much earlier in the

project timeline but confirmation and final setups may be necessary.

8.2 Operations and Support Plan – The operations and support plan details how the new system will be supported in production. This includes hours of operation, on-call support, hardware responsibilities, application responsibilities, and support team structure.

8.3 Operations Training – The operations manual details the processes associated with the day-to-day operations required, including:

- Bringing the application up or down
- Executing scheduled tasks
- Diagnosing and remedying common problems
- Scheduling backups

Agency personnel are trained in carrying out these tasks.

8.4 Disaster Recovery Plan – The implementation team assists the agency in updating their existing disaster-recovery plan to cover the new application and its platform. Alternatively, a new plan is developed collaboratively with the agency. The plan details which strategies the agency has, or will implement, to mitigate the impact of unforeseen events.

8.5 Cutover Checklist – A cutover checklist provides a list of interrelated steps and activities that must be coordinated to ensure a smooth and successful rollout. A high-level checklist is prepared for general consumption within the agency to communicate the general schedule. A step-by-step checklist is prepared for the project team to follow.

8.6 Help Desk Setup – A transitory solution-specific help desk provides a triage function—routing non-solution-related calls, responding to and managing help calls related to the software, and sometimes dispatching a specialist from the project team to provide assistance in person. As the number of calls to the help desk dwindle, the solution-specific help desk services shift back to the agency's general help desk service.

During the early stages of system-adoption within a production environment, it is important to provide enhanced support to first-time users. Deskside support goals are to:

- Provide guidance to any user performing a regular activity for the first time

- Identify any conversion or software distribution/installation problems as soon as possible for escalation and resolution
- Catch any common user mistakes or bad habits early and address with ad hoc training and/or general communications to the user community

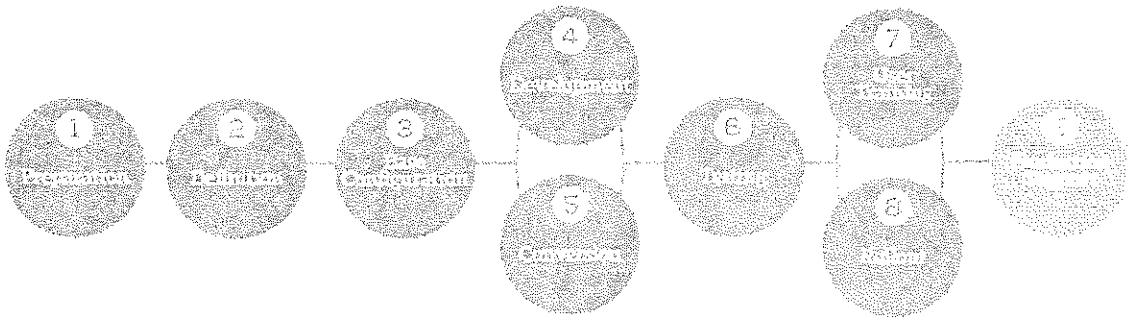
During this 10-15 day window, an application support team is established from project resources to cover the period. When appropriate, other members of the project team will assess and assist in problem solving or creating longer-term solutions. Not all regular business activities may be performed during the rollout support period. For example, there may be monthly, quarterly or annual activities that do not fall within the immediate post-implementation support dates. The project team provides deskside support for such activity and the 10-15 day deskside support timeline may be extended as mutually agreed upon by the project teams.

8.7 Run Conversion – Conversion processes are executed, databases are backed up, application servers are readied, and application shortcuts are installed to user desktops.

8.8 Production Cutover – The system goes live. Desk-side support is provided to users and operations are carefully monitored.

Rollout Phase – Examples Only – Not Definitive			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan

9. Production Support Phase



Immediately after transitioning to production, a desk-side support team is deployed in user work areas affected by the rollout. This team is comprised of project team members and agency staff who are most familiar with the software solution and new business processes. They remain on duty for the initial days or weeks that the new system is in production. Desk-side support personnel are available to answer any questions that arise during those initial weeks. Users may have questions or may simply want someone standing by as they perform new tasks.

Our experience has shown that deploying a desk-side support team is a highly effective means of managing anxiety and boosting confidence of agency staff as they first start to use the new system. Desk-side support may be extended, day-by-day or week-by-week, at the joint discretion of agency and FAST management. The location, duration, and amount of desk-side support are determined through discussions between the agency and the FAST project team.

As the need for desk-side support diminishes, project team members are no longer deployed on a regular basis to the business areas. At this stage, a system-specific help desk will continue to serve as a first point of contact to users who need assistance.

As the number of actual system-related calls decrease, the help-desk service transitions back into the steady-state help desk. During a transition period, project staff work with agency help-desk staff to ensure they have the skills, knowledge, and procedures to take over. This may include training, use of a buddy system, mentoring, and documentation development. The duration of these support periods varies according to the State's comfort level in making the transition.

Please note that FAST recommends that an agency perform an independent audit of application security after the production system has stabilized in order to confirm appropriate segregation of duties.

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Production Support Phase – Standard Work Products			
Rollout 1	Rollout 2	Rollout 3	Rollout 4
• System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan

FAST Implementation Methodology – Standard Tasks and Work Products

While the FAST Implementation Methodology does not prescribe the use of formal sign-offs, tasks and work products are established by FAST and agency project management during the project's Preparation Phase. The following table identifies the standard tasks and work products associated with each phase of the FAST Implementation Methodology. Please note that since the same tasks are conducted for each rollout, some work products created in the first of our proposed four rollouts will be expanded or modified, rather than recreated, to address the specifications of Rollout 2, Rollout 3, and Rollout 4.

Standard Tasks and Work Products by FAST Implementation Methodology Phase

Phase	Tasks	Work Products
Preparation Phase	• Establish Team Workspace/Workstations • Prepare Project Plan • Confirm Infrastructure • Install GenTax Software • Create Environments • Conduct Rollout Kick-Off Meeting • Present GenTax System Overviews	• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Definition Phase	• Conduct Definition Meetings • Prepare Definition Items • Review and Modify Definition Items • Inventory Inputs and Outputs • Train Agency Developers	• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory
Base Configuration Phase	• Scope Preliminary Configuration • Prepare Preliminary Configuration • Conduct Verification Sessions • Update Definition Items	• Preliminary Configuration and Verification • Updated Definition Items
Development Phase	• Continue configurations • Build and Unit-Test Letters/Correspondence • Build and Unit-Test Reports • Build and Unit-Test Interfaces	• Interface Design Documentation • Configurations • Site code • Application Security Plan

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Phase	Tasks	Work Products
	• Build and Unit-Test Additional Site Functions • Prepare Application Security Plan • Review configured software	
Conversion Phase	• Inventory Data Stores • Prepare Conversion Plan • Build and Test Conversion Extract Modules • Build and Test Conversion Load Modules • Build and Test Reconciliation Reports (extract) • Build and Test Reconciliation Reports (load) • Perform Data Purification • Run Partial Mock Conversions • Run Full Mock Conversions	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Testing Phase	• Prepare Test Plan • Prepare for Business Testing • Conduct Business Testing • Conduct Converted Data Testing • Conduct Performance Testing • Conduct End-to-End Testing	• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results

User Training Phase	• Prepare Training Plan
	• Localize Training Materials
	• Train Trainers (Train-the-Trainer)
	• Train Users
		• Training Plan
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 2
		  ○ Training Material – Tier 3
		• Training Results
		• User Documentation and Aids

Rollout Phase	• Prepare Operations & Support Plan • Prepare Operations Manual • Prepare Cutover Plan • Prepare Help Desk and Desk-Side Support Plan • Run and Verify Conversion • Production Cutover	• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan
Production Support Phase	• Perform Desk-Side Support • Perform Operations Support	• System Maintenance and Support Plan

Preliminary Project Plan

Development of the project plan will be one of the first tasks conducted by the project management team during the project's Preparation Phase. The plan, in large part, will be based on our proposed project schedule. All of our project schedules are based on the FAST Implementation Methodology and the following schedule management goals.

- Model a realistic project schedule at an appropriate level of detail to keep the schedule manageable. This facilitates the completion of activities on time, within scope, and at cost.
- Develop scheduling strategies that reduce the project's exposure to issues and risks, making it possible to detect potential impacts in advance.
- Implement repeatable processes for schedule updates and project reporting, ensuring consistency and adherence to best practices for implementing COTS software.

We propose a 47-month schedule for the implementation and acceptance of the GenTax-based Tax Modernization system. This project schedule is achievable due to the highly configurable architecture of our software and our streamlined implementation methodology. Almost every aspect of our system can be flexibly configured to provide DOR with the options, settings, and criteria necessary for effective and efficient administration of the agency's tax and revenue programs.

Our proposed schedule consists of four rollouts of groups of similar tax programs:

- Rollout 1 (11 months) – Corporate
- Rollout 2 (12 months) – Sales, Withholding
- Rollout 3 (12 months) – Individual Income, Fiduciary
- Rollout 4 (12 months) – Special tax types

Project Schedule for Indiana Revenue Modernization Integrated Tax System

Key Project Milestone	Start Date	Completion Date	Duration
Project Start	January 8, 2018		
GenTax Installation	January 8, 2018	February 2, 2018	1 month
Project Rollout 1 Corporate	January 8, 2018	December 10, 2018	11 months
Project Rollout 2 Sales, Withholding	December 10, 2018	December 2, 2019	12 months
Project Rollout 3 Income, Fiduciary	December 2, 2019	December 7, 2020	12 months

Key Project Milestone	Start Date	Completion Date	Duration
Project Rollout 4 Special Tax Types	December 7, 2020	December 6, 2021	12 months
Maintenance & Support	December 6, 2021	December 5, 2031	10 years

A finalized project schedule, to include scope and rollout dates, will be confirmed during the Preparation Phase in the FAST Implementation Methodology. If an agency desires a shorter timeframe for the first rollout, sometimes that can be accomplished by reducing the scope of what is delivered in that first rollout. Once our project personnel begin work, it is appropriate to finalize the scope and date for the first rollout. Schedule and scope may be adjusted to achieve the Agency's goals and model a realistic project schedule at an appropriate level of detail to keep the schedule manageable. This facilitates the completion of activities on time and within scope and reduces the project's exposure to issues and risks.

Production Rollouts Based on Simultaneous Cutover to GenTax

As illustrated in the following table, each rollout will include the full functionality of relevant, in-scope, GenTax modules and subsystems, providing complete and integrated GenTax functionality for each in-scope tax program on its first day of production.

GenTax Consists of Seven Fully Integrated Modules and Subsystems

GENTAX

Customer
- Registry
- e-Services
- Correspondence
- Licensing

Revenue
- Returns
- Payments
- Billing
- Refunds
- Accounting
- Appeals

Workflow
- Work Management
- Case Management

Information
- Analytics
- Dashboard
- Reporting
- Data Mart
- Query

Compliance
- Data Warehouse
- Discovery
- Audit
- Non-Filer
- Collection
- Bankruptcy
- Enforcement

Management Studio
- Help
- Business Rules
- Implementation Toolkit
- Operations Support
- Security
- Interfaces

Special Functions
- Imaging
- Inventory Management
- IRP*
- IFTA*
- Cashiering*
- Unclaimed Property*

*Not in scope

GenTax consists of seven integrated modules and constituent subsystems that are configured—not programmed—to meet the specific business and technical objectives of revenue agencies. Please note that the IRP, IFTA, Cashiering, and Unclaimed Property subsystems are not in scope.

Our approach to implementing groups of tax programs through simultaneous cutover to the new system, rather than a rolling implementation that relies on piece-meal releases of select software functionality, avoids the need to keep both the legacy systems and new system operating in parallel. This approach minimizes data-synchronization risks, is less disruptive to external business partners and internal operations, ensures consistent customer service across the organization, and is the preferred approach due to the additional rational:

- In a rolling implementation, central help-desk personnel must have access to both the new system and the legacy system to assist field staff with customer issues. Batch jobs must also reconcile records from both the legacy system and the new system for the same customer, which can be problematic due to data transformation during conversion.
- Rolling implementations unnecessarily increase workload since dual interfaces from legacy systems and the new system are necessary to provide the same information to internal users and external partners.

- if an agency is operating the new system and legacy system(s) in parallel, users and external partners may make incorrect decisions that negatively impact customers if information presented from one system is uncoordinated with the other(s).
- In rolling implementations, back-bridge code is necessary to handle the synching of information as users enter new data or edit old data in the new system. This back-bridge code, which is temporary and unnecessary after the implementation, can require extensive development resources that can be better utilized on other critical aspects of the project. The time, labor, and other resources used to create, test, and implement the temporary code detracts from the efforts necessary to configure the new system to meet the agency's business requirements.

Project Preparation

GenTax is installed in the first weeks of the project. We begin the Preparation and Definition phases of FAST's Implementation Methodology and conduct requirements sessions focusing on how GenTax will be used to carry out business processes. Agency business analysts/subject-matter experts (SMEs) receive overviews of system functionality and then participate with FAST experts who lead the meetings. These meetings begin to determine how business requirements may be met, how business processes may be changing, and how information may be accessed and used in the new system.

Since GenTax is already a fully functioning COTS solution, these sessions focus on business needs rather than on IT problems and issues. FAST experts are able to present multiple alternatives to meet business needs, discuss advantages and disadvantages of each option, and help the agency make choices consistent with the agency's vision and goals. The result of the requirements sessions is revised configuration, often within hours or days of the meeting, to confirm the objectives discussed in the meeting were met. As adjustments are required, the team again uses the active configuration in review sessions to revise and refine the decisions and move on to other topics. This iterative approach is a hallmark of our FAST Implementation Methodology and allows the project to move forward at an accelerated pace.

Functional overviews and system demonstrations continue for agency staff and management, reflecting configuration and business-process decisions. These overviews and demonstrations increase exposure to, and awareness of, the to-be business processes, and continue the "show, review, improve" cycle of iterative configuration.

Implementation decisions are captured in the system configuration. As the configuration matures, significant business process changes are identified, impacts are analyzed, and demographic information about affected users is gathered. The impact analysis is mapped to various organizational change-

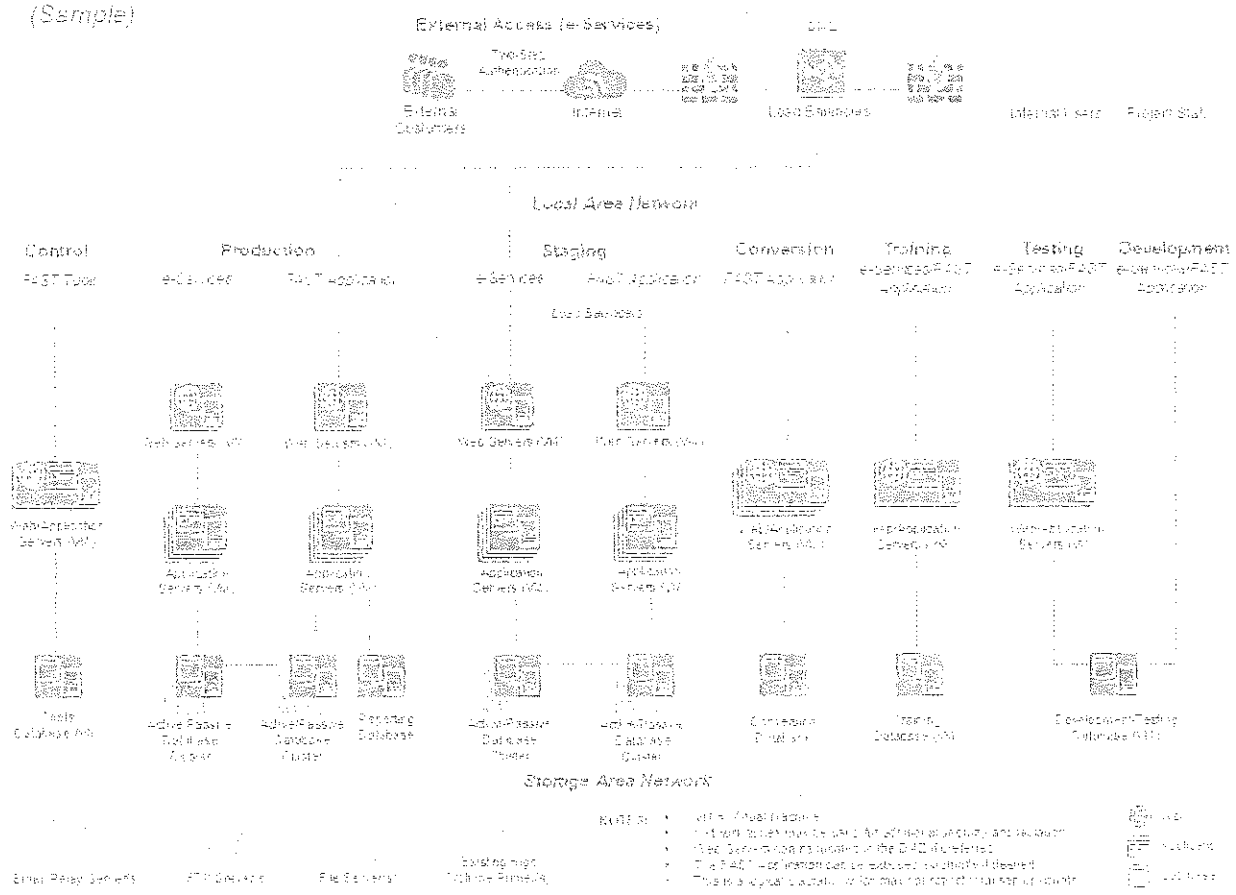
management activities to be used to help work areas effectively make the transition from the current state to the future state.

Using FAST's approach, "high-level" and "detailed" functionality is delivered seamlessly because the level of configuration detail increases over time as more configuration iterations occur. In our experience, the simplicity inherent in our method delivers a result exceeding traditional software implementation methods. It keeps the project focused on an agency's vision and goals, business outcomes, and creating the supporting configuration. It also provides continuous involvement of agency personnel in the configuration and demonstration of system functionality and workflow, allowing them to see firsthand the changes and positive impact that GenTax will have for the agency's various business areas, workload, and personnel.

Technical Environment Design

GenTax is a service-oriented enterprise application that operates in a Microsoft-based environment and architecture. The core architecture utilizes the Microsoft .NET Framework and Windows Communication Foundation (WCF) to process secured web services. GenTax was built using the .NET Framework programming language Visual Basic.NET (VB.NET) and VB.NET is the preferred language for any custom code extensions. Consequently, custom components are built on the same platform and developed using the Microsoft Visual Studio integrated Development Environment (IDE). FAST has created several add-ins for this IDE that enable developers to create business objects that inherit and reference the appropriate GenTax architectural components. The following is a design diagram is an example of our standard environments. FAST will work with DOR to plan and design all technical environments needed for the project.

GenTax Architecture
(Sample)



FAST will work with DOR during the procurement process to ensure all components have been identified after evaluating DOR's current infrastructure. Procurement planning and expectations for procurement deliverables will be included in the project's technical architecture plan.

As requested during the on-site demo, FAST included a list all databases across all FAST products and provided a typical layout of our proposed databases for each SQL instance. These tables can be found in H. Additional Clarification and Requests.

The Preparation Phase of the FAST Implementation Methodology confirms the proposed infrastructure presented during project procurement. Confirmation of the proposed infrastructure is usually done in parallel with a review of the current technical infrastructure. This review includes network, hardware, operating system, storage, desktop software, and associated logistics. This process validates that the proposed infrastructure can be configured successfully for incorporation into the current technical

infrastructure as well as determines the strategy and timing for the use of existing inventory and/or new purchases.

During this step, FAST technical team members work with DOR technology department to ensure that server-level hardware and operating systems are implemented to function properly with the FAST software architecture. System infrastructure configuration can be categorized into the following areas.

- Hardware installation and configuration:
  - Physical server installation/hardening
  - Switch and routing
  - Virtualization
  - Firewall
  - Security
- Application Servers – OS installation and system load-balance configuration
- Database servers – OS and SQL Server installation and configuration
- Web service and file servers – File/folder security and web service configuration
- Disaster recovery planning and installation

FAST technical architects will work with DOR to install, configure, and maintain the FAST software on the dedicated servers for the project. We will work with DOR to develop installation plans that support an agency's infrastructure security policies.

The following are the proposed system environments:

- Development
- Testing/User Acceptance Testing (UAT)/Training
- Staging/Conversion
- Production
- Control

Development Environment

The implementation team uses the development environment to support initial configuration, site-specific extension, and unit testing of configuration and site components. In the development environment, the interface and business logic layers run locally on the developer's machine—no application server is used.

Developers work on various components (client interface objects and application-server business objects) directly on their local workstations. The structure of the development database allows each developer the flexibility to prepare and share specific test case data.

After unit testing in the development environment, components and configuration are migrated to the testing, training, and UAT environments. Since the development environment is inherently unstable due to ongoing development work, the testing and training environments are usually those in which users get their first hands-on experience with the system.

Testing/UAT/Training Environments

The testing, UAT, and training environments are three-tier environments with client machines, application/web servers, and database servers. The databases in these environments are structured to support multiple simultaneous test streams and sharing of test data.

Once training begins, the training environment contains a stable set of components and configurations that have been used to prepare data for multiple training scenarios. Data management tools are used to make a variety of customized training data scenarios available so that users can work through specific scenarios independently. Typically, the environment is frozen at some point prior to the commencement of classroom training sessions to provide users with a stable platform for hands-on training scenarios.

Staging/Conversion Environment

Prior to production rollout, a staging and conversion environment is established for end-to-end testing. This environment also provides the resources and performance needed for large partial mock conversions that lead up to full mock conversions during the finalization of conversion processes. This environment is also used for performance testing by temporarily redeploying additional application servers to mimic production-processing capacity.

The staging environment is used to test interfaces. In most cases, a realistic set of data is needed to properly exercise the interface solution. As production rollout approaches, this environment is used for final user verification.

Following production rollout, this environment becomes the pre-production environment—a full three-layer shadow of production that contains a relatively recent copy of production data. Here, new or modified components and configuration can undergo final user verification before migration into the production environment and copy-managed into the production secondary site (disaster recovery).

Production Environment

All customer activity takes place in the production environment—the environment in which the agency conducts its business. No testing is performed in this environment. Business objects run on the application servers. The e-Services web servers run on the production web servers. This environment has a separate database cluster that houses a reporting database, which is a copy of the application database. The reporting database is configured for reporting. Since this database server hardware is separate, there is no impact on other production users that are using the application database.

Control Environment

The Control Environment is the FAST Central Repository (FCR), which contains integrated FAST tools used to store, control, and track instances of software components/site-specific code developed solely for the agency's use. Each environment uses a separate data store and supports sharing the same hardware by virtualizing the servers.

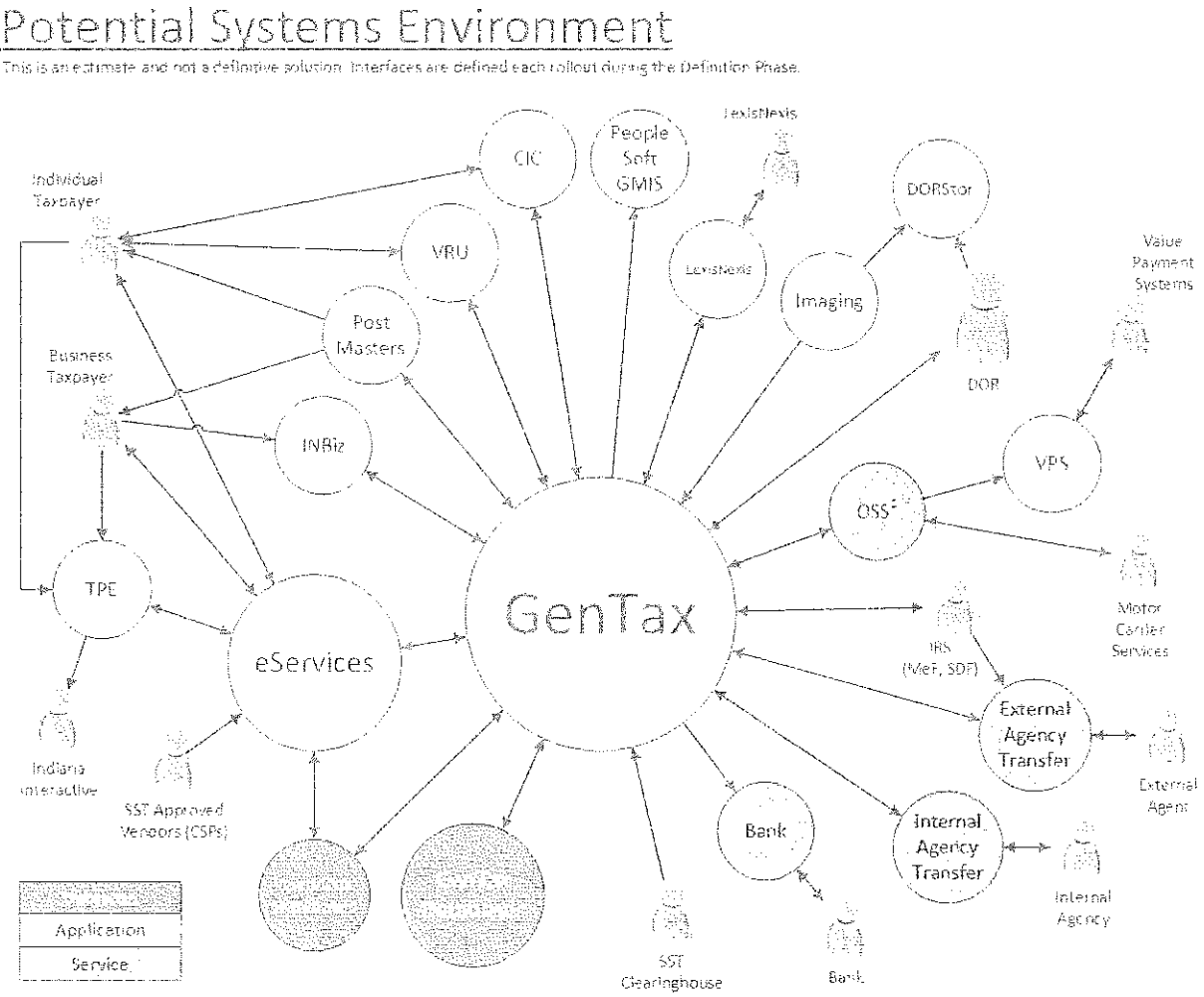
The GenTax Security subsystem defines and enforces application function security. Security tools and functions allow system/security administrators to define application security controls; maintain security groups; designate and protect "VIP" customer data; designate, track, summarize, and maintain user access and activities; and perform many other security-related activities. GenTax supports LDAP-based user authentication and internal user authentication. All network-transmitted data sent to, from, and through GenTax is protected through use of the following best-practice security designs and safeguards:

- GenTax uses industry-standard message specifications and formats for communications with external applications. Business services use standard parameters encoded in binary format.
- Windows Communication Foundation (WCF) message-level encryption algorithms can be enabled in accordance with agency security policies.
- GenTax encrypts the data in transit within an agency's network. Standard SSL/TLS encryption in the browser is used for messaging between client workstations and web servers.
- Message data is signed and encrypted using SSL/TLS for external communication or for internal WCF messages.
- Inbound messages are validated for allowable data to prevent compromising content. Message attachments are scanned at the server using standard server-based virus scanning software.
- Communication between the application and database servers is encrypted using SSL/TLS certificates.
- Data at rest within Microsoft SQL Server is encrypted using Transparent Database Encryption (TDE). TDE performs real-time I/O encryption and decryption of data and log files. Data at rest is encrypted by using AES and 3DES encryption algorithms. Encryption of the database file is

performed at the page level. The pages in an encrypted database are encrypted before they are written to disk and decrypted when read into memory. TDE does not increase the size of the encrypted database.

- Multi-factor authentication, when enabled for agency or e-Services users, requires users to enter their username, password, and a security code sent to them via email or text message. This approach provides the latest in security technology where a username and password alone is not enough to access the system. A user must "know something" and "have something" to log on.
- Agencies can enable field-level security by choosing configuration options that define when users can view or update specific fields on screens. This feature can be used to hide or disable editing of sensitive information (such as bank account details) from users who need access to a particular screen but have no business need to see or edit all of the available information.
- GenTax user sessions may be locked manually by users or automatically by the system after a defined period of inactivity. Once a user session is locked, no system information can be viewed and the user's credentials must be provided again to resume the session.

Following is a hypothetical diagram that displays the application layout proposed after implementation is complete.



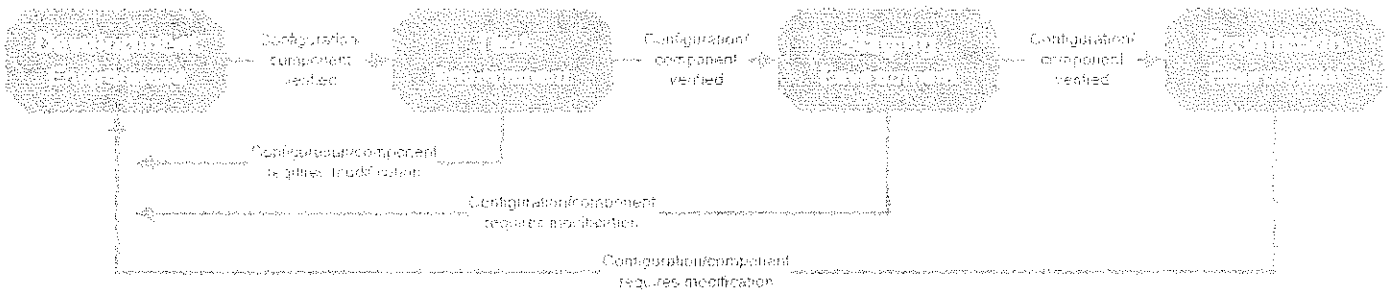
Implementation and Staging Approach

FAST uses a spiral model for software configuration during the implementation of GenTax. Project staff apply configurations (or develop site-specific components) in lower environments. These configurations and components are verified prior to their migration to higher environments. If a configuration or

component does not pass the verification process at any stage of the migration path, the component or configuration is returned to the development environment for modification. Once modified, the configuration or component begins reverification through each stage of the migration path. This method allows users to use multiple environments simultaneously. Reviews, documentation, confirmations, and other quality assurance tasks help to ensure the production environment is stable and operating as intended.

The following figure illustrates the migration path of configurations and components across the GenTax development, test, staging, and production environments.

Spiral Migration Path of GenTax Configurations and Components



Creating Migrations

Once unit testing at any step is completed, team members use GenTax tools to compare the configuration and modules found in the lower environment with the next higher environment. The result is a report that highlights the differences between the two environments. Effectively, it provides instructions on how to migrate the new functionality between the two environments.

1. Project personnel package this information into a migration request that describes the new functionality and specifies (1) the new or modified modules and (2) reference database changes required to affect the new functionality.
2. The migration requests go through an approval process. The project technical team then uses GenTax tools to apply the requested changes to the environment.
3. As configurations and modules are tested and verified in one environment, FAST uses the same migration request to replicate the changes in higher environments. This helps to reduce risk because the same instructions are used to migrate configurations and modules across all environments—from development to production.

Migration Requests

Project staff are responsible for ensuring that changes made to the development environment are successfully migrated to the testing and staging environments, and that testers have validated the changes. Team members are also responsible for ensuring that the approved changes resolve their respective issues and successfully migrate into the production environment. Migrations are processed through use of the GenTax Migration tool.

The GenTax Migration tool provides the project team with a submit-approve-complete process flow: a team member submits a request, a team manager approves the request, and the technical team runs processes that complete the request. Approval processes are configurable and based on the authority level of the requesting individual and the environment to which they are migrating. The GenTax Migration tool incorporates the following functions and features:

- Create a request to migrate specific versions of components (for example, DLL components and server objects) to specific environments
- Validate that the component is in the correct repository for migration and has correctly progressed through the lower environments
- Test reference table SQL migration scripts prior to submission of the request
- Search requests by destination, team member, or status
- Approve and change the status of request
- View, edit, and resubmit migration requests
- View and search the entire history of all migration requests

Configuration Control

Configuration control is accomplished through integrated solution-management tools which include, but are not limited to, the FAST Solution Manager tool, the FAST Central Repository, the FAST Workbench, and various configuration-comparison tools that are used to compare the solution configuration of two different environments, such as the development and testing environments. These tools are employed by management and team members alike, although different user groups use the tools in different ways and for different functionality.

Business Rules

GenTax Business Rules functionality provides the tools used to configure, maintain, and process the business rules that tailor GenTax to meet an agency's distinct business and operational requirements.

The integrated GenTax business rules engine (BRE) models business rules in a language that is clear and easy to understand. Business rule strings are formatted similar to Microsoft Excel functions; users that

are familiar with creating formulas in Microsoft Excel will easily understand business rule language. As business rules are created, business rule descriptions can be entered. The purpose of these descriptions is to clearly identify and explain the purpose of the individual business rules. GenTax Help features also provide organized documentation that references and explains business rule configurations.

Business rules are stored in database tables in the GenTax reference database and are managed and updated by project staff through use of the integrated Reference Table Editor tool. The editor provides business rule organization, predictive text for expediting rule creation, and testing facilities for rule validation. The tool also enforces referential integrity to ensure rule consistency by preventing many invalid entries.

The system is code-table driven and has many options for easily updating configuration, however not all changes to business rules can be accommodated with the same level of ease. Business rules are generally divided into two distinct categories.

The first category is business rules with a high degree of volatility and a well-defined path for change. These are usually maintained as "system values" in tables in GenTax. There is a set of simple screens in the application to allow users to update these configurations with an effective date applied.

The second category of business rules are those that have more profound impact to the overall system architecture. These types of changes use the GenTax integrated business rules engine. This type of change generally requires a coordinated effort between SMEs and IT due to modifications to existing interfaces between GenTax and external systems; business-process changes; new data to be captured; and new automated system actions.

The configured business rules drive the system much as programming code determined the actions of legacy systems. Changes to business rules, therefore, must be carried out in a controlled and disciplined fashion. This means, for example, following procedures for making changes in the development environment, promoting the changes to the test environment for integration and regression testing, and migrating the changes to the staging environment for acceptance testing before entering production. Integrated GenTax tools are designed to support these activities.

Project Activities, Phase Completion Dates, Resources, and Work Products

The following table outlines the proposed project activities, resources, phase completion dates, and standard work products for the RMITSS project. Due to the iterative nature of the project activities and the collaborative nature of our FAST Implementation Methodology, work in subsequent phases can

proceed even though a current phase is not 100% complete. For example, the project can proceed with configurations and site-code development even though all requirements may not have been fully identified and detailed. This is essential to our approach to providing on-time system delivery.

Proposed Project Activities, Resources, Phase Completion Dates, and Standard Work Products

Task Name	Staffing Resources	Completion Date and Standard Work Products
Rollout 1 (corporate taxes) – January 8, 2018 to December 10, 2018		
Preparation Phase		Fri 2/2/18
Establish Team Workspace/Workstations	Project Management (FAST & Agency)	• Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Confirm and Build Infrastructure	Technical Team (FAST & Agency)	
Prepare Project Plan	Project Management (FAST & Agency)	
Prepare Business Profiles	Agency SMEs	
Inventory Inputs & Outputs	Agency SMEs, Agency Developers	
Install GenTax Software	Technical Team (FAST & Agency)	
Conduct Project/Rollout Kick-Off Meeting	Project Management (FAST & Agency)	
Present GenTax Overview	Project Management (FAST & Agency)	
Create Environments	Technical Team (FAST & Agency)	
Definition Phase		Fri 2/16/18
Conduct Definition Meetings	Implementation Teams	• Business Requirements and Definition Items • Technical Architecture Plan • Technical Training Material • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	
Train Agency Developers	Technical Team (FAST & Agency)	
Base Configuration Phase		Fri 4/16/18
Scope Preliminary Configuration	FAST Functional Project Manager	• Preliminary Configuration and Verification • Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		Fri 8/24/18
Build & Test Letters/Correspondence	Implementation Teams	• Interface Design Documentation • Configurations • Site code • Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Prepare Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	
Conversion		Fri 12/7/18
Inventory Data Stores	Conversion Team (FAST & Agency)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Prepare Conversion Plan	FAST Conversion Manager	
Build/Test Conversion Extract Modules	Agency Conversion Team	
Build/Test Conversion Load Modules	FAST Conversion Team	
Perform Data Purification	Agency Conversion Team, Agency SMEs	

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task Name	Staffing Resources	Completion Date for Staffing / Work Products
Run Partial Mock Conversions	Conversion Team (FAST & Agency)	
Run Full Mock Conversions	Conversion Team (FAST & Agency)	
Testing Phase		Fri 12/7/18
Prepare Testing Plan	FAST Testing Manager	• Test Plan • Preliminary Test Scenarios • Tester Training Plan • Test Results
Prepare for Business Testing	Testing Team (FAST & Agency)	
Conduct Business Testing	Testing Team (FAST & Agency)	
Conduct Converted Data Testing	Conversion Team (FAST & Agency)	
Conduct Performance Testing	Technical Team (FAST & Agency)	
Conduct End-to-End Testing	Implementation Teams	
User Training Phase		Fri 12/7/18

Prepare Training Plan	FAST Training/Business Manager	• Training Plan
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 2
		  ○ Training Material – Tier 3
		• Training Results
		• User Documentation and Aids

Localize Training Materials	Training Team (FAST & Agency)	
Localize Online Help	Training Team (FAST & Agency)	
Train Trainers (Train-the-Trainer)	FAST Training Team	
Train Users	Agency Trainers	
Rollout Phase		Mon 12/10/18
Prepare Maintenance & Support Plan	FAST Project Director, FAST Functional Project Manager	• Operations and Support Plan (includes transition planning) • Production Cutover Checklists • Help Desk/Desk-Side Support Plan
Localize Operations Manual	Technical Team (FAST & Agency)	
Train Operators	Technical Team (FAST & Agency)	
Prepare Cutover Plan	FAST Project Director, FAST Functional Project Manager	
Prepare Help Desk & Desk-Side Support Plan	FAST Functional Project Manager	
Production Cutover	Project Team	
Production Rollout Day	Project Team	Dec. 10, 2018
Production Support Phase		Fri 12/28/18
Perform Desk-Side Support	Implementation Teams	• System Maintenance and Support Plan
Perform Operations Support	Technical Team (FAST & Agency)	
Rollout 2 (sales and withholding taxes) – December 10, 2018 to December 2, 2019		
Preparation Phase		Fri 12/28/18
Update Project Plan	Project Management (FAST & Agency)	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Prepare Business Profiles	Agency SMEs	
Inventory Inputs & Outputs	Agency SMEs, Agency Developers	
Conduct Rollout Kick-Off Meeting	Project Management (FAST & Agency)	
Present GenTax Overview	Project Management (FAST & Agency)	
Definition Phase		Fri 1/18/19
Conduct Definition Meetings	Implementation Teams	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task Name	Staffing Resources	Completion Date and Supporting Work Products
		Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material
Base Configuration Phase		Fri 3/22/19
Scope Preliminary Configuration	FAST Functional Project Manager	• Preliminary Configuration and Verification • Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		Fri 7/18/19
Build & Test Letters/Correspondence	Implementation Teams	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Update Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	
Conversion		Fri 11/29/19
Inventory Data Stores	Conversion Team (FAST & Agency)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Prepare Conversion Plan	FAST Conversion Manager	
Build/Test Conversion Extract Modules	Agency Conversion Team	
Build/Test Conversion Load Modules	FAST Conversion Team	
Perform Data Purification	Agency Conversion Team, Agency SMEs	
Run Partial Mock Conversions	Conversion Team (FAST & Agency)	
Run Full Mock Conversions	Conversion Team (FAST & Agency)	
Testing Phase		Fri 11/29/19
Prepare Testing Plan	FAST Testing Manager	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results
Prepare for Business Testing	Testing Team (FAST & Agency)	
Conduct Business Testing	Testing Team (FAST & Agency)	
Conduct Converted Data Testing	Conversion Team (FAST & Agency)	
Conduct Performance Testing	Technical Team (FAST & Agency)	
Conduct End-to-End Testing	Implementation Teams	
User Training Phase		Fri 11/29/19
Update Training Plan	FAST Training/Business Manager	Rollout-specific updates, as necessary, to: • Training Plan • Training Material ○ Training Material – Tier 2 • User Documentation and Aids New • Training Schedule (trainers) • Training Schedule (users) • Training Material
Localize Training Materials	Training Team (FAST & Agency)	
Localize Online Help	Training Team (FAST & Agency)	
Train Trainers (Train-the-Trainer)	FAST Training Team	
Train Users	Agency Trainers	

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task Outline	Staffing Resources	Completion Date and Deliverable Work Products
		○ Training Material – Tier 3 ▫ Training Results
Rollout Phase		Mon 12/2/19
Update Maintenance & Support Plan	FAST Project Director, FAST Functional Project Manager	▫ Production Cutover Checklists
Localize Operations Manual	Technical Team (FAST & Agency)	Rollout-specific updates, as necessary, to: ▫ Operations and Support Plan (includes transition planning) ▫ Help Desk/Desk-Side Support Plan
Train Operators	Technical Team (FAST & Agency)	
Prepare Cutover Plan	FAST Project Director, FAST Functional Project Manager	
Prepare Help Desk & Desk-Side Support Plan	FAST Functional Project Manager	
Production Cutover	Project Team	
Production Rollout Day	Project Team	Dec. 2, 2019
Production Support Phase		Fri 12/13/19
Perform Desk-Side Support	Implementation Teams	Rollout-specific updates, as necessary, to: ▫ System Maintenance and Support Plan
Perform Operations Support	Technical Team (FAST & Agency)	
Rollout 3 (Individual income tax, fiduciary taxes) – December 2, 2019 to December 7, 2020		
Preparation Phase		Fri 12/20/19
Update Project Plan	Project Management (FAST & Agency)	Rollout-specific updates, as necessary, to: ▫ Project Plan ▫ Resource Plan ▫ Communications Plan ▫ Hardware/Software Plan ▫ Risk Management Plan
Prepare Business Profiles	Agency SMEs	
Inventory Inputs & Outputs	Agency SMEs, Agency Developers	
Conduct Rollout Kick-Off Meeting	Project Management (FAST & Agency)	
Present GenTax Overview	Project Management (FAST & Agency)	
Definition Phase		Fri 1/17/20
Conduct Definition Meetings	Implementation Teams	▫ Business Requirements and Definition Items ▫ Interface Inventory ▫ Letters/Correspondence Inventory ▫ Reports Inventory Rollout-specific updates, as necessary, to: ▫ Technical Architecture Plan ▫ Technical Training Material
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	
Base Configuration Phase		Fri 3/13/20
Scope Preliminary Configuration	FAST Functional Project Manager	▫ Preliminary Configuration and Verification ▫ Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		Fri 6/19/20
Build & Test Letters/Correspondence	Implementation Teams	▫ Configurations ▫ Site code Rollout-specific updates, as necessary, to: ▫ Interface Design Documentation ▫ Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Update Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task/Phase	Staffing Resources	Completion Date and Significant Work Products
Conversion		Fri 12/4/20
Inventory Data Stores	Conversion Team (FAST & Agency)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Prepare Conversion Plan	FAST Conversion Manager	
Build/Test Conversion Extract Modules	Agency Conversion Team	
Build/Test Conversion Load Modules	FAST Conversion Team	
Perform Data Purification	Agency Conversion Team, Agency SMEs	
Run Partial Mock Conversions	Conversion Team (FAST & Agency)	
Run Full Mock Conversions	Conversion Team (FAST & Agency)	
Testing Phase		Fri 11/13/20
Prepare Testing Plan	FAST Testing Manager	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results
Prepare for Business Testing	Testing Team (FAST & Agency)	
Conduct Business Testing	Testing Team (FAST & Agency)	
Conduct Converted Data Testing	Conversion Team (FAST & Agency)	
Conduct Performance Testing	Technical Team (FAST & Agency)	
Conduct End-to-End Testing	Implementation Teams	
User Training Phase		Fri 11/13/20

Update Training Plan	FAST Training/Business Manager	Rollout-specific updates, as necessary, to:
		• Training Plan
		• Training Material
		  ○ Training Material – Tier 2
		• User Documentation and Aids
		New
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 3
		Training Results

Localize Training Materials	Training Team (FAST & Agency)	
Localize Online Help	Training Team (FAST & Agency)	
Train Trainers (Train-the-Trainer)	FAST Training Team	
Train Users	Agency Trainers	
Rollout Phase		Fri 12/7/20
Update Maintenance & Support Plan	FAST Project Director, FAST Functional Project Manager	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan
Localize Operations Manual	Technical Team (FAST & Agency)	
Train Operators	Technical Team (FAST & Agency)	
Prepare Cutover Plan	FAST Project Director, FAST Functional Project Manager	
Prepare Help Desk & Desk-Side Support Plan	FAST Functional Project Manager	
Production Cutover	Project Team	
Production Rollout Day	Project Team	December 7, 2020
Production Support Phase		Fri 12/18/20
Perform Desk-Side Support	Implementation Teams	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan
Perform Operations Support	Technical Team (FAST & Agency)	
Rollout 4 (special and miscallaneuos tax types) – December 7, 2020 to December 6, 2021		
Preparation Phase		Fri 12/25/20

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task Items	Staffing Resources	Completion Date and Deliverables/Work Products
Update Project Plan	Project Management (FAST & Agency)	Rollout-specific updates, as necessary, to: • Project Plan • Resource Plan • Communications Plan • Hardware/Software Plan • Risk Management Plan
Prepare Business Profiles	Agency SMEs	
Inventory Inputs & Outputs	Agency SMEs, Agency Developers	
Conduct Rollout Kick-Off Meeting	Project Management (FAST & Agency)	
Present GenTax Overview	Project Management (FAST & Agency)	
Definition Phase		Fri 1/15/21
Conduct Definition Meetings	Implementation Teams	• Business Requirements and Definition Items • Interface Inventory • Letters/Correspondence Inventory • Reports Inventory Rollout-specific updates, as necessary, to: • Technical Architecture Plan • Technical Training Material
Prepare Definition Items	Implementation Teams	
Review & Modify Definition Items	Implementation Teams	
Base Configuration Phase		Fri 4/9/21
Scope Preliminary Configuration	FAST Functional Project Manager	• Preliminary Configuration and Verification • Updated Definition Items
Conduct Preliminary Configuration	Implementation Teams	
Conduct Verification Sessions	Implementation Teams	
Update Definition Items	Implementation Teams	
Development Phase		Fri 7/30/21
Build & Test Letters/Correspondence	Implementation Teams	• Configurations • Site code Rollout-specific updates, as necessary, to: • Interface Design Documentation • Application Security Plan
Build & Test Reports	Implementation Teams	
Build & Test Interfaces	Implementation Teams	
Build & Test Additional Site Functions	Implementation Teams	
Update Security Plan	FAST Technical/Security Manager	
Review Implementation	FAST Functional Project Manager	
Conversion		Fri 12/3/21
Inventory Data Stores	Conversion Team (FAST & Agency)	• Data Conversion Plan • Conversion Purification/Cleansing • Conversion Verification • Conversion Reconciliation
Prepare Conversion Plan	FAST Conversion Manager	
Build/Test Conversion Extract Modules	Agency Conversion Team	
Build/Test Conversion Load Modules	FAST Conversion Team	
Perform Data Purification	Agency Conversion Team, Agency SMEs	
Run Partial Mock Conversions	Conversion Team (FAST & Agency)	
Run Full Mock Conversions	Conversion Team (FAST & Agency)	
Testing Phase		Fri 10/1/21
Prepare Testing Plan	FAST Testing Manager	Rollout-specific updates, as necessary, to: • Test Plan New • Preliminary Test Scenarios • Tester Training Plan • Test Results
Prepare for Business Testing	Testing Team (FAST & Agency)	
Conduct Business Testing	Testing Team (FAST & Agency)	
Conduct Converted Data Testing	Conversion Team (FAST & Agency)	
Conduct Performance Testing	Technical Team (FAST & Agency)	
Conduct End-to-End Testing	Implementation Teams	

ATTACHMENT G1 IMPLEMENTATION PROPOSAL – APPROACH DEFINITION

Task/Phase	Staffing Resources	Completion Criteria/Deliverables/Work Products
User Training Phase		Fri 10/29/21

Update Training Plan	FAST Training/Business Manager	Rollout-specific updates, as necessary, to:
		• Training Plan
		• Training Material
		  ○ Training Material – Tier 2
		• User Documentation and Aids
		New
		• Training Schedule (trainers)
		• Training Schedule (users)
		• Training Material
		  ○ Training Material – Tier 3
		Training Results

Localize Training Materials	Training Team (FAST & Agency)	
Localize Online Help	Training Team (FAST & Agency)	
Train Trainers (Train-the-Trainer)	FAST Training Team	
Train Users	Agency Trainers	
Rollout Phase		Mon 12/6/21
Update Maintenance & Support Plan	FAST Project Director, FAST Functional Project Manager	• Production Cutover Checklists Rollout-specific updates, as necessary, to: • Operations and Support Plan (includes transition planning) • Help Desk/Desk-Side Support Plan
Localize Operations Manual	Technical Team (FAST & Agency)	
Train Operators	Technical Team (FAST & Agency)	
Prepare Cutover Plan	FAST Project Director, FAST Functional Project Manager	
Prepare Help Desk & Desk-Side Support Plan	FAST Functional Project Manager	
Production Cutover	Project Team	
Production Rollout Day	Project Team	December 6, 2021
Production Support Phase		Fri 12/20/21
Perform Desk-Side Support	Implementation Teams	Rollout-specific updates, as necessary, to: • System Maintenance and Support Plan
Perform Operations Support	Technical Team (FAST & Agency)	

Interface Approach

As integrated COTS software built on a single database platform, GenTax eliminates data redundancy and the need for internal interfaces between core tax, license, permit, endorsement, and registration functions and support processes (such as accounting, audit, correspondence, imaging, and workflow). While some third-party applications are necessary in GenTax for infrastructure management (such as Windows Server software), development of site-specific components (Visual Studio), and the creation of training materials and interactive simulations, the core tax and revenue administration functions are handled solely by GenTax.

Full integration of all key tax and revenue functions results in streamlined interface between GenTax processes, data, and agency-support systems. Hundreds of interfaces are currently in production for our clients, including interfaces to existing remittance processing, web filing, electronic data interchange, electronic funds transfer, online payment, interactive voice response, banking, data-capture, financial-management/general ledger, and many local, state, and federal systems. FAST also retains a large

inventory of standard interfaces, such as interfaces for Modernized e-File (MeF) and the Treasury Offset Program (TOP), that can be implemented with less effort than is required for developing custom interfaces.

Imaging is considered in scope in our response. From a development and integration standpoint, interfaces can be built to connect to imaging systems; however the user experience tends to be less than optimal because they are still accessing multiple systems. GenTax allows for side by side document/image comparisons within the built-in imaging solution.

The following table provides a sample of some of the more common interfaces that are in production in GenTax for many of our client agencies.

Common Interfaces in Production in GenTax for Multiple Client Agencies

Interface	Client Agencies in Production
• Treasury Offset Program: 15+ agencies • Debit/Credit Card Processors: 20+ agencies • State-to-State Offset Transfers: 5+ agencies Law Enforcement networks: 5+ agencies • Secretary of State Agencies: 10+ agencies • Departments of Motor Vehicles: 10+ agencies • Human Services Agencies: 10+ agencies • Internal Revenue Service (IRS): 20+ agencies • Scanning (checks, returns): 20+ agencies	• Phone/ACD/IVR: 10+ agencies • Outside Collection Agencies: 15+ agencies • Electronic Funds Transfer: 15+ agencies • Banks (ACH, direct debit) : 25+ agencies • State Financial Accounting Systems: 20+ agencies • Third-Party Imaging Systems: 10+ agencies • U.S. Treasury: 5+ agencies • Social Security Information: 5+ agencies • Check Processors: 15+ agencies • Various Offset Programs: 15+ agencies

For jurisdiction-specific interfaces, GenTax has a number of tools and standard configurations that can be deployed to implement multiple interfaces for a wide array of transfer protocols and data formats. For example, a web service can be created in little time using a native GenTax tool. remote files can be fetched and distributed via configurable FTP tools, and ODBC connections can be configured for both inbound and outbound data. These tools are typically employed during the Development Phase when the in-scope interfaces are configured or developed. Options available for real-time and scheduled interfaces are typically driven more by the policies, restrictions, and/or limitations of the externally interfaced entities than by GenTax. Our software can process data exchanges through either of these options based on agency needs/preferences and the frequency of data updates by the interfaced systems.

GenTax can consume and expose web services for exchanging data, and supports service-oriented architecture (SOA) via web services and external interfaces such as:

- XML
- SOAP 1.1 or 1.2
- .NET 3.0 Windows Communication Foundation (WCF)
- OASIS WS-Security standards
- Compatible with Universal Description, Discovery and Integration (UDDI)
- Representational State Transfer (REST)

The FAST API Gateway is a full-service integration layer that is loosely coupled with GenTax to provide robust services for integration with other internal and external applications. Data exchanges with external systems are funneled through the system transparently and are presented to users within the GenTax user interface—meaning most users do not realize that they are accessing an external system.

The FAST Gateway provides a central point for outside agencies and external systems to access publicly-offered agency web services (incoming). The FAST Gateway also provides the communication mechanism for the FAST application to interface with external web services (outgoing). The FAST Gateway is designed with Enterprise Service Bus (ESB) and Service-Oriented Architecture (SOA) principles to promote agility and flexibility with regards to communication between applications. The FAST Gateway is a required layer as it is directly integrated with the FAST application and is required even if additional layers are present, such as an ESB. FAST recommends utilizing the FAST Gateway without introducing additional layers due to the resulting additional complexity, configuration, maintenance, overhead, and costs incurred.

Key features of the FAST Gateway include, but are not limited to:

- User interface for FAST Gateway configuration management
- User interface for certificate management, including functionality to:
    - Load certificates
    - Perform other management functions, such as managing certificate expirations
- User interface for credential management, including functionality for:
    - Account provisioning
    - Account authorization
    - Certificate association
- The ability to add documentation to FAST Gateway services including:

- Customizable attribute documents
- Attachments
- Notes
- History records for all changes, with audit trails

* Notifications for certificate and credential expiration
* User interface for service definition, including options to configure:
  - Authentication requirements
  - Access authorization
  - Endpoints/Uniform Resource Locators (URLs)
  - The type of service supported. The following types are used:
    * Representational State Transfer (REST)
    * Simple Object Access Protocol (SOAP) with standard feature support -- for example, Web Service Definition Language (WSDL)
* Data transformation support
  - Extensible Markup Language (XML) schema validation and manipulation
* Throttling and session limiting
* Message size validation
* Logging of certain data elements whenever message requests are executed. These logs include the following elements:
  - Function
  - Endpoint
  - Credential
  - Server
  - Errors
* Reporting mechanisms across all data elements via basic lists and three-dimensional interactive data cubes

Features added by the inter-application module include:

* Additional authorization check based on the calling system and function being requested
* Session management
  - Public key exchange for message decryptions

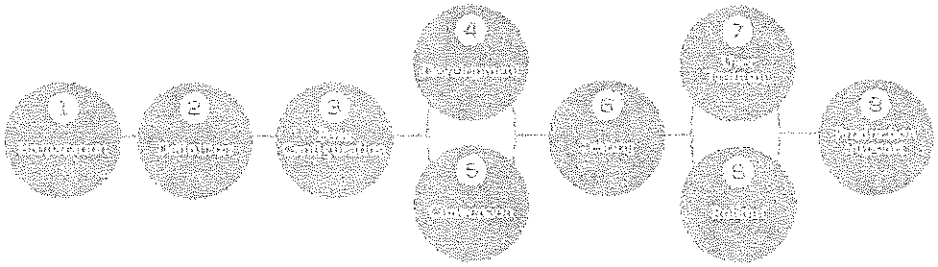
o Callback functionality: As new sessions are established; the receiving system makes a call back to a predefined sender URL to confirm the request was submitted by the sender

New or custom interfaces are documented during the project through the development of an interface-design document. This document specifies information such as interface purpose, direction, frequency,

business contact, technical contact, and formats/layouts. Timely development of these interfaces is managed in coordination with an agency project manager and technical staff and will be evaluated based on business impact, risk, and available resources.

The following table identifies the project phases in which key interface activities occur as part of our FAST Implementation Methodology (illustrated in the following graphic).

FAST Implementation Methodology



Interface Implementation Activities by FAST Implementation Methodology Phase

Interface Activity	Phase	Description
Analysis	Definition Phase	A work item that serves as an inventory of inputs and outputs is created during the Preparation Phase to list the interfaces necessary for an agency's business line(s). Required interfaces are prioritized as pre-existing interfaces and temporary interfaces needed between GenTax and legacy systems during the course of the implementation.
Design	Base Configuration Phase	Interfaces are documented as part of the definition items created during the project's Base Configuration Phase. Definition items provide high-level details for how GenTax will be implemented to meet the agency's business requirements. Definition items for a major functional area typically include interfaces to be implemented, including purpose (usage context), and conceptual approach.
Development	Development Phase	During the Development Phase, FAST performs the configuration and development needed to implement and unit test the in-scope interfaces. The definition items identified and prepared in the Base Configuration Phase identify each interface, the data required, the interfacing organization, and other key factors. Once finalized

Definition Activity	Phase	Description
		during this stage, the definition items become the primary driver of the work done by the project team. We expect to evaluate the required interfaces during the Development Phase and to choose an appropriate approach given the source, platform, and volume of data. New or custom interfaces are documented during the project through the development of an interface-design document. This document specifies information such as interface purpose, direction, frequency, business contact, technical contact, and formats/layouts. Timely development of these interfaces is managed in coordination with an agency project manager and technical staff.
Testing	Testing Phase	FAST works closely with the agency and external organizations to ensure the full participation of the agency's external interfaces in the testing process. Payment information and transmitted interface files are examples of incoming electronic files that will feed into the system. Samples of these files are used to test the solution. Typically, testing starts with data in small volumes then uses progressively larger volumes of data as testing progresses.
Production Rollout	Rollout Phase	Preparations for the rollout are captured in a series of cutover checklists during the Rollout Phase. Cutover checklists provide a list of interrelated steps and activities (including those for interfaces) that must be coordinated to ensure a smooth and successful rollout. Examples include which systems to shut down and when shutdown should take place, which batch jobs to run or cancel, and which external interfaces to redirect. The final data conversion is run and reconciled. A high-level checklist is prepared to communicate the general schedule to agency personnel. A detailed, step-by-step checklist is prepared for the project team to follow for ensuring successful transition to production.

GenTax provides core functionality for interface processing. A given interface may have separate modules for validation, reformatting/transformation, loading, as well as associated security. Every time

an interface is executed in GenTax it is logged.

All interface code and configuration is managed and versioned in the Fast Central Repository. The Fast Central Repository is the primary repository for all GenTax code and site-specific configurations, table definitions, and document source code that is designed specifically for an agency. The Fast Central Repository is used to:

- Search for code, database schemas, solutions, and Business Rules Documents (BRDs). BRDs store configurable business rules and are the chief mechanism used for configuring most aspects of GenTax, including the user interface, forms, and cases.
- View database schemas.
- Check in and check out source code, database schemas, and BRDs for modifications.
- Retrieve and compare different source code and BRD versions.

We expect to evaluate required interfaces and choose an appropriate approach for each one given the source, platform, and volume of the data. Sensible design is critical to the successful interface implementation. In general, inbound data files are loaded into our software tables with almost no processing. If control totals are available, they will be verified. Also, a check can be performed to ensure the inbound data file has not already been processed. Once the data is loaded, individual rows are selected for validation and posting. This approach ensures that valid records are processed completely while problem records can be brought to a user's attention with a work item.

Outbound interfaces may be simplified by creating tables in our software that mirror as closely as possible the data that must be exported. In this way the difficult work is isolated in a program that can be restarted in the event of a failure and can naturally take advantage of database commits and rollbacks. The export process itself becomes trivial.

Once the interface programs are coded, they must be tested thoroughly to ensure that they operate properly. Testing will occur at the unit level, at the system level, and then at the end-to-end level. A few interfaces, by their nature, may also require performance testing.

We expect that DOR will take responsibility for establishing the agreements and arrangements with external sources and for defining the data needs. We will take the lead in building interfaces based on the definitions provided. The interfaces are built jointly to ensure knowledge transfer and to enable the agency to perform future support. For internal interfaces, we assume that DOR will take the lead in making the modifications needed to redirect the interfaces to GenTax.

During the Definition Phase of each rollout, interfaces will be discussed in detail. Existing interfaces and new opportunities will be vetted, including opportunities to interface with the current TransCentra and DORStor systems. If those systems support the scanning and transmission of images to GenTax for checks, money orders, or other physical forms of payment, users can view images of these payments side-by-side in GenTax with associated payment transactions and account details. Suspended or misapplied payments are resolved using GenTax functions that allow users to correct, resubmit, or transfer payments. If available, images of taxpayer registration forms, returns or other taxpayer correspondence may also be viewed side-by-side with those items in GenTax.

The GenTax Document Management subsystem provides integrated functions for managing image files that are input in GenTax through an agency's third-party scanning and imaging systems. It provides multiple capabilities for integrated digital-document imaging and is compatible with industry standard formats such as TIFF, Bitmap (BMP), PCX, DCX, JPEG (JPG), PDF, and XIF, and supports online and batch image processing. Images can be indexed by customer, account, period, return, payment, collection case, audit, registration, appeals, and more. If indexing information is not provided by the scanning system, a work item can be generated to prompt a user to manually index the image online.

Functions of the Document Management subsystem include automatic indexing, manual indexing, establishing pre-defined zoom regions, zooming images manually, annotating all or a portion of images, printing images, key-from-image data entry, creating image-based workflow, and displaying images side-by-side in the same window with returns, payments, and registration forms.

Built-in Interfaces

Interfaces with external systems that are common to many tax administration agencies are maintained as part of the core GenTax software. Built-in interfaces currently available in GenTax are listed below:

- Streamlined Sales Tax (SST) – Registration, return filings, and payments through integration with the standards defined by the Streamlined Sales Tax Governing Board.
- Electronic Bankruptcy Noticing (EBN) – Bankruptcy filings and updates through integration with U.S. Bankruptcy Courts.
- Modernized e-File (MeF) – Return filings through integration with the Internal Revenue Service.
- Automated Clearing House (ACH) – Payments through integration with an agency's bank.
- Treasury Offset Program (TOP) – Offset of taxpayers' federal refunds through integration with the Bureau of the Fiscal Service.

- State Income Tax Levy Program (SITLP) – Offset of taxpayers' state refunds through integration with the Internal Revenue Service.
- International Fuel Tax Agreement (IFTA) – Interstate commercial vehicle licensing, reporting, filing, auditing, and funds transmittal functions through integration with the IFTA Clearinghouse.
- International Registration Plan (IRP) – Commercial vehicle registration through integration with the IRP Clearinghouse.
- Google Maps – Graphical depiction of GenTax data as geographic points on a Google map.
- Public Records Data – Third-party data to support agency compliance efforts.

Per the requirements listed in section 9 of Attachment F1, the following interfaces are built-in to the core GenTax application:

- 9.012 NACHA Bank File Interface (Bank EFT)
- 9.021 ITS Application PostMasters File (Correspondence Letter)
- 9.037 IRS Modernized eFile (Electronic Returns Download & Filings)
- 9.038 IRS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)
- 9.039 RS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)
- 9.040 Imaging ITS Database XML File
  Note: Core business rules tables are available for XML file uploads. Configuration is needed to match specific schemas.
- 9.041 Imaging ITS Database ASCII File
  Note: Core business rules tables are available for ASCII file uploads. Configuration is needed to match specific file formats.
- 9.051 External Agency File (Informatix Bank Account Request)
- 9.052 External Agency File (Informatix Bank Account Data)
- 9.054 The Vendor system shall interface with an Address Validation (NCOA) provider
- 9.056 External Agency File (Federal Court System)
- 9.057 External Agency File (IRS - Federal Offset Levy - Candidates)
- 9.058 External Agency File (IRS - Federal Offset Levy - Refunds)
- 9.059 External Agency File (IRS - Federal Offset Levies Confirmation)
- 9.060 External Agency File (IRS - Federal Offset Levies Acknowledgement)
- 9.061 External Agency File (IRS - State Offset Request - FMS/TOP program)
- 9.062 External Agency File (IRS - Federal Offset Reply - Unprocessable)
- 9.063 External Agency File (IRS - Federal Offset Reply - Payments/Reversal)
- 9.136 Streamlined Sales Tax Registration Clearinghouse
- 9.137 Streamlined Sales Tax Returns/Payments

- 9.138 ITS Taxpayer Portal - Business Taxpayers
- 9.139 ITS Taxpayer Portal - Individual Taxpayers
- 9.140 The Vendor system shall use the state's preferred Credit/Debit Payment Processor for collecting payments made by credit/debit card.

  Note: Debit card processing included in core product, custom interface required for credit card processing.
- 9.141 ITS Tax payment Portal - VPS Payment and Payment Rejection

  Note: Debit card processing included in core product, custom interface required for credit card processing.
- 9.143 VPS Payment Files (RPE)
- 9.144 Bank Payment Files

Custom Interfaces

During the Definition Phase of each rollout, interfaces will be discussed in detail. Existing interfaces and new opportunities will be vetted, resulting in the creation Interface Design Documents (IDDs) for the interfaces in scope for the rollout. The IDDs identify the type, format, data required, schemas, interfacing organization(s), and other key information required to configure and support the interface.

Examples of common GenTax interfaces, include:

- Address verification and mail services
- Automatic call distribution (ACD)/interactive voice response (IVR)
- Banks (ACH, direct debit)
- Check processors
- Credit-card processing
- Electronic Funds Transfer
- Federal government (Treasury Offset Program, Modernized e-File, SSA Death Master
- Index, and many more)
- Front-end imaging/scanning (checks, returns)
- Geographic information systems (GIS)
- International Fuel Tax Agreement (IFTA) clearinghouse
- International Registration Plan (IRP) clearinghouse
- Third-party collection services
- State agencies (secretaries of state, labor departments, health and human services
- departments, motor vehicle departments, liquor control divisions, and so on)

- State financial accounting and general ledger systems
- State-to-State offset transfers

A subset of the custom interfaces may be configured using the Business Rules Engine while others will require programming of a business object. Interfaces that are common at multiple tax agencies have built-in configuration options. Site-specific business objects will plug-in to GenTax for less common custom interfaces.

Technical Preparation and System Turnover

Rollout preparations are captured in a series of cutover checklists. Cutover checklists provide a list of interrelated steps and activities that must be coordinated to ensure a smooth and successful rollout, such as which systems to shut down and when shut down should take place, which batch jobs to run or cancel, and which external interfaces to redirect. The final data conversion run and reconciliation steps are also included as part of the checklists, as are readiness-assessment steps and go/no-go checkpoints.

A high-level checklist is developed to communicate the schedule to agency personnel. A more detailed, step-by-step checklist is created for the project team. A checklist-specific communication plan is also developed to keep all project team members, management, and other stakeholders aware of progress as the project moves toward final production cutover.

In addition, a contingency plan based on industry best practices will be developed as part of the project risk plan managed within GenTax. The following narrative describes FAST's general practices for contingency planning and system turnover.

The GenTax production environment is comprised of software components, configuration settings, and data, all of which are entries stored in various GenTax databases. Should the transition effort for any element of a new environment begin to fail, the project team will assess the cause and estimate the effort to correct the failure. Two options will be considered.

- Suspend processing, fix the problem, and resume processing. The interruption may require that a data fix be applied if any flaws were introduced. If the duration in which processing is suspended reaches critical point, it might prompt the agency to invoke certain business continuity measures.
- Restore all GenTax databases to the most recent backup point in which the system was known to be without defect. This option can cause the loss of any data changes made since the backup was taken.

Once the impact of the failure is fully understood, the project team recommends a course of action to the agency's senior business leaders for their approval. Since either option could affect the agency's business operations, business leaders should authorize the option to be taken.

To reduce the possibility of system failures, we employ numerous preventative practices. We have a well-defined and highly secure software migration mechanism. This established process relies on integrated tools to request, evaluate, test, approve, execute, and confirm the promotion of software components and configuration from one environment to another. The tool isolates which software elements will be promoted so that only those components are included in the migration request. The tool also documents the entire record of the requests.

We employ a ladder of environments through which software components and configurations must pass. Software is never migrated directly to the production environment. All changes must migrate from the development environment through the testing and staging environments before the migration tool will permit promotion to production. Since the staging environment is a close parallel of the software and data in production at any one time, migration to staging serves the purpose of confirming the migration request and surfacing any potential flaws, allowing correction of any issues that may arise. The technical architecture of the production environment does not contain any single points of failure. All servers, services, and components in the GenTax production environment are configured in a redundant manner so that a failure in any one component is extremely unlikely to result in unplanned downtime.

The project team will collaborate with data-center-operations staff to establish an appropriate program of regular, frequent, and automated database backups. Together, the two groups will identify how the backup media will be securely stored.

During cutover, the project team executes a well-planned and thoroughly rehearsed sequence of automated scripts to move software into production. Cutover activities are tested numerous times throughout the final weeks of each rollout, looking for flaws in the transition and optimizing the procedures to be taken. By the time of actual system cutover, the team will have gone through all tasks several times. Should an unforeseen event occur during the actual cutover, the project team will resolve the problem with the goal of moving forward. Abandoning the cutover and returning to the legacy application should not be considered.

Implementation Proposal

RFP 17-082 Attachment G3 - Staffing Plan Template

Instructions for this Workbook

Staffing Plan Template Instructions
Staffing estimates must include all hours expected from all sources including the Vendor, DOR, Vendor-Partners and Third-Parties.
This Staffing Plan Template must include all hours for non-infrastructure and non-hardware related activities required to fully impleme the proposal.
Additional information can be provided beyond what is included in the Staffing Plan Template. The additional information must be ref "Additional Information" worksheets.
All information in this Staffing Plan Template should be consistent with the strategy and approach described in the proposal including
DOR reserves the right to contact Vendors on staffing information for clarification at any time throughout the selection process and ne
Do NOT use "To Be Determined" or similar annotations in the Staffing Plan Template worksheets. DOR is asking for staffing hours resource teams with the understanding that assumptions may apply. Such assumptions should be stated in the "Assumptions" worksh
All worksheets in the Staffing Plan Template should be thoroughly and accurately completed.
Staffing Plan Template Formatting Information
The light blue shaded cells indicate information Vendors are expected to provide (i.e. Staffing Summary Worksheet, Cell A6).
All red text shown in light blue shaded cells represent SAMPLES and/or EXAMPLES (i.e. Staffing Summary Worksheet, Cell A6). The se examples should be replaced or removed in the submitted Cost Proposal.
Where needed, major column and row headings in each worksheet have comments defining the required information.
The description cells in the "Additional Information" and "Assumptions" worksheets should be limited to 300 words.
Staffing information must be in hours, rounded to the nearest whole hour.
We have included some formulas, however, it is the Vendor's responsibility to ensure the accuracy of all cells

As a guideline, there should be no less than six Major Activities for each phase.

Vendor, Vendor-Partner and Third Party Definitions and Instructions
Where staffing estimates refer to Vendor vs Vendor-Partner vs Third-Party:
Vendor staffing is defined as:
Staffing for Vendor resources that are solely the responsibility of the Vendor, are fully managed by the Vendor, are committed in the V contracted through the Vendor.
Vendor-Partner staffing is defined as:
be contracted through the Vendor. All partners providing resources, including Women, Minority and Veteran Owned business partne Partners.
Third-Party staffing is defined as:
Staffing for Third-Party resources that are not the responsibility of the Vendor, may NOT be fully managed by the Vendor, are included estimates only and will be contracted by DOR directly with the Third-Party.
All staffing in this Staffing Plan Template for Vendors , Vendor-Partners or Third-Parties must be included in their respective spreadshe
All Vendor-Partners and Third-Parties must be thoroughly defined in this Staffing Plan Template and must be included in the appropria
DOR strongly prefers to have very few, if any, Third-Party products or services!

Brief Staffing Plan Template Worksheet Descriptions
Staffing Summary - A phase-by-phase, month-by-month summary of staffing, for each resource team, required to fully implement the implementation phases must be consistent with those described throughout your proposal including Attachments D, G1 and G3.
DOR Staffing - A monthly detail of required Department of Revenue staffing by phase, by activity and by role.
Vendor Staffing - A monthly detail of required Vendor staffing by phase, by activity and by role.
Vendor-Partner Staffing - A monthly detail of required Vendor-Partner staffing by phase, by Vendor-Partner, by activity and by role.
Third-Party Staffing - A monthly detail of required Third-Party staffing by phase, by Third-Party, by activity and by role.
Additional Information - A brief description and reference to additional staffing related information.
Assumptions - A brief description of the assumptions for the information in this Staffing Proposal.

Rules and Guidelines For Activities
The following are Activities that must be included in a phase if appropriate for that phase. Additional Activities can be included by the
Executive Oversight and Governance - Executive support for project oversight and governance activities
Project and Change Management - Project and change management to ensure the project stays on target, on time and on budget
Organizational Change Management Support - Support for a reasonable OCM effort for a state revenue function similar to DOR
IV&V Support - Support for a reasonable IV&V effort for a state revenue function similar to DOR
System Initiation and Setup - Setup of the base system to accommodate the implementation process
Project Planning & Design - Planning and design required at project launch and potentially for each phase in order to define the scope,
Configuration - Setup of system configurations to the base system that are required to meet DOR requirements

Customization - Development of technology enhancements or extensions required to meet DOR requirements that cannot be configu
Integration and Interfacing - Development of integration and interfaces
Testing - Includes all aspects of testing including unit, business, performance, conversion and security testing.
Technical Training - Training for DOR technical resources
Business Training - Training for the DOR functional business areas
Data Conversion - Includes data preparation, cleansing and conversion. A separate conversion activity should be included for each tes
Infrastructure Installation and Support - Installation and maintenance of the technical infrastructure including servers, networks, stora
Go-Live / Rollout - Cutover to production
Vendors should also include any other major activity that requires more than 40 hours per month of resource dedication.
Vendors may include an Activity labeled "Other" in each phase, however, the total hours in the "Other" Activity cannot be more than 7 for that phase.

Roles and Guidelines For Roles
The following are the required roles to be assigned for Vendor, Vendor-Partner and Third-Party staffing. Additional Roles can be inclu
Executive Leadership - Executive leadership required for oversight, governance and other activities
Tax Project Leader - Project Managers with more than 5 years of project leadership experience and full Vendor tax system implementa
Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) previous full Vendor experience
Project Manager - Project Managers with less than 5 years of project management experience and no previous full Vendor tax system
Tax Technology Architect - Technology Professionals with more than 5 years of Vendor tax technology experience with the Vendor tax system implementation experience
Technology Resource - Technology Professionals with less than 5 years of Vendor tax system technology experience
Tax Configuration Expert - Configuration Professionals with more than 5 years of Vendor tax system configuration experience
Configuration Resource - Configuration Professionals with less than 5 years of Vendor tax system configuration experience
Sr. Tax Test Lead - Testing Professionals with more than 5 years of Vendor tax system testing experience
Tester - Testing Professionals with less than 5 years of Vendor tax system testing experience
Sr. Tax Training Lead - Training Professionals with more than 5 years of Vendor tax system training experience
Trainer - Training Professionals with less than 5 years of Vendor tax system training experience
The following are the required roles to be assigned for DOR staffing. Additional Roles can be included by the Respondent.
Executive Leadership - Executive leadership required for oversight, governance and other activities
Tax Project Leader - Project Managers with more than 5 years of DOR project management experience
Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) more than 5 years o management experience
Project Manager - Project Managers with less than 5 years of project management experience and less than 5 years of previous full DO management experience

Tax Technology Architect - Technology Professionals with more than 5 years of DOR tax technology experience
Technology Resource - Technology Professionals with less than 5 years of DOR technology implementation experience
Business Expert - DOR professionals who have broad understanding of DOR business processes across all tax types
Correspondence Design Experts - DOR professionals who have the ability to create clear, effective, professional business documents, c correspondence that is in accordance with DOR policy
Sr. Business Analysts - DOR professionals with more than 3 years of DOR business analyst experience and required skills to configure b
Configuration Specialists - DOR professionals who have a advanced understanding of DOR process and business rules that would enab activities.
SME - DOR business specialists across all ten business processes
Sr. Tax Test Lead - DOR professionals with more than 3 years of DOR tax experience
Tax Tester - Professional testers with less than 3 years of DOR tax experience
Tax Training Lead - DOR professionals with more than 3 years of DOR tax experience
Trainer - Professional trainers with less than 3 years of DOR tax experience
Vendors should also include any other major role that is necessary for DOR to understand the staffing requirements and expectations

Attachment 6B

Estimated Total Project Implementation Staffing

Date For Month 1-4 1/8/2018

Resource Team Hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
DGR Hours																		
Phase 1	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	1213	1213	1213	1213	1213	1213
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Hours																		
Phase 1	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	4125	4125	4125	4125	4125	4125
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner Hours																		
Phase 1	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Third-Party Hours																		
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hours																		
Phase 1	6028	6028	6028	6028	6028	6028	6548	7935	9668	9668	9668	8975	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	6028	6028	6028	6028	6028	6028
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month

24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1213	1213	1213	1213	1213	1213	1733	312
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	3014	3014	3014	3014	3014	3014	3014	501
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690	690	690
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8975	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	6399	6399	6399	6399	6399	6399	6919	8305	10039	10039	10039	9345	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	4917	4917	4917	4917	4917	4917	5437	682
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment C3

Estimated DOR Implementation Staffing Levels

	Payment Trigger ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mo
PHASE 1 Activities & Roles															
Project Management															
Project Management		347	347	347	347	347	347	347	347	347	347	347	347		
Development															
Business Analysts		520	520	520	520	520	520	520	520	520	520	520			
IT Resources		347	347	347	347	347	347	347	347	347	347	347			
Testing															
Business Analysts									347	347	347	347			
Testers									1040	1040	1040	1040			
Conversion															
Business Analysts								173	173	173	173	173	173		
IT Resources								347	347	347	347	347	347		
Training															
Trainers										1733	1733	1733	1733		
Production Cutover															
Business Analysts													867		
IT Resources													693		
Total Phase 1 Hours		1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	
PHASE 2 Activities & Roles															
Project Management															
Project Management														347	3
Development															
Business Analysts														520	5
IT Resources														347	3
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 2 Hours		0	0	0	0	0	0	0	0	0	0	0	0	1213	1
PHASE 3 Activities & Roles															
Project Management															
Project Management															
Development															

	Payment Trigger ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mo
Business Analysts															
IT Resources															
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 3 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 4 Activities & Roles															
Project Management															
Project Management															
Development															
Business Analysts															
IT Resources															
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 4 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 5 Activities & Roles															
Total Phase 5 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	

Totals By Phase		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mo
Phase 1														0	
Phase 2		0	0	0	0	0	0	0	0	0	0	0	0		
Phase 3		0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 4		0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 5		0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mont 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
347	347	347	347	347	347													
520	520	520	520	520														
347	347	347	347	347														
	347	347	347	347														
	1040	1040	1040	1040														
173	173	173	173	173	173													
347	347	347	347	347	347													
		1733	1733	1733	1733													
					867													
					693													
1733	3120	4853	4853	4853	4160	0	0	0	0	0	0	0	0	0	0	0	0	0
						347	347	347	347	347	347	347	347	347	347	347	347	

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mon 37
						520	520	520	520	520	520	520	520	520	520	520		
						347	347	347	347	347	347	347	347	347	347	347		
													347	347	347	347		
													1040	1040	1040	1040		
												173	173	173	173	173	173	
												347	347	347	347	347	347	
														1733	1733	1733	1733	
																	867	
																	693	
0	0	0	0	0	0	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0
																		347
																		520
																		347
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1213
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mon 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0													0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
347	347	347	347	347	347	347
520	520	520	520	520	520	
347	347	347	347	347	347	
		347	347	347	347	
		1040	1040	1040	1040	
	173	173	173	173	173	173
	347	347	347	347	347	347
			1733	1733	1733	1733
						867
						693
1213	1733	3120	4853	4853	4853	4160
0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Attachment G3

Estimated Vendor Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo
PHASE 1 Activities & Roles																
Project Management																
Project Management	412	412	412	412	412	412	412	412	412	412	412	412				
Development																
Team Leaders	408	408	408	408	408	408	408	408	408	408	408	408				
Implementation Consultants	829	829	829	829	829	829	829	829	829	829	829	829				
Testing																
Team Leaders	272	272	272	272	272	272	272	272	272	272	272	272				
Implementation Consultants	553	553	553	553	553	553	553	553	553	553	553	553				
Conversion																
Team Leaders	204	204	204	204	204	204	204	204	204	204	204	204				
Implementation Consultants	415	415	415	415	415	415	415	415	415	415	415	415				
Training																
Team Leaders	204	204	204	204	204	204	204	204	204	204	204	204				
Implementation Consultants	415	415	415	415	415	415	415	415	415	415	415	415				
Production Cutover																
Team Leaders	136	136	136	136	136	136	136	136	136	136	136	136				
Implementation Consultants	276	276	276	276	276	276	276	276	276	276	276	276				
Total Phase 1 Hours	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	0	0	0	
PHASE 2 Activities & Roles																
Project Management																
Project Management													412	412	412	4
Development																
Team Leaders													408	408	408	4
Implementation Consultants													829	829	829	8
Testing																
Team Leaders													272	272	272	2
Implementation Consultants													553	553	553	5
Conversion																
Team Leaders													204	204	204	2
Implementation Consultants													415	415	415	4
Training																
Team Leaders													204	204	204	2
Implementation Consultants													415	415	415	4
Production Cutover																
Team Leaders													136	136	136	1
Implementation Consultants													276	276	276	2
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	4125	4125	4125	41
PHASE 3 Activities & Roles																
Project Management																
Project Management																
Development																

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo
Team Leaders																
Implementation Consultants																
Testing																
Team Leaders																
Implementation Consultants																
Conversion																
Team Leaders																
Implementation Consultants																
Training																
Team Leaders																
Implementation Consultants																
Production Cutover																
Team Leaders																
Implementation Consultants																
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 4 Activities & Roles																
Project Management																
Client Engagement																
Leadership																
Team Leader																
Implementation Consultants																
Testing																
Team Leader																
Implementation Consultants																
Conversion																
Team Leaders																
Implementation Consultants																
Training																
Team Leaders																
Implementation Consultants																
Production Cutover																
Team Leaders																
Implementation Consultants																
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 5 Activities & Roles																
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo
Phase 1													0	0	0	
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0				
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
412	412	412	412																
408	408	408	408																
829	829	829	829																
272	272	272	272																
553	553	553	553																
204	204	204	204																
415	415	415	415																
204	204	204	204																
415	415	415	415																
136	136	136	136																
276	276	276	276																
4125	4125	4125	4125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				450	450	450	450	450	450	450	450	450	450	450	450				

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
				445	445	445	445	445	445	445	445	445	445	445	445				
				904	904	904	904	904	904	904	904	904	904	904	904				
				297	297	297	297	297	297	297	297	297	297	297	297				
				602	602	602	602	602	602	602	602	602	602	602	602				
				223	223	223	223	223	223	223	223	223	223	223	223				
				452	452	452	452	452	452	452	452	452	452	452	452				
				223	223	223	223	223	223	223	223	223	223	225	223				
				452	452	452	452	452	452	452	452	452	452	452	452				
				148	148	148	148	148	148	148	148	148	148	148	148				
				301	301	301	301	301	301	301	301	301	301	301	301				
0	0	0	0	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	0	0	0	
																301	301	301	3
																298	298	298	2
																606	606	606	6
																199	199	199	1
																404	404	404	4
																149	149	149	1
																303	303	303	3
																149	149	149	1
																303	303	303	3
																99	99	99	
																202	202	202	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3014	3014	3014	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0													0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 45	Month 46	Month 47	Month 48
0	0	0	0
0	0	0	0

Month 45	Month 46	Month 47	Month 48
0	0	0	0
301	301	301	301
298	298	298	298
606	606	606	606
199	199	199	199
404	404	404	404
149	149	149	149
303	303	303	303
149	149	149	149
303	303	303	303
99	99	99	99
202	202	202	202
3014	3014	3014	3014
0	0	0	0

Month 45	Month 46	Month 47	Month 48
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Attachment G2

Estimated Vendor-Partner Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23
PHASE 1 Activities & Roles																							
Vendor-Partner (VPE, VPE Subcontractors)																							
Development																							
Implementation Consultants	276	276	276	276	276	276	276	276	276	276	276	276											
Testing																							
Implementation Consultants	173	173	173	173	173	173	173	173	173	173	173	173											
Conversion																							
Implementation Consultants	104	104	104	104	104	104	104	104	104	104	104	104											
Training																							
Implementation Consultants	69	69	69	69	69	69	69	69	69	69	69	69											
Deployment Support																							
Implementation Consultants	69	69	69	69	69	69	69	69	69	69	69	69											
Total Phase 1 Hours	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 Activities & Roles																							
Vendor-Partner (VPE, VPE Subcontractors)																							
Development																							
Implementation Consultants													276	276	276	276	276	276	276	276	276	276	276
Testing																							
Implementation Consultants													173	173	173	173	173	173	173	173	173	173	173
Conversion																							
Implementation Consultants													104	104	104	104	104	104	104	104	104	104	104
Training																							
Implementation Consultants													69	69	69	69	69	69	69	69	69	69	69
Deployment Support																							
Implementation Consultants													69	69	69	69	69	69	69	69	69	69	69
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690	690	690	690	690	690
PHASE 3 Activities & Roles																							
Vendor-Partner (VPE, VPE Subcontractors)																							
Development																							
Implementation Consultants																							
Testing																							
Implementation Consultants																							
Conversion																							
Implementation Consultants																							
Training																							
Implementation Consultants																							
Deployment Support																							
Implementation Consultants																							
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles																							
Vendor-Partner (VPE, VPE Subcontractors)																							
Development																							
Implementation Consultants																							
Testing																							
Implementation Consultants																							
Conversion																							
Implementation Consultants																							
Training																							
Implementation Consultants																							
Deployment Support																							
Implementation Consultants																							
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles																							
N/A																							
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23
Phase 1													0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner (VPE, VPE Subcontractors)																							
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0											
Vendor-Partner (VPE, VPE Subcontractors)																							
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner (VPE, VPE Subcontractors)																							
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner (VPE, VPE Subcontractors)																							
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner (VPE, VPE Subcontractors)																							

Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
276	276	276	276	276	276											
173	173	173	173	173	173											
104	104	104	104	104	104											
69	69	69	69	69	69											
69	69	69	69	69	69											
690	690	690	690	690	690	0	0	0	0	0	0	0	0	0	0	0
						276	276	276	276	276	276	276	276	276	276	276
						173	173	173	173	173	173	173	173	173	173	173
						104	104	104	104	104	104	104	104	104	104	104
						69	69	69	69	69	69	69	69	69	69	69
						69	69	69	69	69	69	69	69	69	69	69
0	0	0	0	0	0	690	690	690	690	690	690	690	690	690	690	690
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0												
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment C3

Estimated Third-Party Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17
PHASE 1 Activities & Roles																	
None used																	
Total Phase 1 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 Activities & Roles																	
None used																	
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 3 Activities & Roles																	
None used																	
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles																	
None used																	
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles																	
None used																	
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
None used																	
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
None used																	
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
None used																	
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
None used																	
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
None used																	

Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Additional Information Description
N/A

Assumption Description
These estimates are provided as required by the RFP. They are for informational puposes only. They will not be used in project planning or pro activities.
Only minimal IDOR IT resources have been included in these estimates since our work plans are not reliant on DOR IT development resou implementation activities other than development of legacy data extraction processes and infrastructure support. DOR may want to assign IT d resources to the project to enhance the knowledge transfer process.
We have combined the MBE, WBE, and IVBE vendors into a single estimate since these resources will be performing the same activities during Determination of specific resources to specific activites will be made during project planning activities.
We did not estimate hours required for user training.

E. Mandatory Requirements Summary

FAST's Mandatory Requirement section includes:

- E.1 Attachment H Mandatory Requirements,
- E.1.a Mandatory Requirements Attachment.

The attachments are completed following the instructions in this section and within the attachments.

Mandatory Requirements
RFP 17 - 082, Attachment H - Mandatory Requirements Template
Instructions:

File Name	Instructions
Mandatory Requirements Template	Please fill in the cells shaded blue. All items require a Yes/No a the evidence and references supporting the response with no r reference additional documentation to support your explanati

Mandatory Requirements
RFP 17 - 082, Attachment H - Mandatory Requirements Template

Mandatory Requirements	Yes/No	Explanation including evidence description and refe es
Respondent must have been the primary implementation vendor for a complete implementation of the proposed, proven Commercial Off the Shelf based ITS solution for at least 1 U.S. state, that implementation for that state must have been completed in the last 7 years, and that state must be currently utilizing the implemented solution. The complete implementation must have included the implementation of the core tax processes (returns processing, account maintenance, revenue accounting, collections, process payments, and process disbursements) for all DOR tax types (individual, corporate and special as referenced in the RFP) together in at least 1 U.S. state (all tax types and core tax processes in the SAME U.S. state). Do you meet this mandatory requirement?	Yes	Please see attachment E.1.a Mandatory Requirements for d

MANDATORY REQUIREMENT ATTACHMENT

Respondent must have been the primary implementation vendor for a complete implementation of the proposed, proven Commercial Off the Shelf based ITS solution for at least 1 U.S. state, that implementation for that state must have been completed in the last 7 years, and that state must be currently utilizing the implemented solution. The complete implementation must have included the implementation of the core tax processes (returns processing, account maintenance, revenue accounting, collections, process payments, and process disbursements) for all DOR tax types (individual, corporate and special as referenced in the RFP) together in at least 1 U.S. state (all tax types and core tax processes in the SAME U.S. state). Do you meet this mandatory requirement?

Please note that updates to the original submission are identified in yellow highlight.

Yes.

FAST has been the primary implementation vendor for GenTax -- our proven Commercial Off the Shelf based ITS solution – for a total of 26 U.S. states:

- Seven initial implementations were completed more than seven years ago – that is, *before* September 6, 2010.
- Eleven initial implementations were completed less than seven years ago – that is, *after* September 6, 2010.
- Eight initial implementations are currently in progress, seven of which have delivered at least one rollout of tax types and functionality to production.

The table on page E.1.a.2 shows the timeframes of these 26 implementation projects in the three temporal categories above.

All 26 of these states are currently utilizing the implemented solution.

Nineteen of the 26 use GenTax to administer individual, corporate, and special taxes. The table on page E.1.a.3 shows the U.S. states in which taxes similar to Indiana's are administered with GenTax.

Every one of the 26 implementations includes all core tax processes - returns processing, account maintenance, revenue accounting, collections, payment processing, and disbursement processing. They also include supporting subsystems. Please see page E.1.a.4 for a mapping of GenTax functional subsystems to the U.S. states in which they are in production.

MANDATORY REQUIREMENT ATTACHMENT

MANDATORY REQUIREMENT ATTACHMENT

GenTax® Implementations in U.S. States

Jurisdiction	Project Start	Go-Live Date	Project End
Completed more than Seven Years Ago			
Idaho State Tax Commission	May'00	Mar'01	Mar'02
New Mexico Taxation and Revenue Department	Mar'02	Nov'02	Sep'08
Louisiana Department of Revenue	May'02	Feb'03	May'05
Montana Department of Revenue	Aug'03	Nov'03	Dec'07
North Dakota Office of State Tax Commissioner	Jul'05	Jan'06	Jun'07
Alabama Department of Revenue	Aug'05	Jul'06	May'10
West Virginia Department of Revenue, Tax Division	Feb'06	Jan'07	Feb'10
Completed in the Last Seven Years			
Wisconsin Department of Revenue	May'05	Dec'05	Dec'11
Utah State Tax Commission	Apr'06	Jan'07	Jun'12
Illinois Department of Revenue	Nov'06	Dec'07	Jun'11
Colorado Department of Revenue	Mar'08	Nov'08	Jun'12
Minnesota Department of Revenue	Mar'08	Dec'08	Feb'12
Arkansas Department of Finance and Administration	Mar'08	Feb'09	Mar'12
Georgia Department of Revenue – Integrated Tax	Aug'08	Apr'09	Sep'12
Mississippi Department of Revenue	Dec'10	Nov'11	Oct'15
Oklahoma Tax Commission	Jan'11	Nov'11	Dec'13
Alaska Department of Revenue	Mar'13	Apr'14	Feb'16
Arizona Department of Revenue	Jan'15	Jun'15	Jun'15
Currently in Progress			
Oregon Department of Revenue	Oct'13	Nov'14	Oct'17
Massachusetts Department of Revenue	Jan'14	Nov'14	Dec'17
Vermont Department of Revenue	Feb'14	Dec'14	Nov'17
South Carolina Department of Revenue	Aug'14	Aug'15	Aug'18
Hawaii Department of Taxation	Jul'15	Dec'15	Jul'19
Washington Department of Revenue	Jul'15	June '16	Jun'18
Tennessee Department of Revenue	Jan'16	Mar'17	Mar'20
California Board of Equalization	Mar'17	Apr'18	Apr'18

MANDATORY REQUIREMENT ATTACHMENT

Indiana Tax Types Implemented in U.S. States

	Alabama DOR	Alaska DOR	Arizona DOR	Arkansas DFA	Colorado DOR	Georgia DOR	Hawaii DOR	Idaho STC	Illinois DOR	Louisiana DOR	Massachusetts DOR	Minnesota DOR	Mississippi DOR	Montana DOR	New Mexico TRD	North Dakota OTC	Oklahoma TC	Oregon DOR	South Carolina DOR	Tennessee DOR	Utah STC	Vermont DOR	Washington DOR	West Virginia DOR	Wisconsin DOR	Indiana Taxes
Alcohol		X		X	X	X		X	X	X	X	X	X	X		X	X				X			X		Alcohol Tax
Business Income	X	X		X		X		X	X	X	X	X	X	X	X	X	X	X	X			X		X	X	Corporate Income Employment Agency Financial Institutions
Controlled Substance		X																								Controlled Substance
Environmental	X	X		X					X	X		X	X	X				X	X		X			X	X	Tire Fee
Estate	X										X										X					Inheritance (Repealed '13)
Excise				X										X												Aeronautics Excise, Business Aeronautics Excise, Individual
Fee										X	X	X														Firework Public Safety Fee Pari-Mutuel Admissions Racino Fees Riverboat Admissions
Fuel	X	X		X	X	X		X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	Alternative Fuel User Aviation Fuel Tax Gasoline Use Tax Motor Fuel Special Fuel Terminal Operator Transporter
Gaming	X	X		X	X	X		X	X			X	X	X			X	X						X		Gaming Excise Tax Pari-Mutuel Wagering Racino Wagering Riverboat Wagering Type II Gaming Tax
Individual Income	X			X	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X		X	X	Fiduciary Individual Income
Rental													X						X							Motor Vehicle Rental excise
Sales and/or Use	X			X	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	Consumer Use County Admissions Indianapolis Motor Speedway Out Of State Use PPD Sales on Gas (Repealed '14) Sales
Severance	X	X		X	X				X	X		X	X	X							X			X		Petroleum Severance
Tobacco	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X			X	X	Cigarette Other Tobacco Products
Tourism	X	X						X	X	X	X			X		X	X	X	X			X			X	County Innkeeper Food & Beverage
Utility	X	X		X	X					X		X	X	X			X	X	X		X			X		Rail: Commuter or Electric
Miscellaneous	X	X										X		X											X	Aeronautics Registration Oversize/overweight MH

MANDATORY REQUIREMENT ATTACHMENT

GenTax Subsystems Implemented in U.S. States

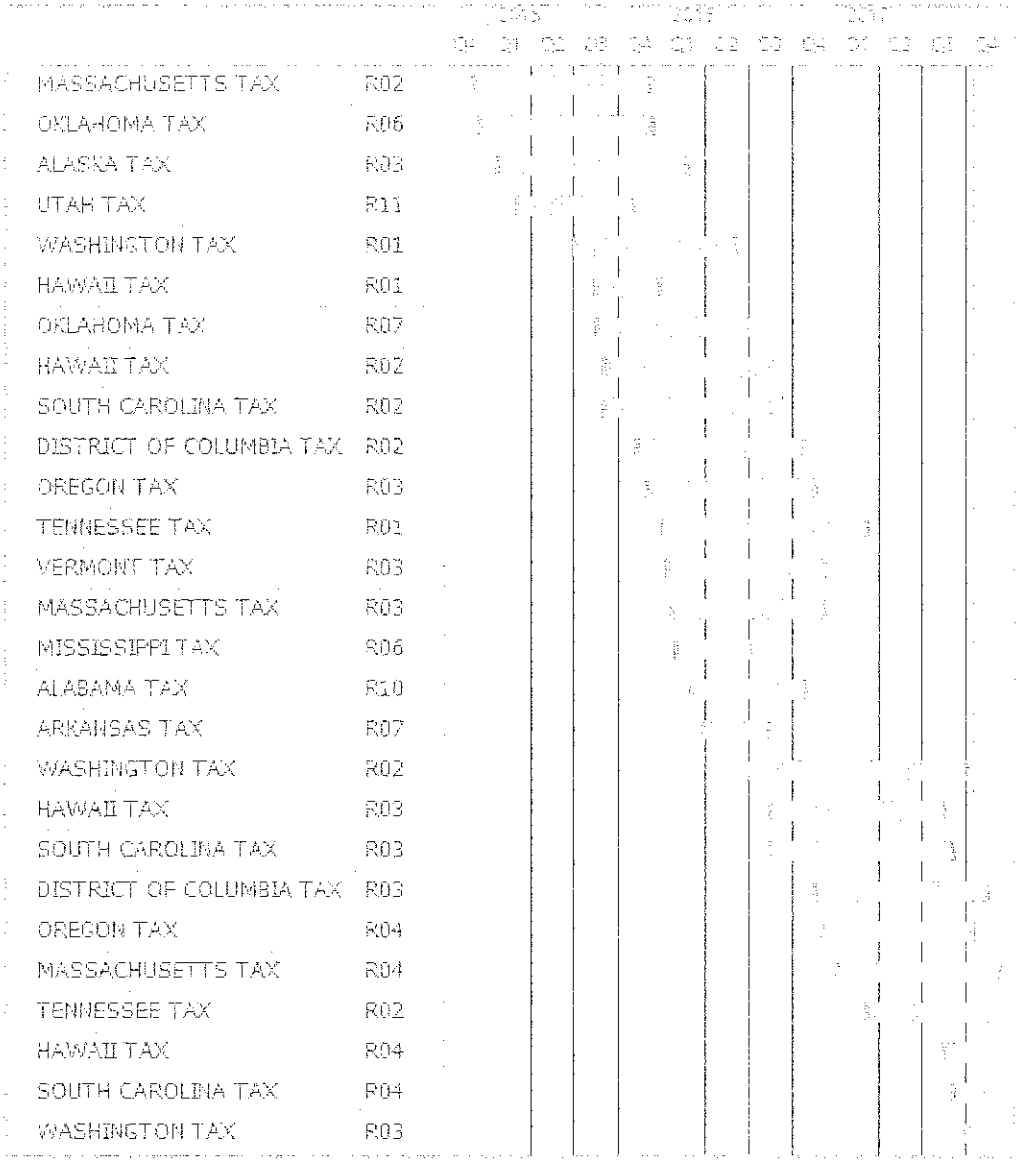
	Alabama DOR	Alaska DOR	Arizona DOR	Arkansas DFA	Colorado DOR	Georgia DOR	Hawaii DOR	Idaho STC	Illinois DOR	Louisiana DOR	Massachusetts DOR	Minnesota DOR	Mississippi DOR	Montana DOR	New Mexico TRD	North Dakota OTC	Oklahoma TC	Oregon DOR	South Carolina DOR	Tennessee DOR	Utah STC	Vermont DOR	Washington DOR	West Virginia DOR	Wisconsin DOR
Core Functionality																									
Registry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
e-Services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Correspondence	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Licensing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Tax Processing																									
Returns	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Payments	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Billing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Refunds	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Accounting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Appeals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Analytics Functionality																									
Analyzer					✓	✓		✓			✓	✓	✓				✓	✓		✓			✓		
Dashboard	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓					✓	✓	✓		✓	✓	✓	
Reporting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Data Mart	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Query	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Collections Functionality																									
Data Warehouse	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Discovery	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Audit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-Filer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Collection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bankruptcy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Enforcement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cashiering Functionality																									
Imaging	✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓		✓		✓	✓	✓	✓		✓	✓	✓
Cashiering							✓	✓				✓						✓		✓	✓		✓		
Inventory Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unclaimed Property														✓								✓			✓
IFTA					✓	✓		✓	✓	✓	✓				✓						✓	✓		✓	
IRP			✓	✓	✓										✓						✓	✓			
Help	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Business Rules	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implementation Toolkit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operations Support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Security	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Workflow Functionality																									
Work Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Case Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

In addition to the 26 U.S. states, we have implemented GenTax for seven local governments in the U.S., three Canadian provinces and seven foreign national governments, bringing our total to 43 tax and revenue agency clients at the national, state/provincial, and local government levels. It is important to note that all agencies who have implemented GenTax are currently using the software. Once implemented, none of our clients have stopped using GenTax or switched solutions.

As shown in the project-level Gantt chart below, over the past three years, FAST has had legacy system replacement, integrated tax implementation projects underway in 14 U.S. state revenue agencies with as many as a dozen concurrent rollouts in progress. Each of these rollouts of functionality and account types has been delivered on time and on budget.

MANDATORY REQUIREMENT ATTACHMENT

GenTax Implementation Project Rollouts – 4Q2014 through 4Q2017



Please refer to Tab G1. FAST Client List, which provides the following information for all our client sites:

- A chronological summary of the government agencies at the local, state/provincial, and national levels in which GenTax has been or is being installed, showing:
  - Name and population of the jurisdiction.
  - Month and year in which the initial implementation project began.
  - Month and year in which the first rollout of the solution entered production.

- Date on which the implementation project was completed or is scheduled to be completed.
- Our current engagement in the jurisdiction.

* Client site detail:
  - Name of the agency and the implementation project.
  - Name, title, telephone number, e-mail address, and mailing address of an agency contact person.
  - A high-level Gantt chart of the implementation project, showing the tax, unemployment insurance, motor vehicle, and other programs and the timeframes in which they were or will be delivered to production.

Please note that our FAST Client List also includes our five FastUI clients and our 12 FastDS-VS clients. FastUI, our unemployment insurance tax and benefits solution, and FastDS-VS, our solution for driver licensing and control and motor vehicle registration and titling, share a large percentage of their functionality with GenTax. Specifically, the Customer, Workflow, Information, Special Functions, and Management Studio modules and most of the Compliance module are common to the three products.

F. INDIANA ECONOMIC IMPACT SUMMARY

FAST's Indiana Economic Impact section includes:

- F.1 Attachment C Indiana Economic Impact,
- F.1.a Indiana Economic Impact Attachment.

The attachments are completed following the instructions in this section and within the attachments.

Indiana Economic Impact Form, Attachment C

Instructions

1. Complete lines 1 - 15 with the information requested about the company in the Attachment C worksheet.
All companies desiring to do business with state agencies must complete an "Indiana Economic Impact" form (Attachment C). The collection and recognition of the information collected with the Indiana Economic Impact form places a strong emphasis on the economic impact a project will have on Indiana and its residents regardless of where a business is located. The collection of this information does not restrict any company or firm from doing business with the state.

2. Line 16: Enter total amount of this proposal, bid, or current contract.
This figure is the respondent's total cost proposal to the the state (as sumitted in Attachment D, Cost Proposal Template). Additionally, this total shall be utilized when completing your Attachment A, MWBE Subcontractor Commitment Form.

3. Lines 18 and 21 measure the full-time equivalent (FTE) count of Indiana residents; this number will be auto-populated on Attachment C worksheet. Respondents shall populate the yellow-shaded cells in the FTE Details worksheet.
The state defines FTE as a measurement of an employee's productivity on a specific project or contract. An FTE of 1 would mean that there is one worker fully engaged on a project. If there are two employees each spending 1/2 of their working time on a project that would also equal 1 FTE.
Please populate the yellow-shaded cells in the FTE Details worksheet.
Respondents shall provide a job title for each of the FTE's proposed for The State of Indiana contract as well as the number of FTE that job title contributes to the toral.
PROJECT MANAGER - 1 FTE
Please keep in mind that the only FTE's that should be included in this count are Indiana employees working on this contract ONLY. If there are 10 employees working on this contract but they are splitting their time with numerous other contracts as well, then these employees cannot be counted as 1 FTE. Instead, these employees should be counted as a fraction of an FTE. For example: 10 employees working on 4 contracts (1 of them being the State of Indiana contract) - each of the 10 employees would only count as 1/4 of an FTE or .25. Therefore, the total number of FTE's for this scenario would be 2.5.

INDIANA ECONOMIC IMPACT - PROPOSALS AND CONTRACTS
State Form 51778 (R4 / 10-08)
DEPARTMENT OF ADMINISTRATION
Approved by State Board of Accounts, 2008

This information is required by the Indiana Department of Administration for all contractors, vendors/suppliers to the State of Indiana (complete all 27 items).

1	Legal Name of Firm:	Fast Enterprises, LLC
2	Address/City/State/Zip Code:	7229 South Alton Way, Centennial CO 80112
3	Telephone #/Fax #/Website:	877-275-3275 ; Fax 303-773-4089 / www.FastEnterprises.com
4	Federal Tax Identification Number:	30-0951152
5	State/Country of domicile/incorporation:	New York, USA
6	Location of firm's headquarters or principal place of business:	Centennial, CO (Denver area)
7	Name of parent company or holding company (if applicable):	Fast LP
8	State/Country of domicile/incorporation of company listed in #7:	Colorado, USA
9	Address of company listed in #7:	7229 South Alton Way, Centennial CO 80112
10	IN Department of Workforce Development (DWD) account number:	We do not currently have a contract in the State of Indiana, so we do not have an DWD account number.
11	IN Department of Revenue (DOR) account number:	We do not currently have a contract in the State of Indiana, so we do not have a DOR account number.
12	Number of Indiana resident employees per most recently completed IRS Form W-2 distribution:	0
13	Total number of employees per most recently completed IRS Form W-2 distribution:	112
14	Total amount of payroll paid to Indiana resident employees per most recently completed IRS Form W-2 distribution:	0
15	Total amount of payroll paid to all employees per the most recently completed IRS Form W-2 distribution:	$154,681,055.80
16	Total amount of this proposal, bid, or current contract:	$115,820,000

ACCOUNTING OF INDIANA RESIDENT EMPLOYEES

17	Prime Contractor Company Name:	Fast Enterprises, LLC
18	Number of Full Time Equivalent (FTE) employees that are Indiana residents specifically for this proposal or contract:	76.36

19	Subcontractor Company Name:	Cohen Zaret & Associates, LLC	Guidesoft, Inc. dba Knowledge Services	Professional Management Enterprises	(Enter Company Name Here)	(Enter Company Name Here)	(Enter Company Name Here)
20(A)	Address	438 N 40th, Milwaukee WI 53208	5875 Castle Creek, Indianapolis IN 46250	9245 N Meridian, Indianapolis IN 46260			
20(B)	Contact Person	Ken Thompson	Barbara Brown	William Retherford			
20(C)	Telephone Number	414-788-1021	317-806-6107	317-489-7722			
20(D)	Tax ID Number	20-2749582	35-1934448	20-4024802			
21	Number of Full Time Equivalent (FTE) employees that are Indiana residents specifically for this proposal or contract	1.00	1.00	2.00	0.00	0.00	0.00

22	Affirmation by authorized official: I affirm under penalties of perjury that the foregoing representations are true, to be the best of my knowledge and belief.	
	Signature:	Please see D.1.a Indiana Economic Attachment
	Name of authorized official:	James G. Hanson
	Title:	Member
	Date:	9/1/2017

FTE DETAILS

Job Titles and Contributing FTE

- Populate the blue-shaded cells with all applicable job titles and the total FTE count.
- Respondents may insert additional rows to account for all job titles attributing to the total FTE count.
Please keep in mind that the only FTE's that should be included in this contract are business employees working on this contract ONLY. If there are 10 employees working on this contract but they are splitting their time with numerous other contracts as well, then those employees cannot be counted as 1 FTE. Instead, these employees should be counted as a fraction of an FTE. For example: The project length of the contract is 24 months. There are 10 employees working on the contract over the 24 month contract period. 5 employees are working solely on the project for 24 months. 3 employees are working equal time on 2 projects for 24 months. 2 employees are working solely on the project for 6 months.
The FTEs would be calculated as follows:
5 employees x 24 months (24 months working solely on this project) x 1 (time spent solely on this project) = 120 months / 24 months (length of contract) = 5 FTEs
3 employees x 24 months x .5 (splitting time equally between 2 projects) = 36 months / 24 months = 1.5 FTEs
2 employees x 6 months (6 months dedicated solely to this project) x 1 (time spent solely on this project) = 12 months / 24 months = .5 FTEs

Column Title Definitions:
Number of Employees = Number of employees working on this State contract.
Duration (In Months) = Amount of time that the employee(s) will spend on the State contract.
Time Spent (Percentage) = Percentage of time the employee(s) will be working on the contract.

Duration of Initial Contract Term *(In Months)*	48	*Number based on initial contract term

Fast Enterprises, LLC

EMPLOYEE JOB TITLE	Number of Employees	Duration *(In Months)*	Time Spent (Percentage)	NUMBER OF FTE
[illegible] Project Manager	1	24	[illegible]	[illegible]
[illegible] Project Coordinator	1	12	[illegible]	[illegible]
[illegible] Project Director	2	6	[illegible]	[illegible]
Project Management	1	48	100.00%	1.00
Implementation Consultants	20	48	100.00%	20.00
Team Leaders	5	48	100.00%	5.00
Part-time Specialists	3	48	10.00%	0.30
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				26.30

Quinn David & Associates, LLC

JOB TITLE	Number of Employees	Duration *(In Months)*	Time Spent (Percentage)	NUMBER OF FTE
[illegible] Consultant	1	48	[illegible]	[illegible]
Implementation Consultant	1	48	100.00%	1.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				1.00

Guidesoft, Inc. dba Knowledge Services

JOB TITLE	Number of Employees	Duration *(In Months)*	Time Spent (Percentage)	NUMBER OF FTE
[illegible] Consultant	1	48	[illegible]	[illegible]
Implementation Consultant	1	48	100.00%	1.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				1.00

Professional Management Enterprises

JOB TITLE	Number of Employees	Duration *(In Months)*	Time Spent (Percentage)	NUMBER OF FTE
[illegible] Consultant	2	48	[illegible]	[illegible]
Implementation Consultants	2	48	100.00%	2.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				2.00

[Enter Company Name Here]

JOB TITLE	Number of Employees	Duration *(In Months)*	Time Spent (Percentage)	NUMBER OF FTE
[illegible] Consultant	2	6	[illegible]	[illegible]
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

				0.00
TOTAL FTE COUNT				0.00

(Enter Company Name Here)

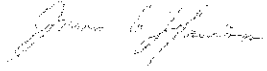
JOB TITLE	Number of Employees	Duration *(in Months)*	Time Spent (Percentage)	NUMBER OF FTE
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				0.00

(Enter Company Name Here)

JOB TITLE	Number of Employees	Duration *(in Months)*	Time Spent (Percentage)	NUMBER OF FTE
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				0.00

INDIANA ECONOMIC IMPACT ATTACHMENT

Due to the locked cells in Attachment C, we are unable to upload or attach James G. Harrison's electronic signature the *Affirmation by Authorized Offical* section. As such, we have recreated the signature cells below and included James G. Harrison's electronic signature.

Affirmation by authorized official: I affirm under penalties of perjury that the foregoing representations are true to be the best of my knowledge and belief:	
Signature:	
Name of auththorized official:	James G. Harrison
Title:	Member
Date:	9/1/2017

G. Supporting Documents Summary

FAST's Section G Supporting Documents section includes:

- G.1 FAST Client List,
- G.2 GenTax Solution Description, and
- G.3 Sample Plans.

The attachments are completed following the instructions in this section and within the attachments.

FAST
ENTERPRISES

Client List

September 2017

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Introduction

The Fast Solution Series is designed for the integrated administration of government programs in the following business areas:

- GenTax, for tax and revenue
- FastUI, for unemployment insurance tax and benefits
- FastDS, for driver services (driver licensing and control)
- FastVS, for vehicle services (registration and titling)

On the following pages, we provide a chronological summary of the government agencies at the local, state/provincial, and national levels in which an element of the Fast Solution Series has been or is being installed.

The following information is shown for each site:

Site Information Included
Jurisdiction	Name of the jurisdiction.
Project Start	Month and year in which the initial implementation project began.
First Production	Month and year in which the first rollout of the solution entered production.
Completion	Date on which the implementation project was completed or is scheduled to be completed. This date includes all expansions of business and/or functional scope that were established beyond the initial implementation project.
Current Activity	Our current engagement in the jurisdiction.

FAST Solution Series Sites – Summary				
Jurisdiction (Population)	Project Start	First Production	Initial Implementation Completion	Current Activity
British Columbia, Canada Ministry of Finance (4.63M)	April 1999	November 1999	December 2000	Converted to GenTax v9 and Retired
	November 2011	October 2012	January 2014	GenTax v9 Implementation and Conversion
	January 2013	December 2013	December 2015	GenTax Maintenance & Support
Idaho State Tax Commission (1.63M)	May 2000	December 2000	March 2002	GenTax Maintenance & Support
Manitoba, Canada Ministry of Finance (1.28M)	July 2001	March 2002	March 2003	GenTax Maintenance & Support
New Mexico Tax and Revenue Department (2.08M)	March 2002	November 2002	September 2008	GenTax Maintenance & Support
	March 2014	May 2015	September 2016	FastDS-VS Maintenance & Support
Louisiana Department of Revenue (4.65M)	May 2002	February 2003	May 2005	GenTax Maintenance & Support
Montana Department of Revenue (1.02M)	August 2003	October 2003	December 2007	GenTax Maintenance & Support
Georgia Department of Revenue (10.1M)	September 2003	March 2004	June 2004	Converted to GenTax v8 and Retired
	August 2008	April 2009	September 2012	GenTax Maintenance & Support
City of Scottsdale, Arizona (226K)	February 2005	November 2005	March 2006	GenTax Maintenance & Support
Wisconsin Department of Revenue (5.75M)	May 2005	December 2005	December 2011	GenTax Maintenance & Support
North Dakota Office of State Tax Commissioner (739K)	July 2005	January 2006	June 2007	GenTax Maintenance & Support
Alabama Department of Revenue (4.84M)	August 2005	July 2006	May 2010	GenTax Maintenance & Support

FAST Solution Series Sites – Summary				
Jurisdiction (Population)	Project Start	First Production	Initial Implementation Completed	Current Product(s)
West Virginia Department of Revenue Tax Division (1.85M)	February 2006	January 2007	February 2010	GenTax Maintenance & Support
Utah State Tax Commission (2.94M)	April 2006	January 2007	June 2012	GenTax Maintenance & Support
	August 2012	October 2013	October 2013	FastVS Maintenance & Support
Republic of Trinidad & Tobago Inland Revenue Division (1.34M)	September 2006	June 2007	November 2008	GenTax Maintenance & Support
Illinois Department of Revenue (12.38M)	November 2006	December 2007	June 2011	GenTax Maintenance & Support
Ontario, Canada Ministry of Finance (13.6M)	December 2006	December 2007	June 2010	GenTax Maintenance & Support
Arlington County, Virginia (224K)	November 2007	November 2008	February 2010	GenTax Maintenance & Support
Colorado Department of Revenue (5.35M)	March 2008	November 2008	June 2012	GenTax Maintenance & Support
	August 2015	February 2017	August 2018	FastDS-VS Ongoing Implementation
Arkansas Department of Finance and Administration (2.96M)	March 2008	February 2009	March 2012	GenTax Maintenance & Support
	June 2011	September 2012	September 2013	FastDS VS Maintenance & Support
Minnesota Department of Revenue (5.48M)	March 2008	December 2008	February 2012	GenTax Maintenance & Support
City and County of Denver, Colorado (649K)	March 2009	November 2009	November 2009	GenTax Maintenance & Support
California Employment Development Department (38.8M)	September 2009	November 2009	January 2011	FastUI/Tax Maintenance & Support
Mississippi Department of Revenue (2.99M)	December 2010	November 2011	October 2015	GenTax Maintenance & Support
	May 2016	October 2017	October 2017	Initial FastVS Implementation

FAST Solution Series Sites – Summary				
Jurisdiction (Population)	Project Start	First Production	Initial Implementation Completion	Current Activity
Oklahoma Tax Commission (3.87M)	January 2011	November 2011	December 2013	GenTax Maintenance & Support
	January 2014	March 2015	March 2015	FastVS Maintenance & Support
Michigan Unemployment Insurance Agency (9.91M)	August 2011	August 2012	September 2013	FastUI/Tax & Benefits Maintenance & Support
Kansas City, Missouri (467K)	April 2012	June 2013	May 2014	GenTax Maintenance & Support
Royal Malaysian Customs Department (30M)	August 2012	January 2013	December 2013	GenTax Maintenance & Support
City of New York, New York (8.41M)	July 2012	January 2013	January 2013	Modernized e-File (MeF) Maintenance & Support
	February 2015	February 2016	February 2018	GenTax Ongoing Implementation
Lakewood, Colorado (147K)	October 2012	May 2013	May 2013	GenTax Software as a Service
Republic of Poland (38.53M)	February 2013	March 2015	January 2017	GenTax Ongoing Implementation
Montana Department of Labor and Industry (1.02M)	February 2013	February 2014	February 2014	FastUI/Tax Maintenance & Support
Alaska Department of Revenue (736K)	March 2013	April 2014	February 2016	GenTax Maintenance & Support
Tennessee Department of Safety and Homeland Security (6.54M)	August 2013	February 2015	February 2015	FastDS Maintenance & Support
Oregon Department of Revenue (3.97M)	October 2013	November 2014	October 2017	GenTax Ongoing Implementation
Massachusetts Department of Revenue (6.75M)	January 2014	November 2014	December 2017	GenTax Ongoing Implementation
Vermont Department of Revenue (626K)	February 2014	December 2014	November 2017	GenTax Ongoing Implementation
Tax Administration Jamaica (2.72M)	May 2014	February 2015	September 2016	GenTax Maintenance & Support

FAST Solution Series Sites – Summary				
Jurisdiction (Population)	Project Start	First Production	Initial Implementation Completion	Current Activity
Finnish Tax Administration (5.4M)	May 2014	January 2016	January 2019	GenTax Ongoing Implementation
South Carolina Department of Revenue (4.83M)	August 2014	August 2015	August 2018	GenTax Ongoing Implementation
District of Columbia (632K)	June 2014	October 2015	October 2018	GenTax Ongoing Implementation
Washington Department of Licensing (7.06M)	November 2014	October 2015	June 2016	GenTax Maintenance & Support (IFTA/IRP/Fuel Tax)
Arizona Department of Revenue (6.73M)	January 2015	June 2015	June 2015	GenTax Maintenance & Support (Tobacco Tax)
North Dakota Department of Transportation (658K)	February 2015	June 2016	June 2016	FastVS Maintenance & Support
Washington Department of Licensing (7.06M)	May 2015	December 2016	June 2018	FastDS-VS Ongoing Implementation
Washington Employment Security Department (7.06M)	May 2015	January 2017	January 2017	Initial FastUI Implementation
Washington Department of Revenue (7.06M)	July 2015	June 2016	June 2018	GenTax Ongoing Implementation
Hawaii Department of Taxation (1.42M)	July 2015	December 2015	July 2018	GenTax Ongoing Implementation
New Zealand Inland Revenue Department (4.47M)	August 2015	April 2017	April 2022	Initial GenTax Implementation
Departamento de Hacienda de Puerto Rico (3.6M)	November 2015	April 2016	December 2018	GenTax Ongoing Implementation
Tennessee Department of Revenue (6.54M)	January 2016	March 2017	March 2020	Initial GenTax Implementation
Illinois Department of Employment Security (12.88M)	July 2016	August 2017	September 2017	Initial FastUI Implementation

FAST Solution Series Sites – Summary				
Jurisdiction (Population)	Project Start	FAST Production	Initial Implementation Completion	Current Activity
Massachusetts Department of Transportation (6.75M)	October 2016	March 2018	October 2019	Initial FastDS-VS Implementation
California Tax and Fee Administration (38.8M)	October 2016	March 2017	May 2020	Initial GenTax Implementation
Michigan Department of State (9.91M)	May 2017	February 2019	February 2021	Initial FastDS-VS Implementation
Louisville, Kentucky	July 2017	July 2018	July 2018	Initial GenTax Implementation

Site Profiles

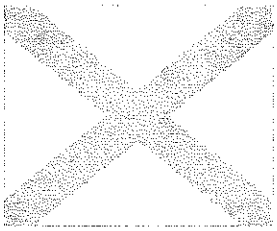
On the following pages, we provide the following additional information regarding Fast Solution Series implementations in alphabetical order by jurisdiction.

Site Profile Information	
Agency & Project	Name of the tax and revenue agency and the implementation project.
Contact	Name, title, telephone number, e-mail address, and mailing address of an agency contact person.
Implementation Timeline	A high-level Gantt chart of the implementation project, showing the tax, unemployment insurance, motor vehicle, and other programs and the timeframes in which they were or will be delivered to production.

Agency / Solution	Contact	Implementation Highlights
Alabama Department of Revenue RITS REVENUE INTEGRATED TAX SYSTEM	Donald Graham Assistant Director, Processing Division +1 334 242 1272 don.graham@ revenue.alabama.gov 50 N. Ripley Street, Suite 4112 Montgomery, Alabama 36104 USA	4% Lodgings Tax Motor Fuel Direct Pay Permit Consumers Use Tax Local Sales, Use, Rental, & Lodgings Taxes North Alabama Lodgings Tax Rental Tax Sales Tax Sales Tax Direct Pay Permit Sales Tax Exemptions Sellers Use Tax Contractor's Gross Receipts Tax Mobile Telecommunications Tax Nursing Home Tax Pharmaceutical Providers Tax Utility Gross Receipts Tax Utility Gross Receipts Direct Pay Permit Utility Service Use Tax Withholding Tax Casual Sales & Use Tax Business Privilege Tax Corporations Income Tax Financial Institutions Excise Tax Partnership Tax Sub-Chapter S Returns Composite Returns for Pass Through Entities Dry Cleaning Registration Fees Hydroelectric Kilowatt Hour Tax 2.2% Utility License Tax



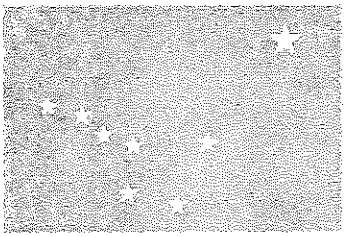
Agency & Projects	Contact	Implemented by
Alabama Department of Revenue		(...Continued)

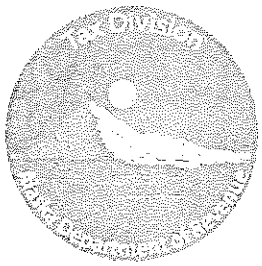


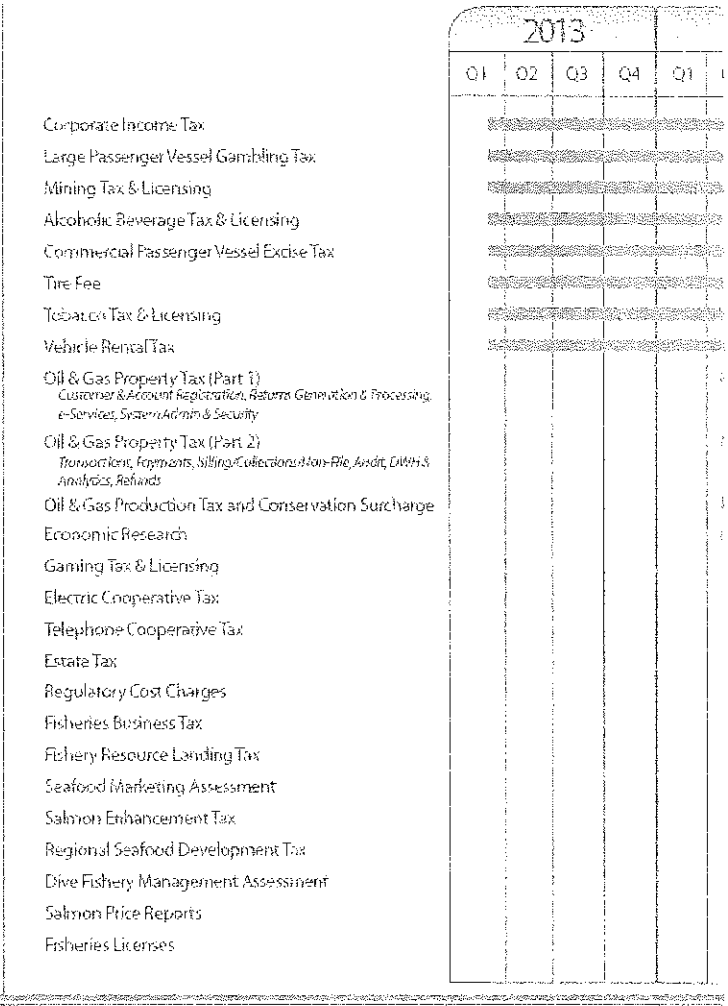


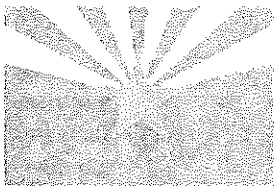
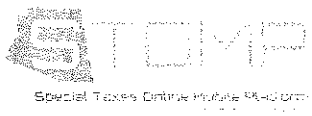
	2005		2006				2	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q
Personal Income Tax								
Fiduciary Tax								
Gasoline Aviation & Jet Fuel Tax								
Gasoline Tax								
Inspection Fee – Gasoline								
Local Gasoline & Motor Fuel Taxes								
Motor Fuels Tax								
Lubricating Oil Tax								
Oil & Gas Privilege Tax								
Oil & Gas Production Tax								
Scrap Tire Environmental Fee								
Statement of Gross Sales								
Cigarette Tax Stamp Sales								
County Tobacco Tax								
Forest Products Severance Tax								
Other Tobacco Products								
Underground & Aboveground Storage Tank Trust Fund Charge								
Estate & Inheritance Tax								

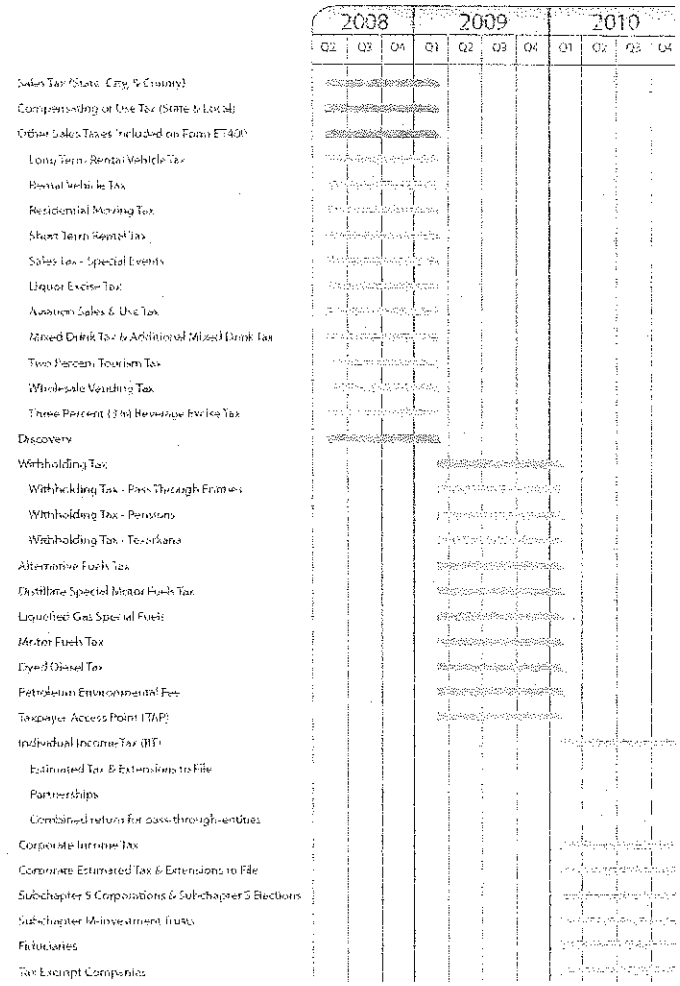
Agency & Project	Contact	Implementation Timeline
Alaska Department of Revenue Tax Revenue Management System (TRMS)	Brandon Spanos Deputy Director, Tax Division +1 907 269 6736 brandon.spanos@alaska.gov Alaska Department of Revenue Tax Division 550 W 7th Avenue, Suite 500 Anchorage, Alaska 99501 USA	







Agency & Project	Contact	Implementation Activities
Arizona Department of Revenue   Special Taxes e-File Program  Special Taxes Online Mobile Platform Tobacco Tax	Tom Johnson Project Champion +1 602 716 6551 RJohnson@azdor.gov 1600 West Monroe Phoenix, AZ 85007 USA	Preparation Definition Base Configuration Development Testing Training Rollout

Agency & Project	Contact	Implementation Timeline
Arkansas Department of Finance and Administration AIRS Arkansas Integrated Revenue System	Ken Williams Chief Information Officer +1 501 371 6021 Ken.Williams@dfa.arkansas.gov 501 Woodlane Street, Suite 3205 Little Rock, Arkansas 72201 USA	

Arkansas
Department of Finance and
Administration

ARKANSAS

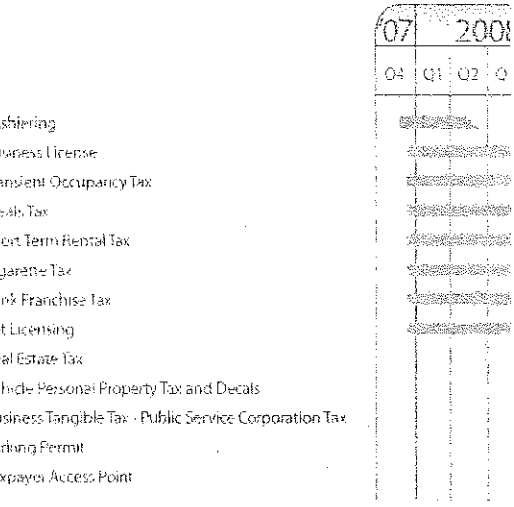
AIRS
Arkansas Integrated Revenue System

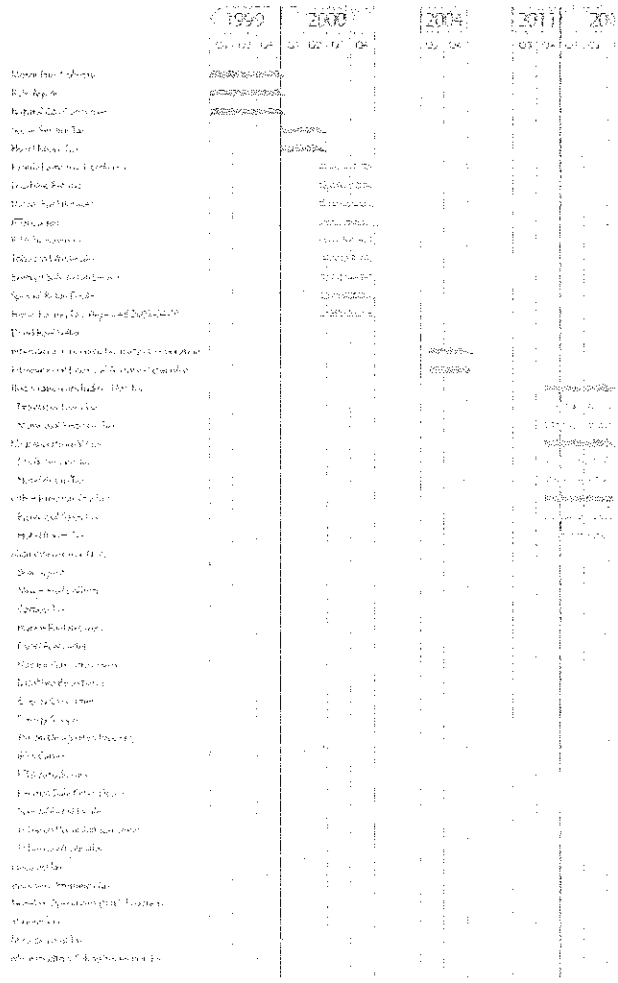
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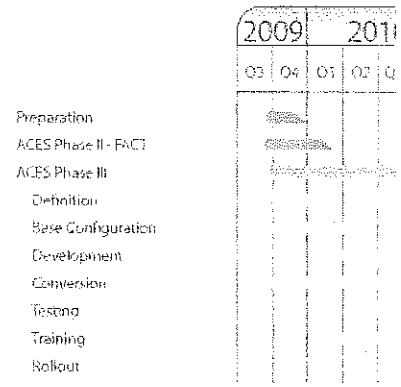
- Beer Tax/ Beer Enforcement Tax
- Income Tax/ Liquor Tax Enforcement
- Native Wine, Hotsprings Wine Tax & Enforcement Tax
- Soft Drink Tax
- Tobacco Excise Tax (Cigar & Tobacco)
- Cigarette Excise Tax & Cigarette Paper Tax
- Natural Resources & Licenses
- Severance Tax (exclusive of timber)
- Timber Severance Tax
- Amusement Machines Tax
- Pari-Mutuels Control Fees
- Other Misc. Taxes & Fees
  - Craft Training Fees
  - Educational Course
  - Drivers Testing
- Real Estate Transfer Tax
- Premotion Fees
  - Tax Assessment
  - Beer Inspection Fee
  - Control Fund Assessment
  - Severance Assessments
  - Cumis Fees
  - Delinquent
  - Wine 5
- Waste Tire Fee
- Dog & Horse Racing
- Electronic Games of Skill
- Liquor Permits & Reports
- Telecommunications Tax
- Tax Exempt Special Returns
- Driver Licensing
- Vehicle Registration
- Vehicle Titling

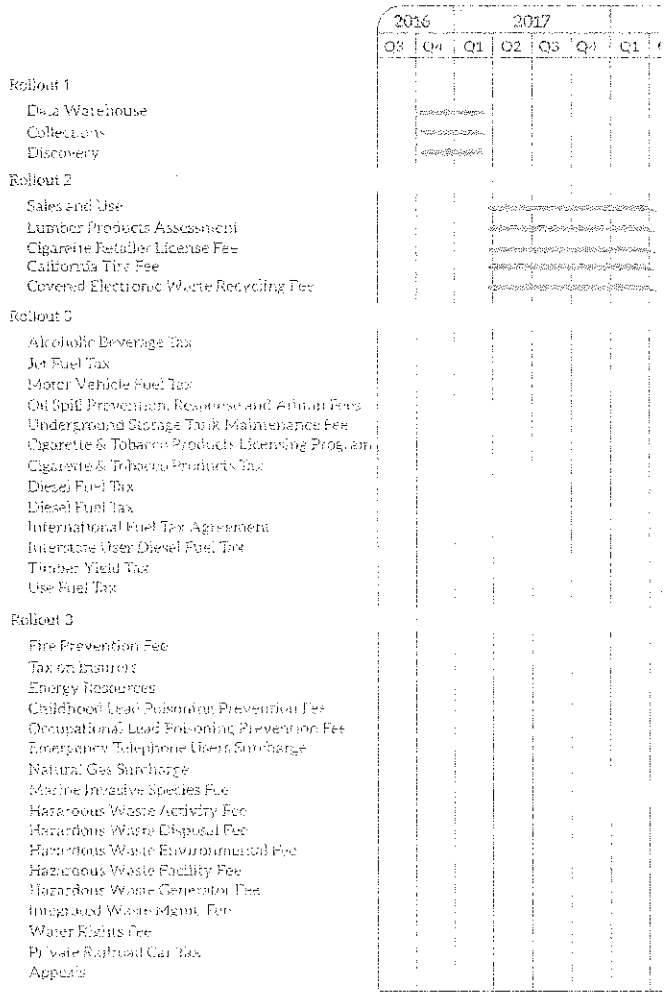


FAST
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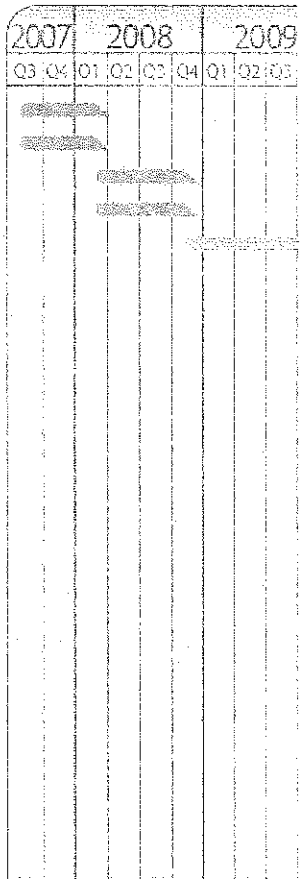
Agency & Profile	Contact	Implementation Timeline
Arlington County, Virginia  	Ajit Arya Chief Technology Officer, DTS +1 703 228 3369 Aarya@ArlingtonVA.us 2100 Clarendon Boulevard Suite 610 Arlington, Virginia 22201 USA	

Agency & Project	Contact	Implementation Time Line
British Columbia, Canada Ministry of Finance - Revenue CTS 21 Consumer Tax Branch for the 21st Century	Louise Lam TACS Business Manager +1 250 387 0459 Louise.Lam@gov.bc.ca P.O. Box 9432 Stn Prov Gov't Victoria, British Columbia V8W 9N6 Canada	

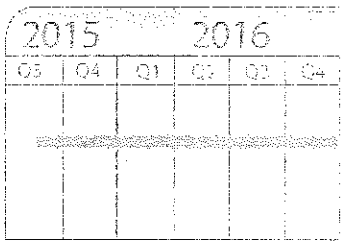
Agency / Project	Contact	Implementation Timeline
California EDD Employment Development Department CALIFORNIA REPUBLIC A C E D S D *Accounting & Compliance Enterprise System*	Sharon Hilliard Chief Deputy +1 916 653 1528 Sharon.Hilliard@edd.ca.gov 750 N Street (MIC 36), Sacramento, California 95814 USA	

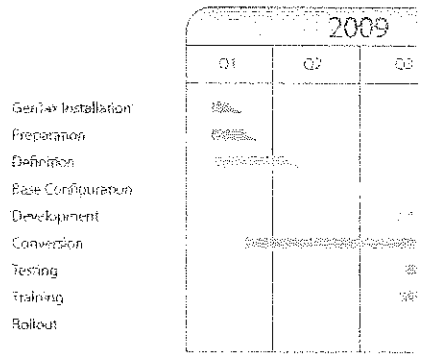
Agency & Project	Contact	Implementation Time
California CDTFA California Department of Tax and Fee Administration Board of Equalization Tax Appeals Board	Chris Caletti Chief Technology Officer / CROS Project Director +1 916 322 9918 Chris.caletti@boe.ca.gov 450 N. Street, 10th Floor Sacramento, California 95814 USA	

Agency / Project	Contact	Implementation Timeline
Colorado Department of Revenue	GenTax John Vecchiarelli Senior Director of Taxation +1 303 866 3714 john.vecchiarelli@state.co.us 1735 Sherman Street Denver, Colorado 80261 USA	Site Build Project Planning & Resourcing Severance Tax Estate Tax Income Tax State & Local Sales & Use Taxes Wage Withholding Alternative Fuel Base State Vehicle Registration Fees IFTA Gasoline/Special Fuels Taxes TAP Discovery Bankruptcy Food Services Licenses Gaming Tax Off-Highway Pari-mutuel Racing Fees Public Utility Commission Tobacco Products Tax Cigarette Tax Vending Machine Stickers Alcohol & Fermented Malt Beverage Taxes

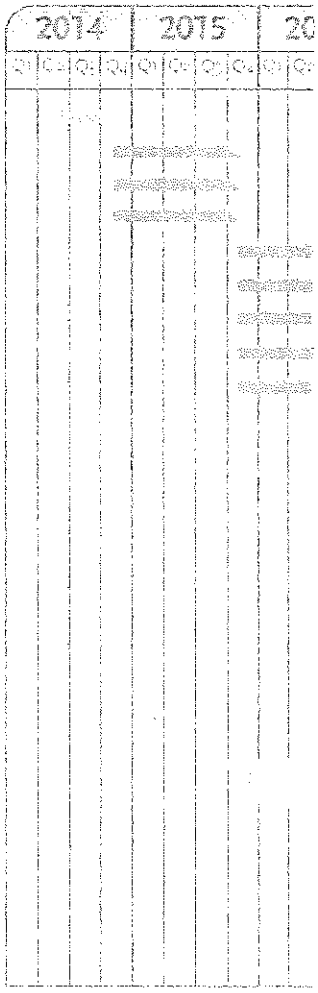


Agency & Project	Contact	Project Milestones
Colorado Department of Revenue *(Continued)*	FastDS-VS Mike Dixon Senior Director – DMV +1 303 205 8388 michael.dixon@state.co.us 1881 Pierce St. Lakewood, CO 80214 USA	Rollout 1 Driver's Services Rollout 2 Vehicle Services



Agency & Project	Contact	Implementation Timeline
City and County of Denver, Colorado TCS TREASURY COLLECTION SYSTEM	Steve Ellington Treasurer +1 720 913 9384 Steve.Ellington@denvergov.org Treasury Department 201 W. Colfax Avenue Department 104 Denver, Colorado 80202 USA	

Agency & Project	Contacts	Implementation Timeline
District of Columbia Modernized Integrated Tax System (MITS)	Theddeus Russell Program Manager +1 202 442 7119 theddeus.russell@dc.gov Government of the District of Columbia Office of the Chief Financial Officer, Office of Tax & Revenue 1101 4th Street SW, Room 7534 Washington, DC 20024 USA	Project Initiating & Planning Individual Income Fiduciary Estate Corporate Franchise Unincorporated Business Franchise Partnership (Information Return) Withholding Businesses Indexed Sales & Use Specialized Sales Consumer Use Motor Vehicle Fuel Interstate Businesses Gross Receipts Public Space Rental Street Vendor Special Event Alcoholic Beverage Other Tobacco Cigarette Ballpark Fee Healthcare Provider Nursing Provider Waiver Deferred Fee Hospital Bed Provider



Agency & Project	Contact	Implementation Timeline

Finnish Tax Administration

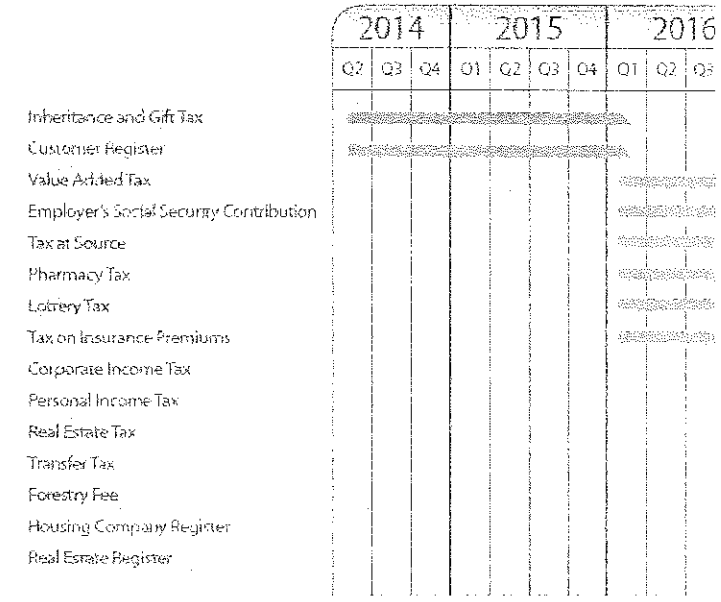
Markku Heikura
Chief Information Officer

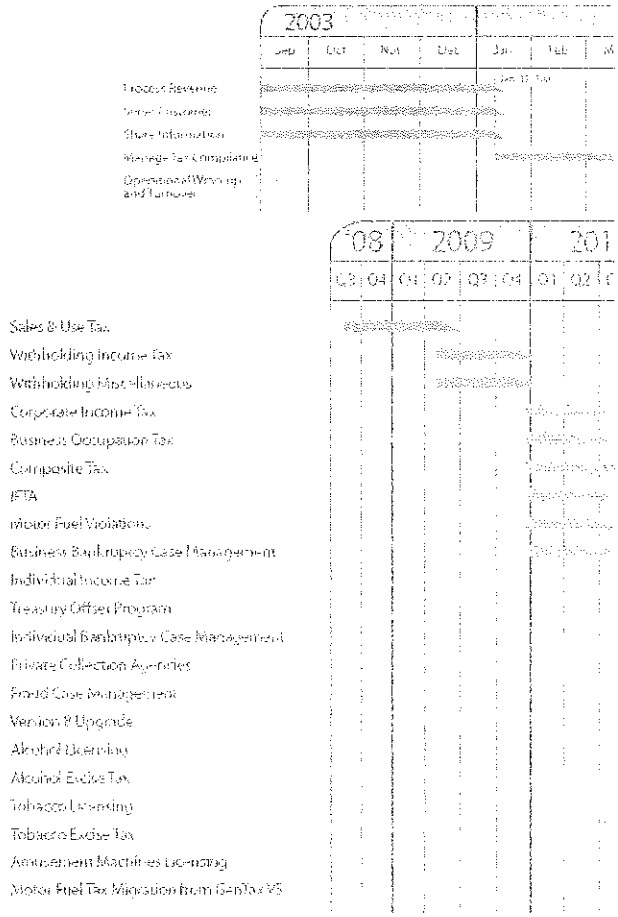
+358 40 7521212

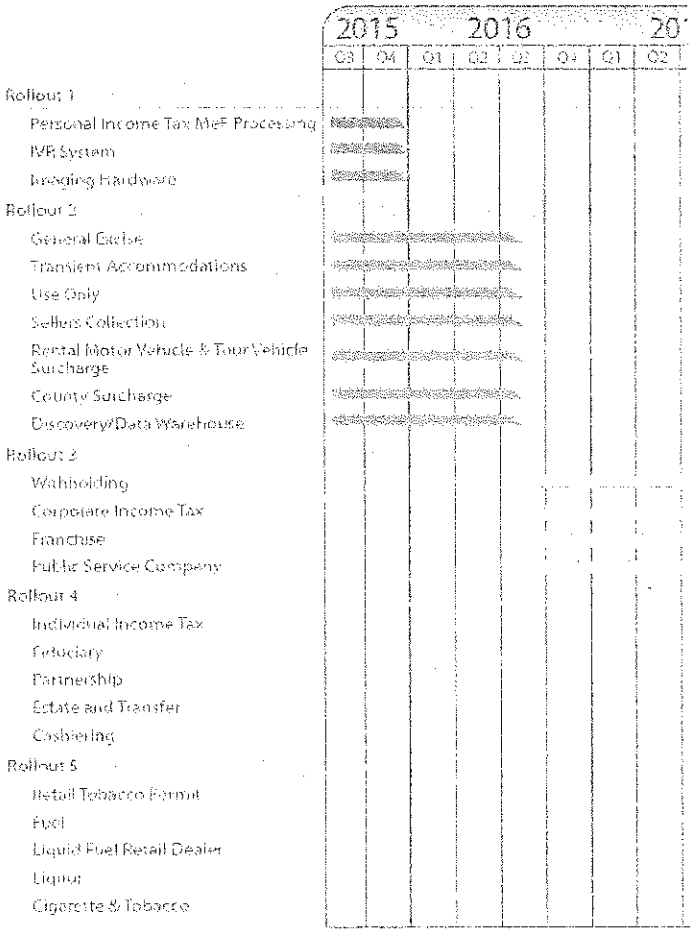
markku.heikura@vero.fi

Lintulahdenkuja 10
Helsinki, Finland

Postal address:
PL325 00052 Vero
Finland

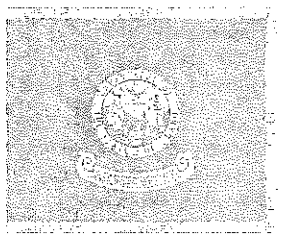


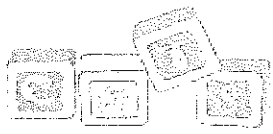
Agency & Project	Contact	Implementation Detail
Georgia Department of Revenue 2003/04 GEORGIA INTEGRATED FUEL TAX SYSTEM (GIFTS) PROJECT 2008 to 2012 GEORGIA INTEGRATED TAX SOLUTION (ITS)	Darcy Pyle Project Manager +1 404 417 6534 Darcy.Pyle@dor.ga.gov 1800 Century Boulevard NE Atlanta, Georgia 30345 USA	

Agency & Project	Contact	Implementation Timeline
Hawaii Department of Taxation TSM Tax System Modernization	Maria Zielinski Director of Taxation +1 808 587 1540 Maria.E.Zielinski@hawaii.gov 830 Punchbowl Street, Rm 214 Honolulu, Hawaii 96813 USA	

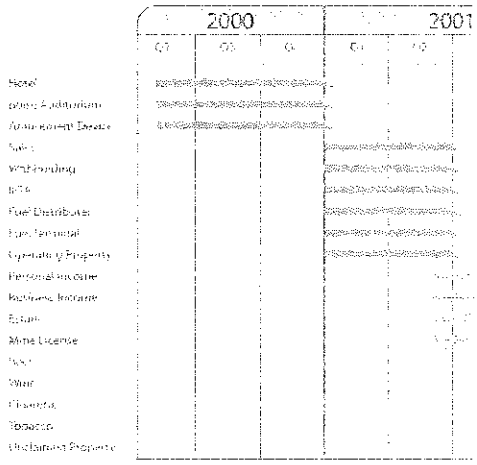
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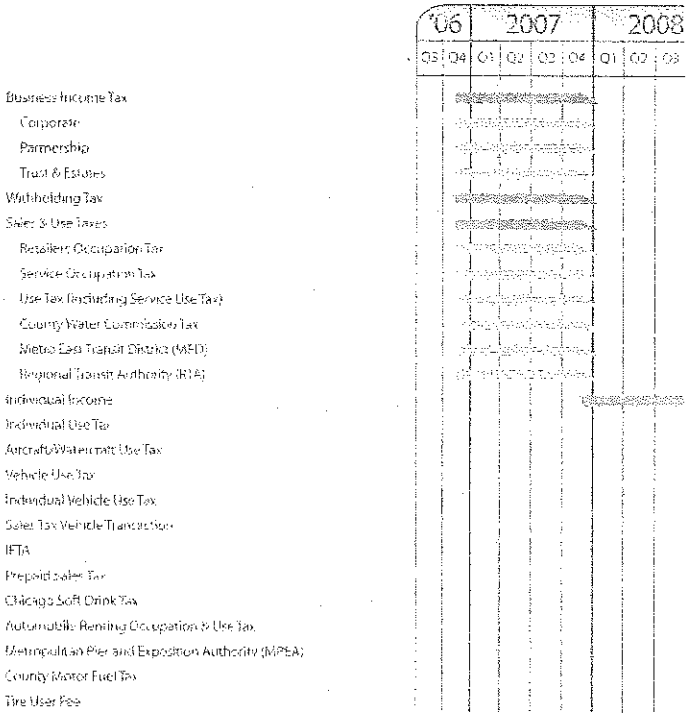
Agency / Project	Contact	Implementation Date
Idaho State Tax Commission	Doreen Warren Division Administrator +1 208 334 7839 Doreen.Warren@tax.idaho.gov 800 Park Boulevard, Plaza IV Boise, Idaho 83712 USA	2000 – 2001



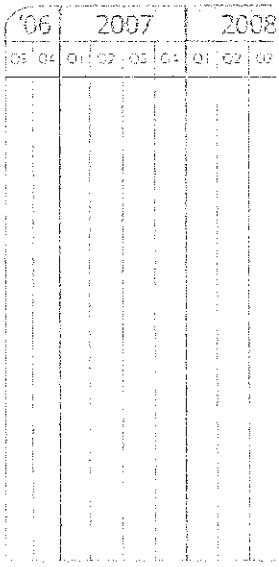


Convert All Tax Systems

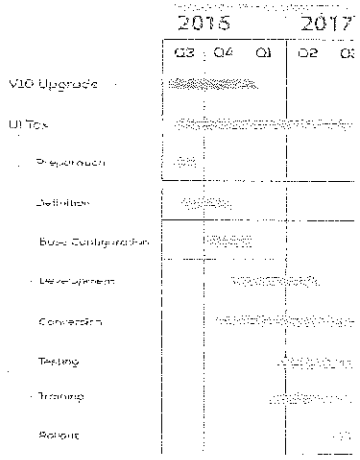
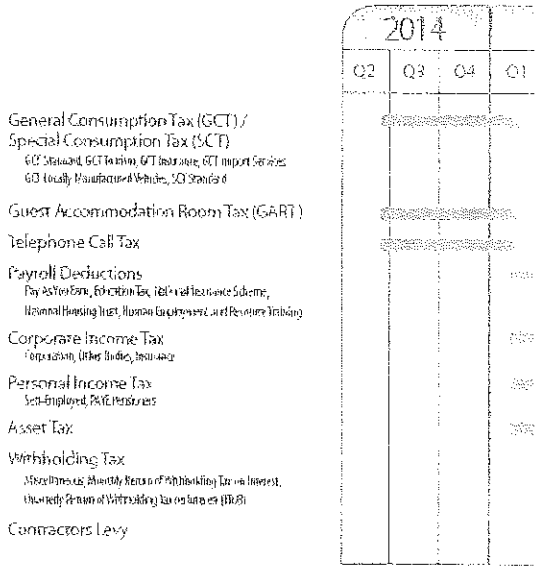


Agency & Notes	Contact	Implementation Timeline
Illinois DOR Department of Revenue ILLINOIS I-STAR (Illinois Solution for Tax AdministRation)	Kendra Banning GenTax Business Lead +1 217 524 7725 kendra.banning@illinois.gov 101 W. Jefferson Street Springfield, Illinois 62702 USA	

Agency & Project	Contact	Implementation Date
Illinois Department of Revenue ILLINOIS I-STAR (Illinois Solution for Tax Administration)		(...Continued)

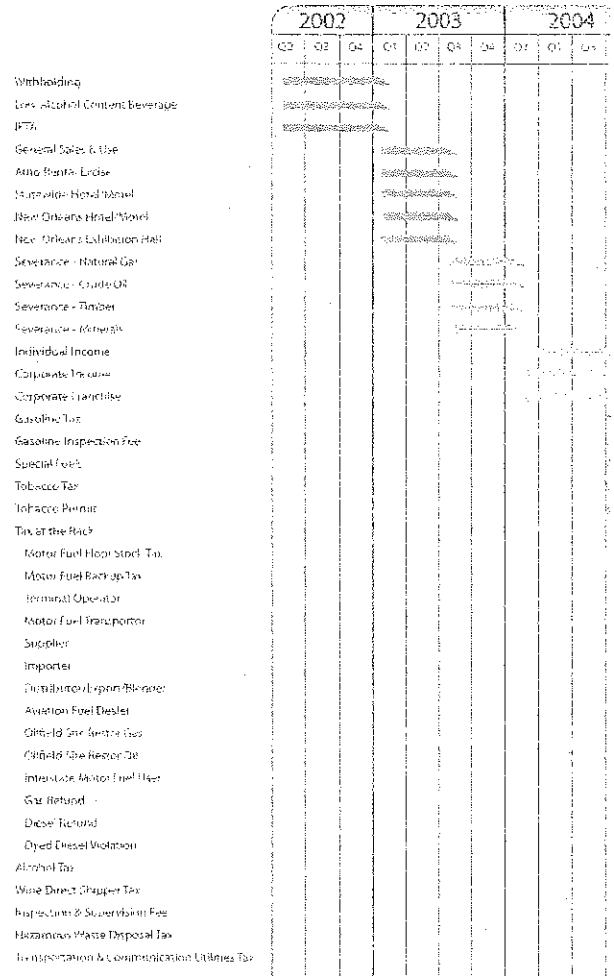


FAST ENTERPRISES

Agency & Project	Contact	Implementation Timeline
Illinois DES Department of Employment Security ILLINOIS	Lois Cuevas Revenue Division Manager +1 312 793 1919 Lois.cuevas@illinois.gov 33 S. State Street, Floor 11 Chicago, Illinois 60603-2804 USA	
Tax Administration Jamaica REVENUE ADMINISTRATION INFORMATION SYSTEM	Mr. Ainsley Powell Commissioner General (Actg.) + 1 876 9228710 ainsley.powell@taj.gov.jm 36 Trafalgar Road, 4th Floor, Petroleum Corporation Jamaica Building, Kingston 10, Jamaica	

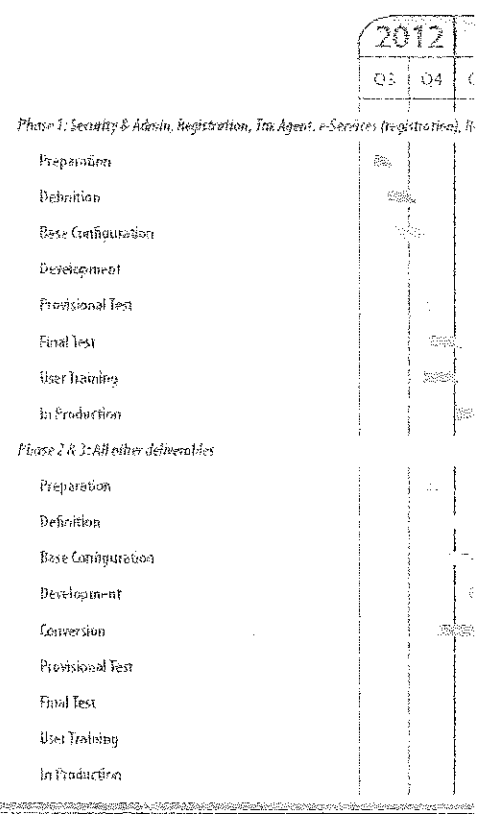
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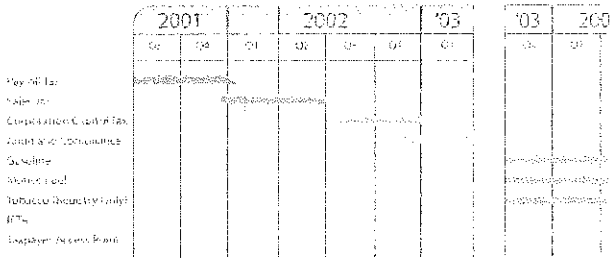
Agency / Project	Contacts	Implementation Time
City of Kansas City, Missouri  	Dawn Hilderbrand PMO Director +1 816 513 0839 dawn.hilderbrand@kcmo.org IT Department Communications Center – 3rd Floor 1111 Locust Street Kansas City, Missouri 64106 USA	2012 Q2 Q3 Q4 Q1 Earnings Tax - Wage Earner Earnings Tax - Profits Earnings Tax - Employer Withholding Conversion & Tourism Tax Occupational License Fees Utility Taxes Cigarette Stamps & Cigarette Licenses Arena Fees Car Rental Fees e-Services Real Property Taxes Special Assessments
City of Lakewood, Colorado  	Larry Dorr Finance Director +1 303 987 7601 ldorr@lakewood.org 480 S Allison Parkway Lakewood, Colorado 80226 USA	2012 | 20 Q4 | Q1 GenTax Installation Preparation Definition Base Configuration Development Conversion Testing Training Rollout

Agency & Project	Contact	Implementation Timeline
Louisiana Department of Revenue Defining Excellence in Louisiana Tax Administration (DELTA) Project	Natalie Howell Undersecretary +1 225 219 2152 Natalie.Howell@la.gov 617 N. Third Street Baton Rouge, Louisiana 70802 USA	

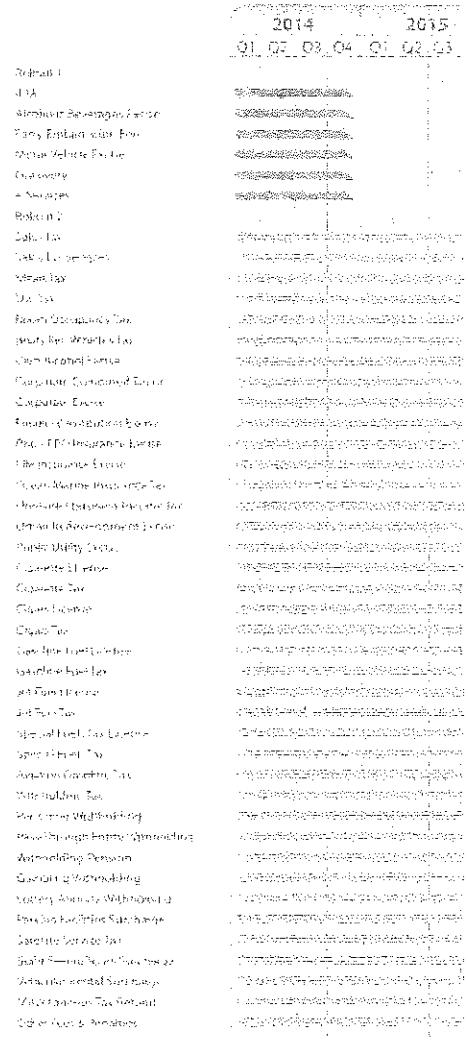
FAST ENTERPRISES

Agency & Project	Contact	Implementation Timeline
Louisville, Kentucky Metro Revenue Department	Angela Dunn Director +1 502 574 4016 Angela.Dunn@louisvilleky.gov 617 W. Jefferson Street Louisville, Kentucky 40202 USA	Q3 Q Rollout 1 Occupational License Fee on Wages Occupational License Fee on Net Profits Insurance Premium Tax Transient Room Tax Truck License Fee

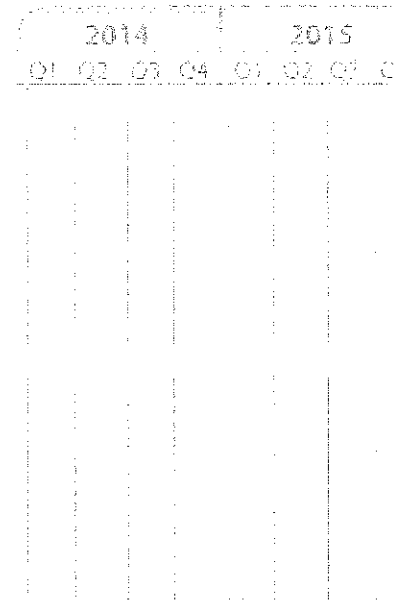
Agency & Project	Contacts	Implementation Timeline
Royal Malaysian Customs Department MyTax	Roslan Yusoff Senior Assistant Director of Customs I WK52 +60 19 221 5995 roslan.yusoff@customs.gov.my Royal Malaysian Customs Headquarters Ministry of Finance Complex No. 3 Persiaran Perdana, Precinct 2 62596, Putrajaya, Malaysia	

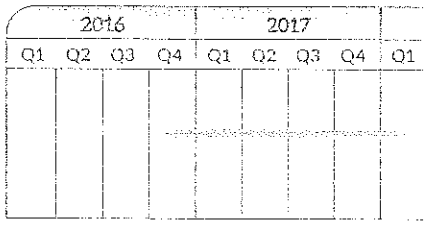
Agency & Project	Contact	Implementation Date
Manitoba, Canada Ministry of Finance Manitoba Better Systems Initiative (BSI) Integrated Taxation Project	Barry Draward Assistant Deputy Minister +1 204 945 3758 Bdraward@gov.mb.ca 401 York Avenue, Room 415 Winnipeg, Manitoba R3C 0P8 Canada	

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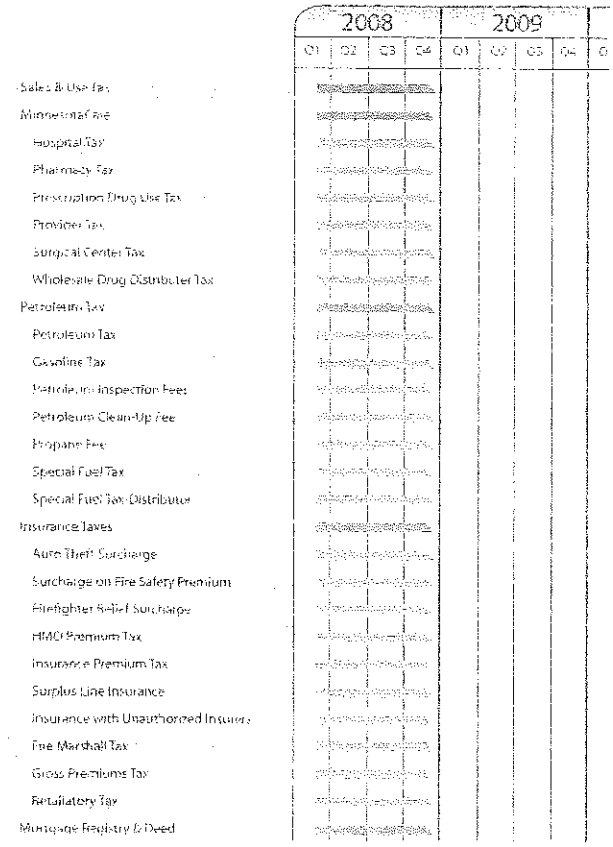
Agency & Project	Contact	Implementation Timeline
Massachusetts DOR Department of Revenue GenSys	Mike Guerin Project Manager, Deputy CIO +1 617 839 9258 guerinj@dor.state.ma.us 90 Everett Avenue - 3rd Floor Chelsea, Massachusetts 02150 USA	

Agency	Scope	Implementation Info
Massachusetts DOR Department of Revenue GenSys		(...Continued)

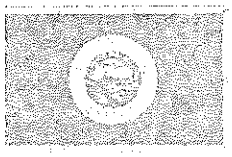


Agency & Project	Contact	Implementation Timeline
Massachusetts RMV Department of Transportation ATLAS Project	Colleen Ogilvie Deputy Registrar +1 857 368 7724 colleen.ogilvie@massmail.state.ma.us 25 Newport Avenue, Suite 3 Quincy, Massachusetts 02171 USA	Rollout 1 Driver Services Rollout 2 Vehicle Services 

Agency & Project	Contact	Implementation Timeline
Michigan DOS Department of State	Rose Jarois Director of Department Services +1 517 373 4790 JaroisR@michigan.gov 7064 Crowner Drive Lansing, Michigan 48918 USA	2017 (Q2 Q3 Q4) 2018 (Q1 Q2 Q3 Q4) 2019 (Q1 Q2 ...) Project 1 – Vehicle Services Project 2 – Driver Services
Michigan UIA Unemployment Insurance Agency Department of Licensing and Regulatory Affairs	Deb Patterson Project Manager +1 313 456 4926 PattersonD6@michigan.gov Cadillac Place, Suite L-500 3024 West Grand Boulevard Detroit, Michigan 48202 USA	2011 (Q3 Q4) 2012 (Q1 Q2 Q3 Q4) UI Tax UI Benefits

Agency & Project	Contacts	Implementation Timeline
Minnesota Department of Revenue onesource	Gary Milewski Information Systems Division Supervisor +1 651 556 6326 Gary.Milewski@state.mn.us 600 North Robert Street, 3rd Floor St. Paul, Minnesota 55146-7120 USA	

Agency Portal	Agency	Implementation Timeline
Minnesota Department of Revenue	(...Continued)	



onesource

	2008				2009				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q
Withholding Tax									
Corporate Franchise Tax									
Corp Franchise Tax for Nonprofits (UBIT)									
Estate Tax									
Fiduciary									
Partnership									
S Corporation									
Non-resident Entertainer Tax									
Non-resident Surety Deposit									
TAP									
Individual Income Tax									
Property Tax Refund									
Political Campaign Refund									
Military Refund									
Sustainable Forest Payment									
Payee Filing Fee									
Use Tax for Individuals									
Revenue Recapture (TOP/SOLP)									
Other Agency Debt									
Alcoholic Beverage Tax									
Cigarette & Tobacco Tax									
Lawful Gambling Tax									
Controlled Substances Tax									
Airflight Property Tax									
Contamination Tax									
Dry Cleaner Fees									
Tire Fee									
Hazardous Waste Generator Tax									
Metropolitan Landfill Fee									
Minerals Taxes									
Rural Elect Coop (REA)									
Statewide Property Tax									
Air Emissions Fee									
Water Quality Fee									

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Mississippi
Department of Revenue

GenTax Project:

MAGNIS
MISSISSIPPI AUTOMATED REVENUE SYSTEM

FastVS Project:

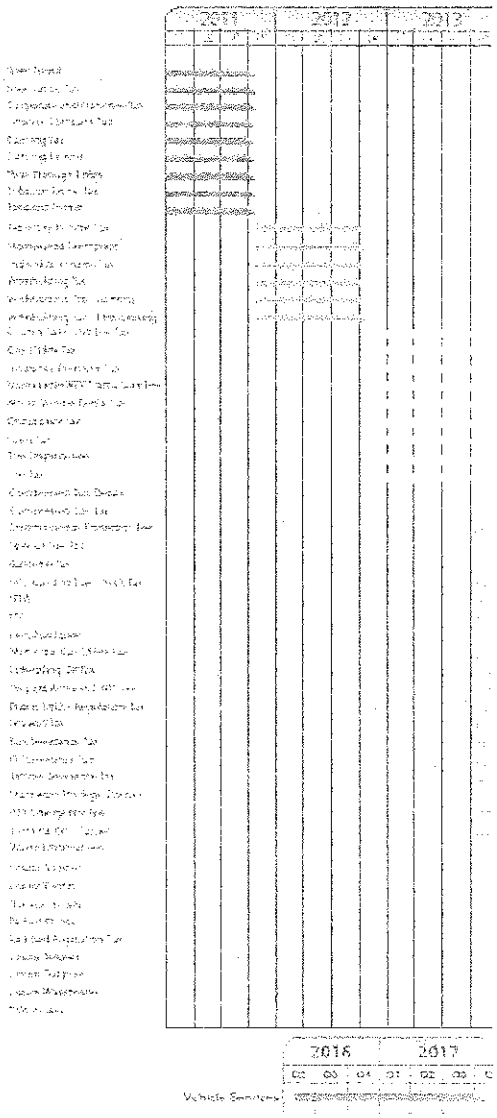
MARVIN (Mississippi Automated Registration and Vehicle Information Network)

Jennifer Wentworth
Project Director

+1 601 923 7273

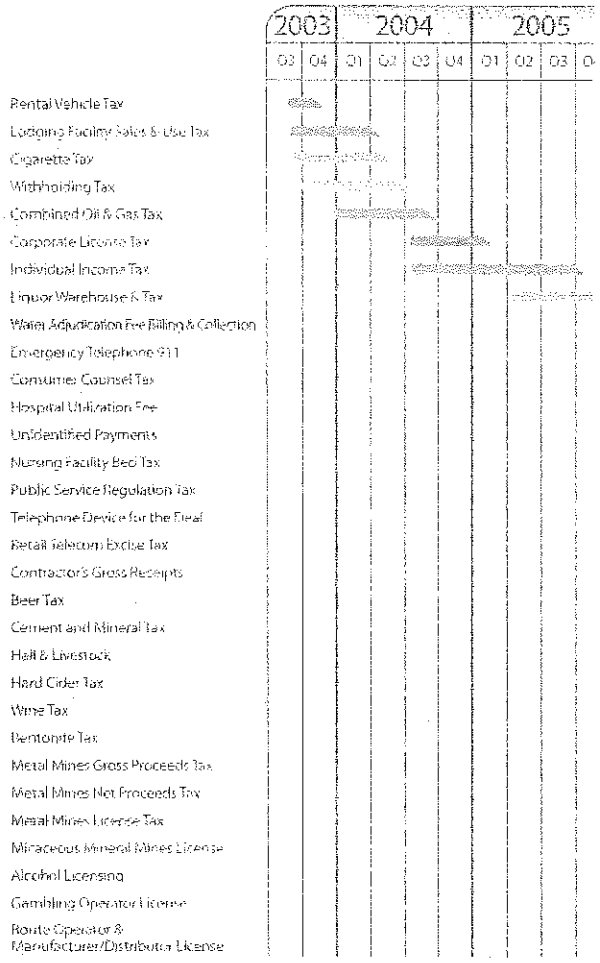
Jennifer.Wentworth@dor.ms.gov

500 Clinton Center Drive
Suite 3300
Clinton, Mississippi 39056
USA

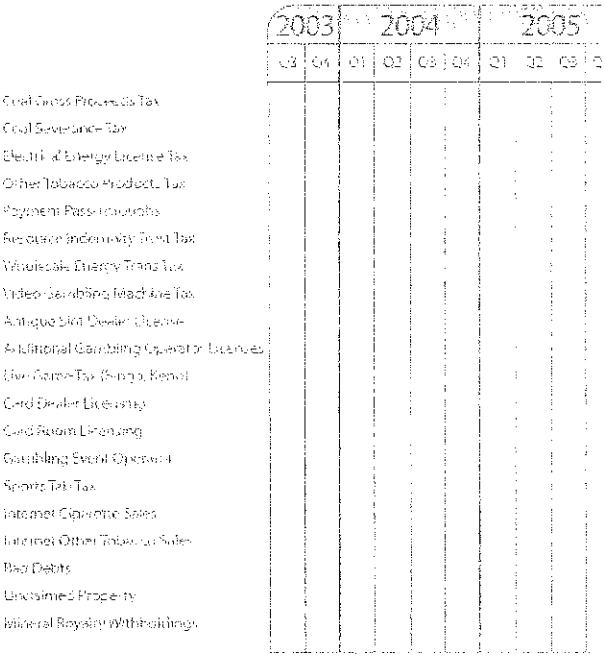


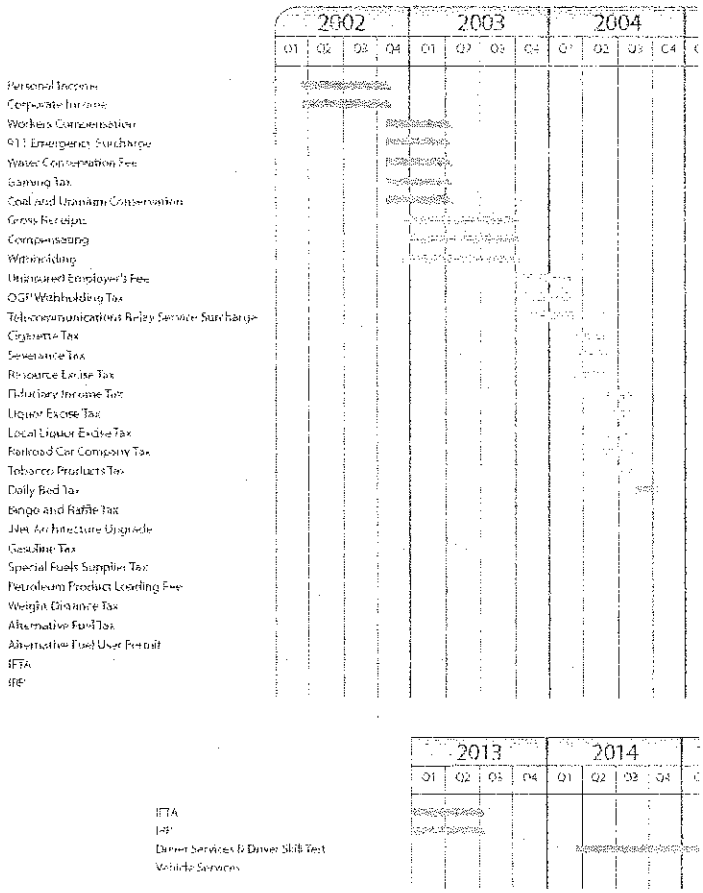
FAST
ENTERPRISES

Agency / Project	Contact	Implementation Timeline
Montana DLI Department of Labor & Industry State Tax Accounting Audit & Rating System STAARS Project	Corena Benjamin Business Lead +1 406 444 0690 CBenjamin@mt.gov 2550 Prospect Avenue Helena, Montana 59601 USA	20 Q1 Q2 Preparation GenTax Installation Rollout: UI Tax Definition Base Configuration Development Conversion Testing Training Rollout

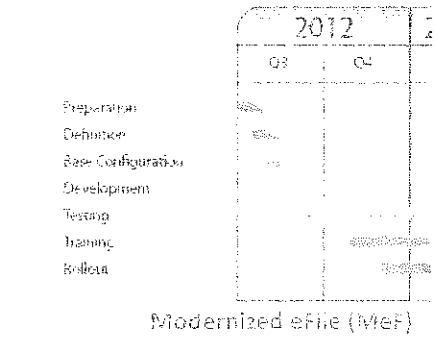
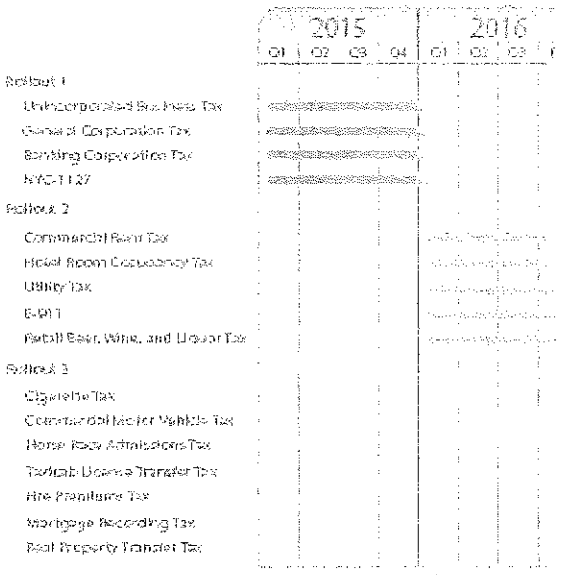
Agency & Project	Contact	Implementation Timeline
Montana DOR Department of Revenue Integrated Revenue Information System (IRIS) Project	Tim Bottenfield IT Bureau Chief +1 406 444 4395 tbottenfield@mt.gov P.O. Box 5805 Helena, Montana 59604 USA	

Agency's Project	Vendor	Implementation Date
Montana DOR Department of Revenue Integrated Revenue Information System (IRIS) Project		(...Continued)

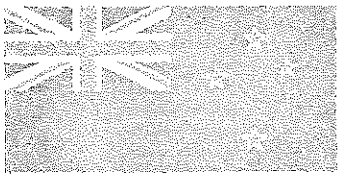
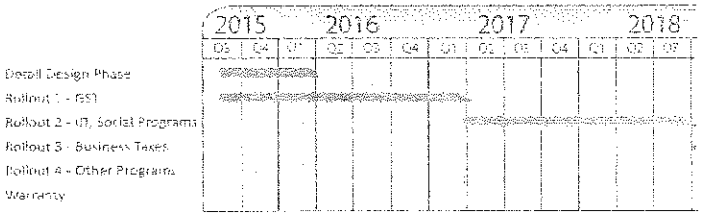


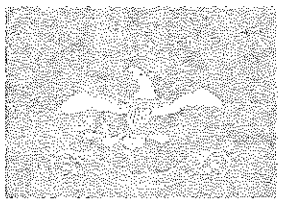
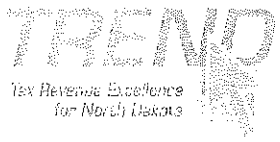
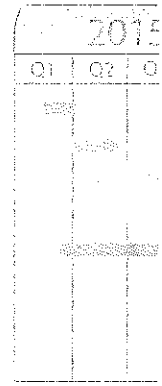
Agency & Project	Contact	Implementation Timeline
New Mexico Tax and Revenue Department THE GENTAX PROJECT	GenTax Jim Wastvedt GenTax Manager +1 505 827 2289 Jim.Wastvedt@state.nm.us Joseph Montoya Building 1100 S. St. Francis Drive Santa Fe, New Mexico 87505 USA FastDS-VS Will Duran Director of MVD +1 505 827 2852 William.duran@state.nm.us Motor Vehicle Division Joseph Montoya Building 2nd Floor 1100 S. St. Francis Drive Santa Fe, New Mexico 87504 USA	

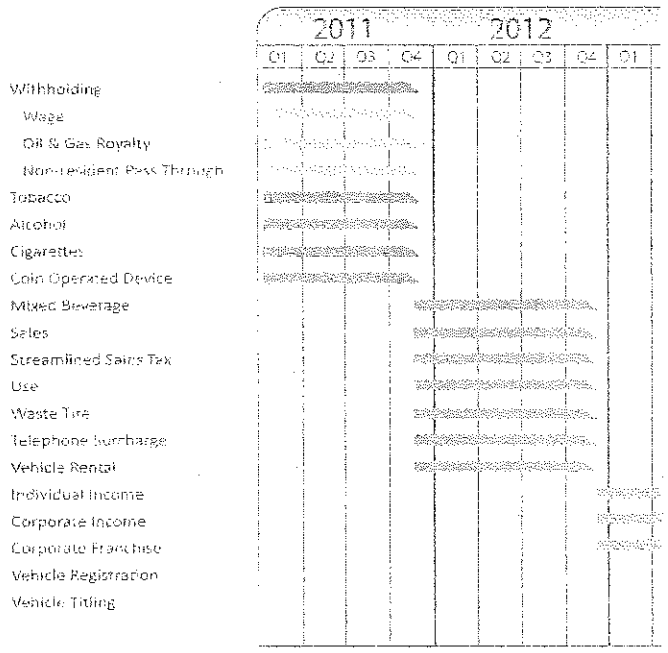
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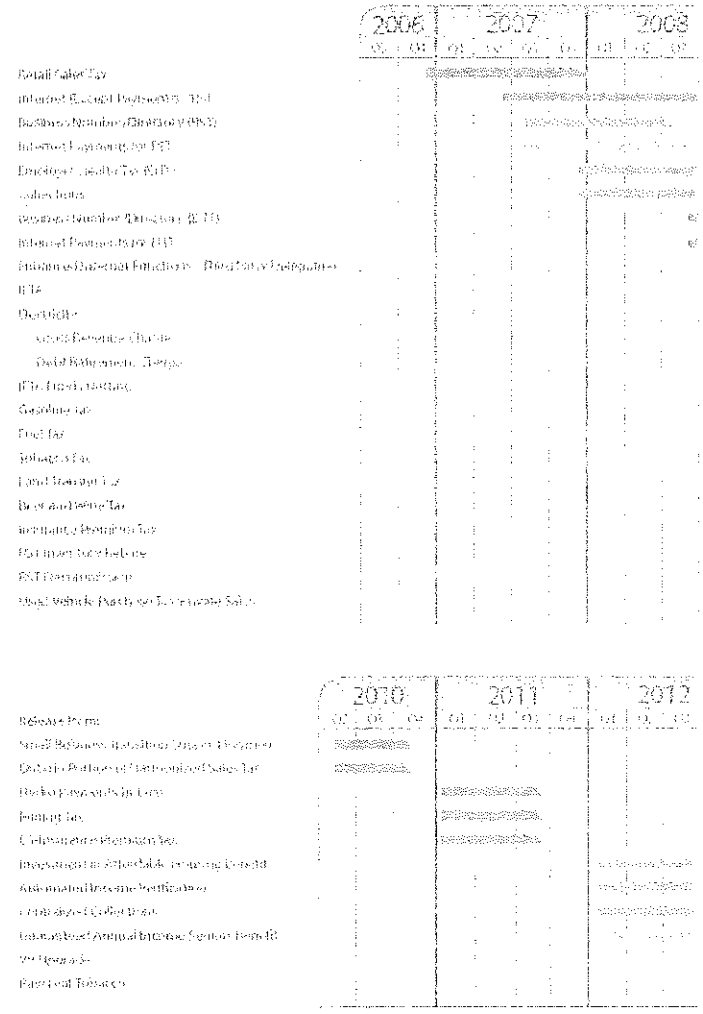
Agency/Project	Contact	Implementation Timeline
City of New York, New York NYC NYC New York City, BTS Project	Leslie Zimmerman Assistant Commissioner +1 212 232 1742 ZimmermanL@finance.nyc.gov 59 Maiden Lane New York, New York 10038 USA	 Modernized eFile (MeF)  Integrated Tax

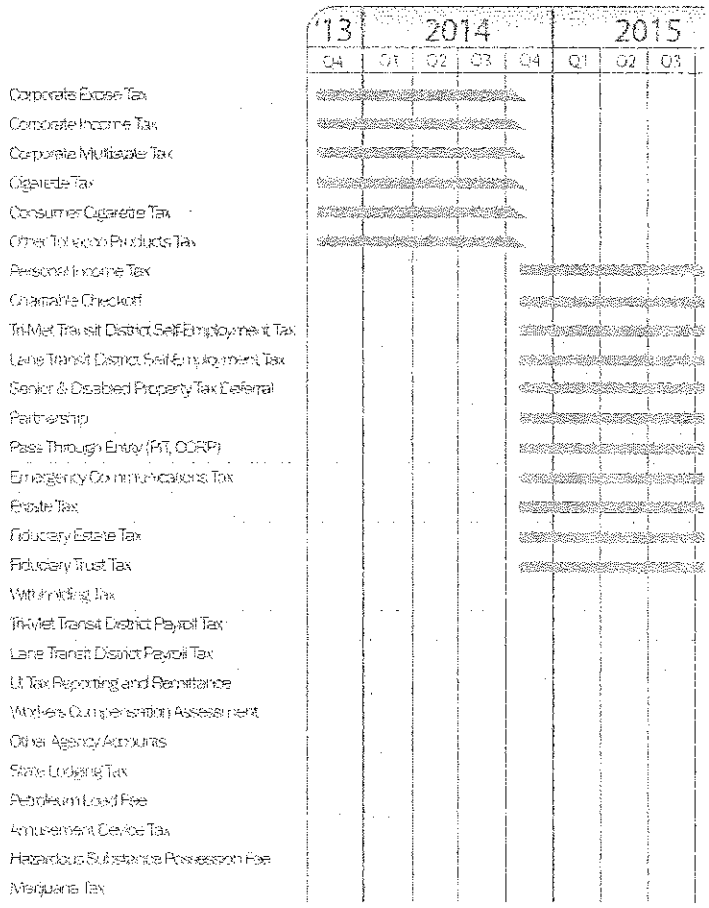
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Agency / Project	Contact	Implementation Timeframe
New Zealand Inland Revenue Department 	Simon Mason Managing Principal NZ – Taxation Advisory +64 4 978 6209 Simon.Mason@ird.govt.nz Inland Revenue - Asteron Centre 55 Featherston Street Wellington 6011 New Zealand	Schedule as proposed in the RFP response – 

Agency / Project	Contact	Implementation Timeline
North Dakota OSTC Office of State Tax Commissioner  	Jill Weigel Taxpayer Services Supervisor +1 701 328 3277 JMWeigel@nd.gov 600 E Boulevard Avewanue Dept. 127 Bismarck, North Dakota 58505 USA	
North Dakota DOT Department of Transportation 	Ross Buchholz Director, Information Technology Division +1 701 328 2561 rjbuchholz@nd.gov 608 E Boulevard Avenue Bismarck, North Dakota 58505	

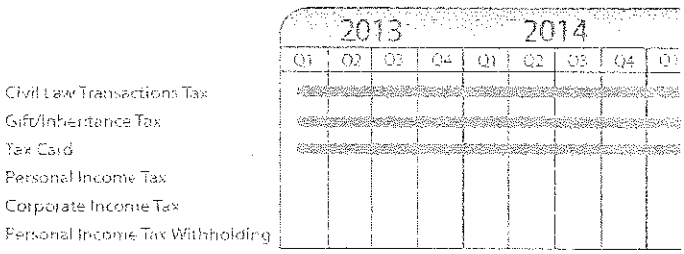
Assisted Project	Contact	Implementation Timeline
Oklahoma Tax Commission	Deborah McIntyre Project Director +1 405 521 4538 dmcintyre@tax.ok.gov Joe Lunn Director, MVD +1 405 521 5663 jlunn@tax.ok.gov 2501 North Lincoln Boulevard Connors Building, Capitol Complex Oklahoma City, Oklahoma 73105 USA	

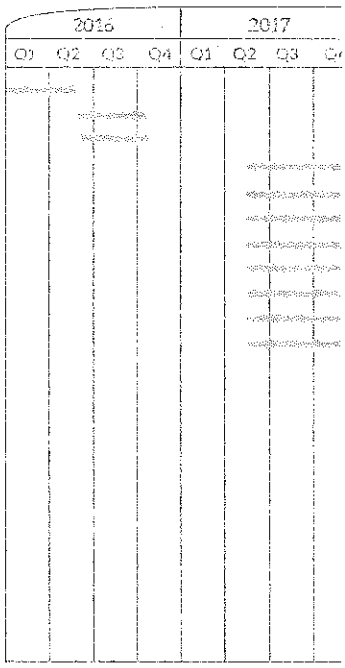
Authority & Region	Contact	Implementation Details
Ontario, Canada Ministry of Finance	Lynne Murdoch Manager, Business Systems Account Management and Collections Branch +1 905 433 5960 Lynne.Murdoch@ontario.ca 33 King Street West, 4th Floor Oshawa, Ontario L1H 8H5 Canada	

Agency & Project	Contact	Implementation Timeline
Oregon Department of Revenue OREGON DEPARTMENT OF REVENUE Core Systems Replacement (CSR) Project	Gary Johnson Chief Information Officer +1 503 945-8095 Gary.johnson@oregon.gov 955 Center Street, NE Salem, Oregon 97301 USA	

Agency & Project	Contact	Implementation Date
Oregon, USA Department of Revenue Core Systems Replacement (CSR) Project		(...Continued)

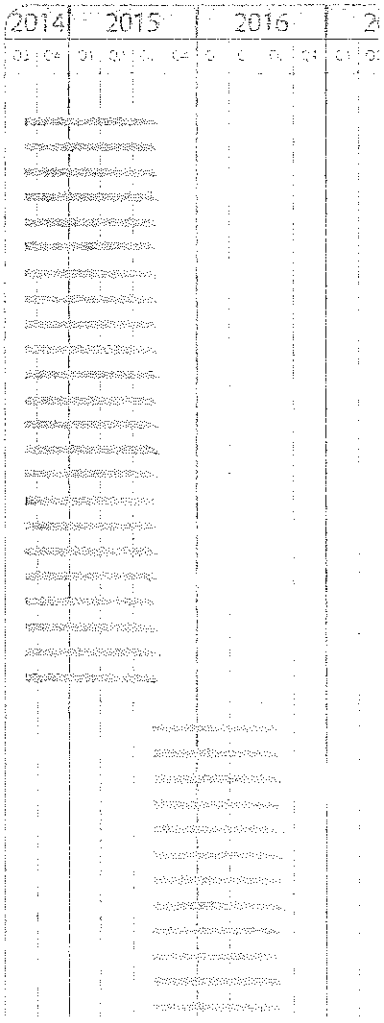
	13	2014				2015		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q...
Assessor's Funding (CAFFA)								
Forest Products Harvest Tax								
Small Tract Forestland Severance Tax - West								
Small Tract Forestland Severance Tax - East								
Marijuana Concepts								
Gas & Oil Production Tax								
Private Rail Car								
Revenue Accounting (Allocated Accounting)								
Non-Profit Homes								
Court Fines & Assessments								
Green Light (Film) Rebate								

Project Name	Contact	Implementation Timeline
Republic of Poland Ministry of Finance e-Podatki	Maciej Puto IT Director +48 600 206 488 Maciej.Puto@mofnet.gov.pl Ministerstwo Finansów ul. Świętokrzyska 12 00-916 Warszawa Poland	

Agency & Project	Contacts	Implementation Date
Departamento de Hacienda de Puerto Rico SUTI SISTEMA UNIFICADO DE RENTAS INTERNAS	Johanna Rohena Project Manager +1 787 640 0280 Johanna.Rohena@hacienda.pr.gov 10 Paseo Covadonga San Juan, Puerto Rico 00901 US Territory	

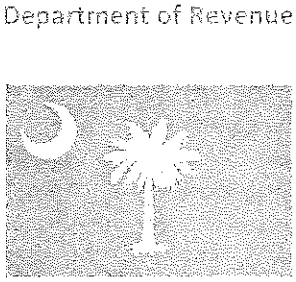
Agency & Project	Contact	Implementation Timeline
City of Scottsdale, Arizona	Jacob M. Beard, MISM Finance Technology Director +1 480 312 7018 JBeard@ScottsdaleAZ.gov 7447 E. Indian School Road Scottsdale, Arizona 85251 USA	2005: Q1, Q2, Q3

- After Hours Establishment License
- Alarm Company License
- Alarm User Permit
- Auctioneer License
- Auction House License
- Business, Occupational, and Professional License
- Charitable Permanent Location Permit
- Escort Bureau License
- Introductory Service License
- Escort Permit
- Charitable Solicitation License
- Spirituous Liquor Tax Permit
- Special Event Liquor License
- Magic Arts License
- Massage Facility License
- Valet Parking License
- Perimeter License
- Recycling License
- Solicitor License
- Secondhand Dealers/Pawn License
- Sexually Oriented Business License
- Sexually Oriented Business Manager License
- Adult Service Provider License
- Commercial Solid Waste License
- Teen Dance Center License
- Transaction Privilege (Sales) and Use Tax License
- Telestack Establishment License
- Telemark Operator License
- Discovery
- Taxpayer Access Point

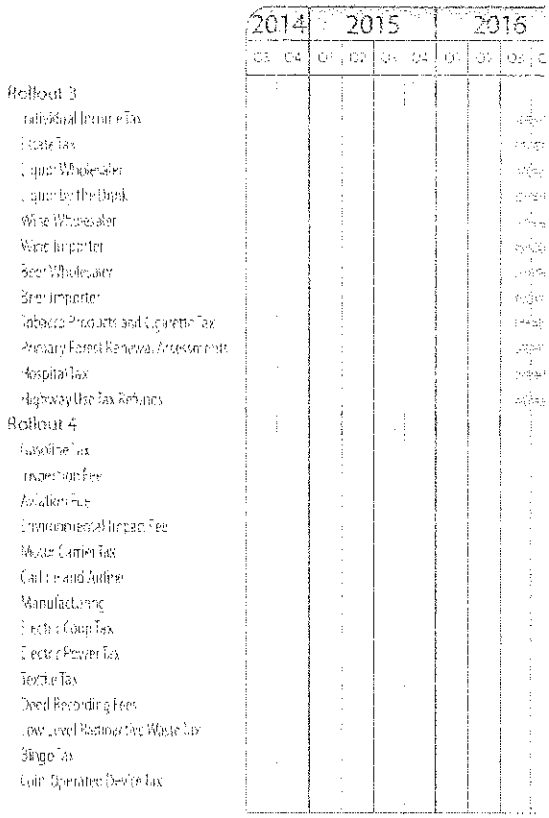
Agency / Jurisdiction	Contacts	Implementation Timeline
South Carolina Department of Revenue	Mario Alvarez Program Manager +1 803 896 1445 Mario.Alvarez@dor.sc.gov Technology Services Division South Carolina Department of Revenue 300A Outlet Pointe Blvd Columbia, SC 29210	

Comprehensive Integrated Tax System (CITS)

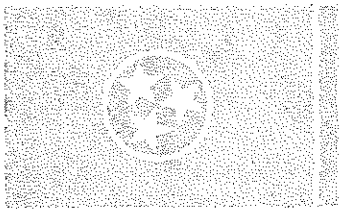
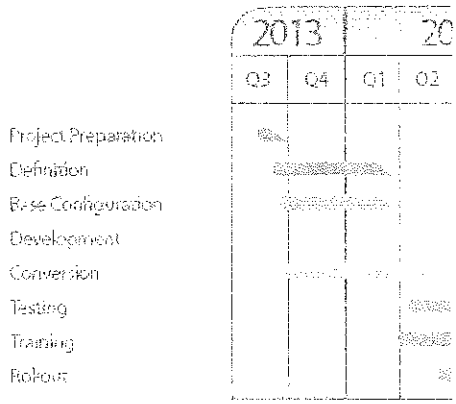
Agency & Project	Contact	Implementation Timeline
South Carolina Department of Revenue Comprehensive Integrated Tax System (CITS)		(...Continued)

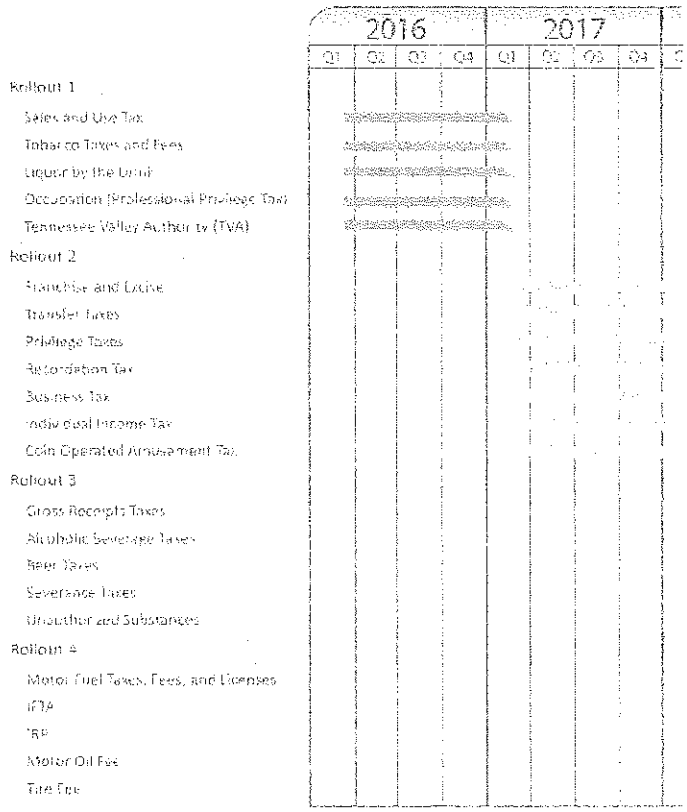






FAST ENTERPRISES

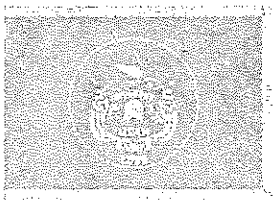
Agency & Project	Contacts	Implementation Timeline
Tennessee DSHS Department of Safety and Homeland Security   A-List	David Thomas Senior Project Director +1 615 741 7648 david.thomas@tn.gov 1158 Foster Avenue Nashville, Tennessee 37210 USA	

Agency / Project	Contact	Implementation Timeline
Tennessee DOR Department of Revenue TR³ *Tennessee Revenue Registration & Reporting System*	Allison Greer Project Director +1 615 393 4731 Greer.Allison@tn.gov 500 Deaderick Street Nashville, Tennessee 37242 USA	

FAST ENTERPRISES

Agency / Project	Contact	Implementation Date
Republic of Trinidad & Tobago Inland Revenue Division INTEGRATED TAX PROCESSING SYSTEM	Allison Raphael Chairman Board of Inland Revenue +1 868 623 4921 Araphael@ird.gov.tt Inland Revenue Division Trinidad House St. Vincent Street Port of Spain, Trinidad & Tobago	2006 Q3 Q4 Q1 Q2 … 200 Pay-As-You-Earn (PAYE) Petroleum Tax Petroleum Profits Tax Supplemental Petroleum Tax Unemployment Levy Green Fund Levy Club Gaming Tax Hotel Accommodation Tax Auctioneer's License Corporations Tax Business Levy Individual Income Tax Health Surcharge Withholding Tax Pawn Broker's Licence Money Lender's Licence Value Added Tax (VAT) Motor Vehicle Tax Insurance Surrender Tax Insurance Premium Tax Stamp Duty Financial Services Tax

Utah
State Tax Commission



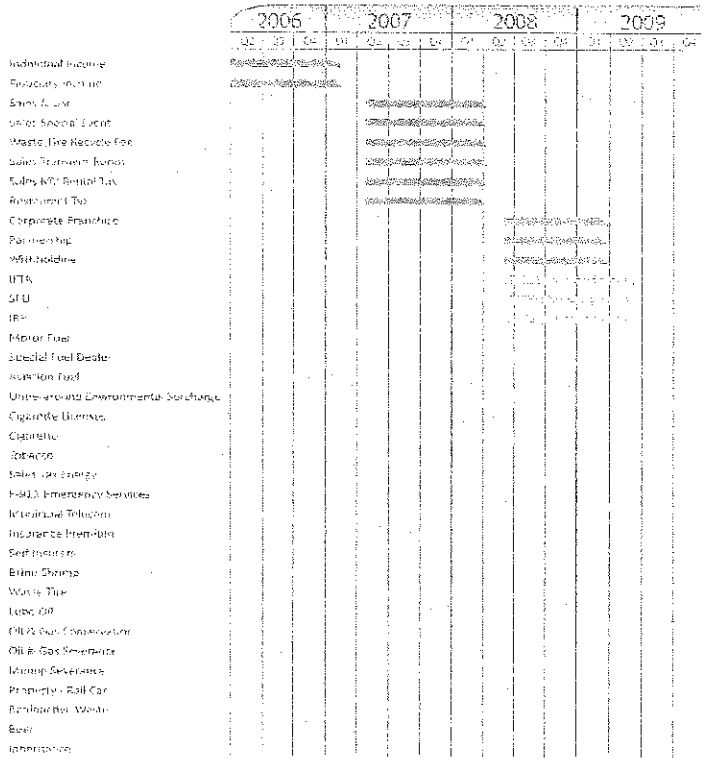


GenTax
Barry Conover
Executive Director

+1 801 297 3820

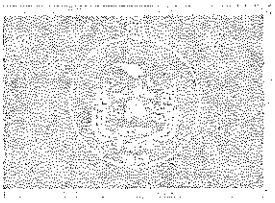
BConover@utah.gov

210 N 1950 W
Salt Lake City, Utah 84134
USA

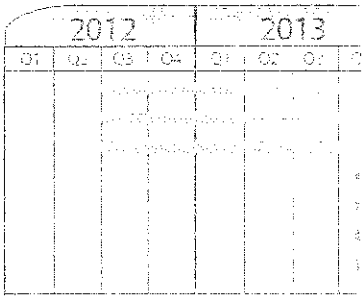


FAST
ENTERPRISES

Account Name	Contacts	Implementation Timing
Utah State Tax Commission	FastVG Monte Roberts Director of DMV +1 801 297 3607 monteroberts@utah.gov	(...Continued)

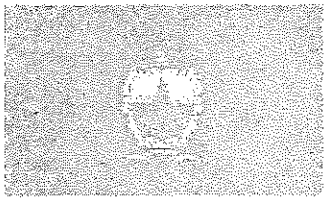






Agency & Project	Contact	Implementation Timeline

Vermont
Department of Taxes



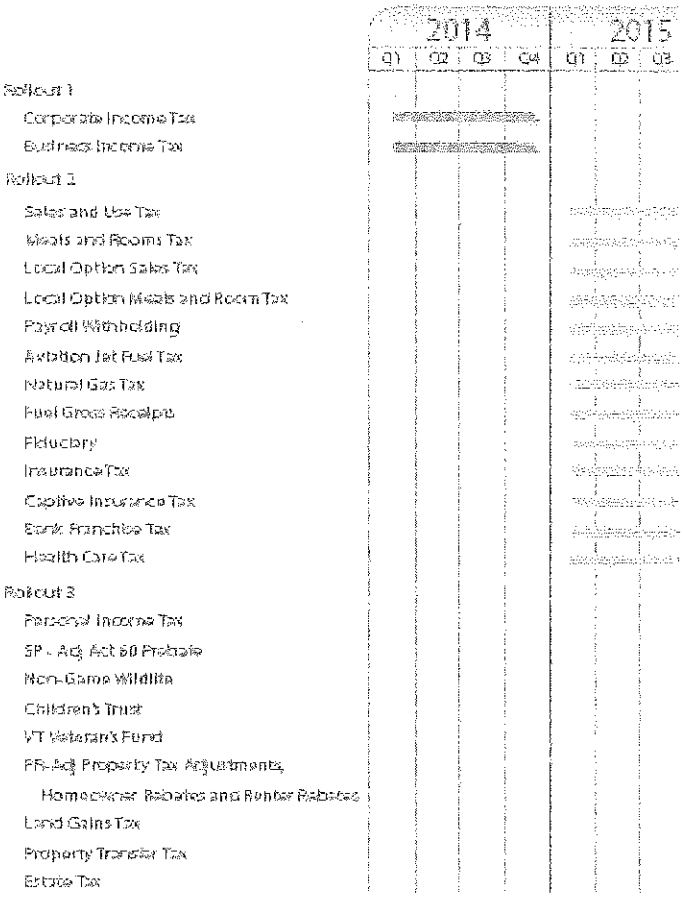
VTAX
VERMONT DEPARTMENT OF TAXES

Gregg Mousley
Deputy Commissioner

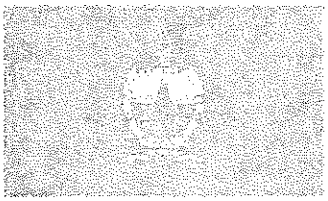
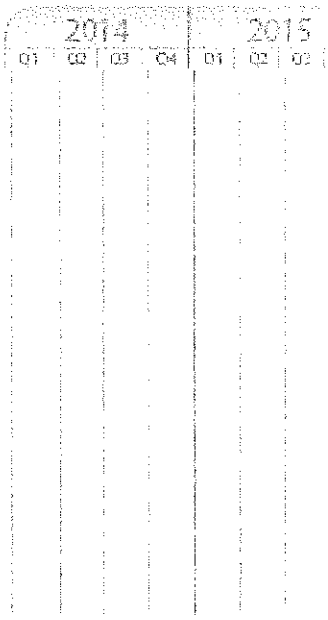
+1 802 828 2415

Gregg.Mousley@state.vt.us

133 State Street
Montpelier, Vermont 05633
USA

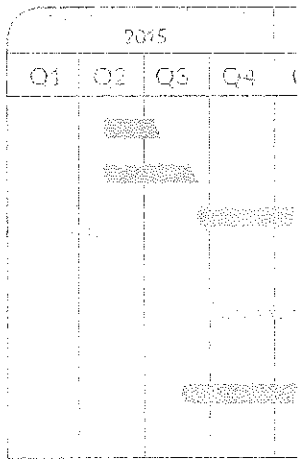


FAST
ENTERPRISES

Agency & Project	Contact	Implementation timing
Vermont Department of Taxes  VERMONT DEPARTMENT OF TAXES	Gregg Mousley Deputy Commissioner +1 802 828 2415 Gregg.Mousley@state.vt.us 133 State Street Montpelier, Vermont 05633 USA	(...Continued) 

Agency & Project	Contact	Implementation Timeline
Washington DOL Department of Licensing (IFTA/IRP/Fuel Tax)	Thao Manikhoth Administrator, Prorate and Fuel Tax +1 360 664 1811 tmanikhoth@dol.wa.gov 2424 Bristol Court SW Olympia, Washington 98502 USA	IFTA IRP Fuel Tax Summary Returns Fuel Tax Law Change, Inc. Fuel Tax Uniformity Unlicensed Refunds Fuel Tax Audit '14 | 2015 Q4 | Q1 | Q2 | Q
Washington DOL Department of Licensing (FastDS-VS) drives	Pamela Davis-Taggart Program Management Office Director +1 360 664 1453 PTaggart@DOL.WA.GOV 1125 Washington Street SE PO Box 9020 Olympia, Washington 98501 USA	Rollout 1 - Vehicle Services Rollout 2 - Driver Services 2015 | 2016 Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3

Agency / Project	Contact	Implementation Time
Washington ESD Employment Security Department UTAB Project	Neil Gorrell Director, Unemployment Insurance (and Project Sponsor) +1 360 902 9303 Ngorrell@esd.wa.gov 212 Maple Park Ave SE PO Box 9046 Olympia, Washington 98507-9046 USA	Preparation Definition Base Configuration Development Conversion Testing Training Rollout



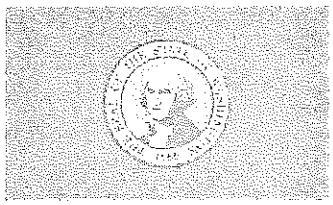
Washington DOR
Department of Revenue

Kit Ball
Project Director, Information Services

+1 360 596 3671

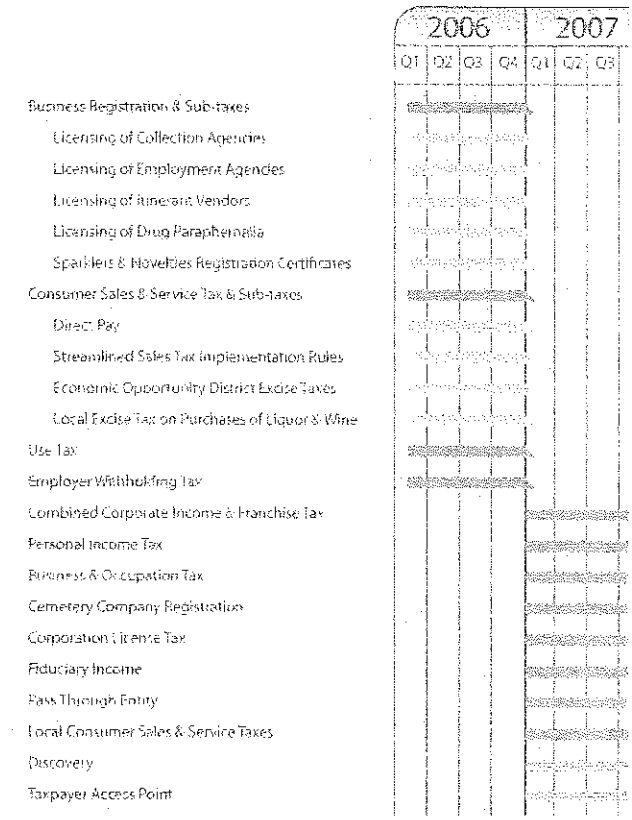
KitB@DOR.WA.GOV

6300 Linderson Way SW
Tumwater, Washington 98501
USA



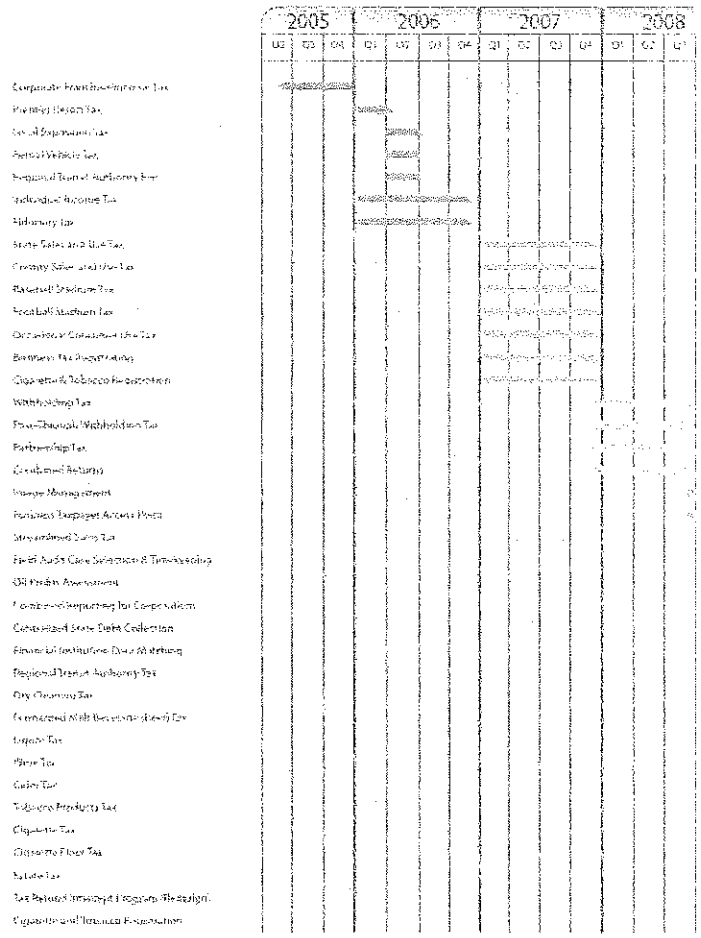
FAST ENTERPRISES

Agency & Project	Contact	Implementation Timeline
Washington DOR Department of Revenue	Kit Ball Project Director, Information Services +1 360 596 3671 KitB@DOR.WA.GOV 6300 Linderson Way SW Tumwater, Washington 98501 USA	(...Continued) Rollout 3 - Additional Taxes Forest Interface Vessel Interface Aircraft Excise Leasehold Excise Real Estate Excise Jeopardy Use Tax - Consumer Cigarette (Stamp Stock, Penalty) Estate Mobile Home Fee Travel Trailer Excise Motor Vehicle Excise Watercraft Excise Oil Spill

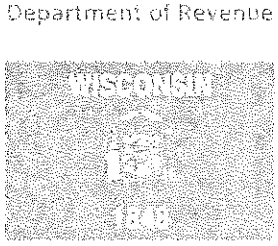
Agency & Project	Contact	Implementation Timeline
West Virginia Department of Revenue Tax Division REVENUE ACCOUNTS PROCESSING INTEGRATED DEVELOPMENT SYSTEM	Kwasi Toombs IT Director +1 304 558 8850 Kwasi.C.Toombs@wv.gov 1001 Lee Street, East Charleston, West Virginia 25301 USA	

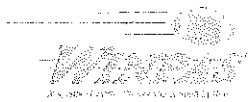
Agency & Project	Comments	Implementation Date
West Virginia Department of Revenue Tax Division	(...Continued)	2006 Q1 Q2 Q3 Q4 / 2007 Q1 Q2 Q3
	Severance Taxes	
	Gross Receipt Severance Taxes	
	Coal Production by County	
	Minimum State Coal Severance	
	Special 2-Cent per Ton Tax	
	Workers' Compensation Debt Reduction	
	Solid Waste Assessment	
	Telecommunications Tax	
	Health Care Provider Tax	
	Motor Fuel Excise Taxes	
	Motor Carrier Road Tax	
	Non-Intoxicating Beer Barrel Tax	
	Soft Drink Excise Tax	
	Tobacco Products Tax	
	Wine Liter Tax	
	Charity Bingo Licensing & Reporting	
	Charity Raffle Licensing & Excise Tax	
	IFTA	

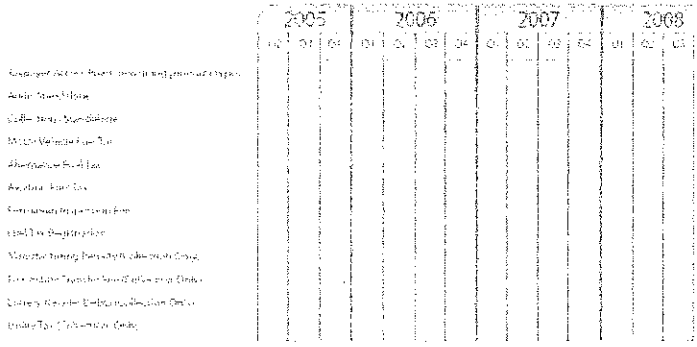
REVENUE ACCOUNTER PROCESSING INTEGRATED DEVELOPMENT SYSTEM

Agency & Project	Contacts	Implementation Timeline
Wisconsin Department of Revenue	Vicki Gibbons Revenue Administration Manager Deputy Division Administrator of Income, Sales and Excise Tax Division +1 608 266 3612 Vicki.gibbons@wisconsin.gov 2135 Rimrock Road Madison, Wisconsin 53708 USA	

Agency & Project	Contact	Implementation Timeline
Wisconsin Department of Revenue		(...Continued)







Implementation Proposal

RFP 17-082 Attachment G3 - Staffing Plan Template

Instructions for this Workbook

Staffing Plan Template Instructions
Staffing estimates must include all hours expected from all sources including the Vendor, DOR, Vendor-Partners and Third-Parties.
This Staffing Plan Template must include all hours for non-infrastructure and non-hardware related activities required to fully impleme the proposal.
Additional information can be provided beyond what is included in the Staffing Plan Template. The additional information must be ref "Additional Information" worksheets.
All information in this Staffing Plan Template should be consistent with the strategy and approach described in the proposal including
DOR reserves the right to contact Vendors on staffing information for clarification at any time throughout the selection process and ne
Do NOT use "To Be Determined" or similar annotations in the Staffing Plan Template worksheets. DOR is asking for staffing hours resource teams with the understanding that assumptions may apply. Such assumptions should be stated in the "Assumptions" worksh
All worksheets in the Staffing Plan Template should be thoroughly and accurately completed.
Staffing Plan Template Formatting Information
The light blue shaded cells indicate information Vendors are expected to provide (i.e. Staffing Summary Worksheet, Cell A6).
All red text shown in light blue shaded cells represent SAMPLES and/or EXAMPLES (i.e. Staffing Summary Worksheet, Cell A6). The pr examples should be replaced or removed in the submitted Cost Proposal.
Where needed, major column and row headings in each worksheet have comments defining the required information.
The description cells in the "Additional Information" and "Assumptions" worksheets should be limited to 300 words.
Staffing information must be in hours, rounded to the nearest whole hour.
We have included some formulas, however, it is the Vendor's responsibility to ensure the accuracy of all cells

As a guideline, there should be no less than six Major Activities for each phase.

Vendor, Vendor-Partner and Third Party Definitions and Instructions
Where staffing estimates refer to Vendor vs Vendor-Partner vs Third-Party:
Vendor staffing is defined as:
Staffing for Vendor resources that are solely the responsibility of the Vendor, are fully managed by the Vendor, are committed in the \ contracted through the Vendor.
Vendor-Partner staffing is defined as:
be contracted through the Vendor. All partners providing resources, including Women, Minority and Veteran Owned business partne Partners.
Third-Party staffing is defined as:
Staffing for Third-Party resources that are not the responsibility of the Vendor, may NOT be fully managed by the Vendor, are includec estimates only and will be contracted by DOR directly with the Third-Party.
All staffing in this Staffing Plan Template for Vendors , Vendor-Partners or Third-Parties must be included in their respective spreadshe
All Vendor-Partners and Third-Parties must be thoroughly defined in this Staffing Plan Template and must be included in the appropria
DOR strongly prefers to have very few, if any, Third-Party products or services!

Brief Staffing Plan Template Worksheet Descriptions
Staffing Summary - A phase-by-phase, month-by-month summary of staffing, for each resource team, required to fully implement the implementation phases must be consistent with those described throughout your proposal including Attachments D, G1 and G3.
DOR Staffing - A monthly detail of required Department of Revenue staffing by phase, by activity and by role.
Vendor Staffing - A monthly detail of required Vendor staffing by phase, by activity and by role.
Vendor-Partner Staffing - A monthly detail of required Vendor-Partner staffing by phase, by Vendor-Partner, by activity and by role.
Third-Party Staffing - A monthly detail of required Third-Party staffing by phase, by Third-Party, by activity and by role.
Additional Information - A brief description and reference to additional staffing related information.
Assumptions - A brief description of the assumptions for the information in this Staffing Proposal.

Rules and Guidelines For Activities
The following are Activities that must be included in a phase if appropriate for that phase. Additional Activities can be included by the
Executive Oversight and Governance - Executive support for project oversight and governance activities
Project and Change Management - Project and change management to ensure the project stays on target, on time and on budget
Organizational Change Management Support - Support for a reasonable OCM effort for a state revenue function similar to DOR
IV&V Support - Support for a reasonable IV&V effort for a state revenue function similar to DOR
System Initiation and Setup - Setup of the base system to accommodate the implementation process
Project Planning & Design - Planning and design required at project launch and potentially for each phase in order to define the scope,
Configuration - Setup of system configurations to the base system that are required to meet DOR requirements

Customization - Development of technology enhancements or extensions required to meet DOR requirements that cannot be configu
Integration and Interfacing - Development of integration and interfaces
Testing - Includes all aspects of testing including unit, business, performance, conversion and security testing.
Technical Training - Training for DOR technical resources
Business Training - Training for the DOR functional business areas
Data Conversion - Includes data preparation, cleansing and conversion. A separate conversion activity should be included for each tes
Infrastructure Installation and Support - Installation and maintenance of the technical infrastructure including servers, networks, stora
Go-Live / Rollout - Cutover to production
Vendors should also include any other major activity that requires more than 40 hours per month of resource dedication.
Vendors may include an Activity labeled "Other" in each phase, however, the total hours in the "Other" Activity cannot be more than 7 for that phase.

Rules and Guidelines For Roles
The following are the required roles to be assigned for Vendor, Vendor-Partner and Third-Party staffing. Additional Roles can be inclu
Executive Leadership - Executive leadership required for oversight, governance and other activities
Tax Project Leader - Project Managers with more than 5 years of project leadership experience and full Vendor tax system implementa
Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) previous full Vendor experience
Project Manager - Project Managers with less than 5 years of project management experience and no previous full Vendor tax system
Tax Technology Architect - Technology Professionals with more than 5 years of Vendor tax technology experience with the Vendor tax system implementation experience
Technology Resource - Technology Professionals with less than 5 years of Vendor tax system technology experience
Tax Configuration Expert - Configuration Professionals with more than 5 years of Vendor tax system configuration experience
Configuration Resource - Configuration Professionals with less than 5 years of Vendor tax system configuration experience
Sr. Tax Test Lead - Testing Professionals with more than 5 years of Vendor tax system testing experience
Tester - Testing Professionals with less than 5 years of Vendor tax system testing experience
Sr. Tax Training Lead - Training Professionals with more than 5 years of Vendor tax system training experience
Trainer - Training Professionals with less than 5 years of Vendor tax system training experience
The following are the required roles to be assigned for DOR staffing. Additional Roles can be included by the Respondent.
Executive Leadership - Executive leadership required for oversight, governance and other activities
Tax Project Leader - Project Managers with more than 5 years of DOR project management experience
Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) more than 5 years o management experience
Project Manager - Project Managers with less than 5 years of project management experience and less than 5 years of previous full DO management experience

Tax Technology Architect - Technology Professionals with more than 5 years of DOR tax technology experience
Technology Resource - Technology Professionals with less than 5 years of DOR technology implementation experience
Business Expert - DOR professionals who have broad understanding of DOR business processes across all tax types
Correspondence Design Experts - DOR professionals who have the ability to create clear, effective, professional business docume..., e correspondence that is in accordance with DOR policy
Sr. Business Analysts - DOR professionals with more than 3 years of DOR business analyst experience and required skills to configure b
Configuration Specialists - DOR professionals who have a advanced understanding of DOR process and business rules that would enab activities.
SME - DOR business specialists across all ten business processes
Sr. Tax Test Lead - DOR professionals with more than 3 years of DOR tax experience
Tax Tester - Professional testers with less than 3 years of DOR tax experience
Tax Training Lead - DOR professionals with more than 3 years of DOR tax experience
Trainer - Professional trainers with less than 3 years of DOR tax experience
Vendors should also include any other major role that is necessary for DOR to understand the staffing requirements and expectations

Attachment G3

Estimated Total Project Implementation Staffing

Date For Month 1 = 1/8/2018

Resource Team Hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
DOR Hours																		
Phase 1	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	1213	1213	1213	1213	1213	121
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Hours																		
Phase 1	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	4125	4125	4125	4125	4125	412
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor-Partner Hours																		
Phase 1	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Third-Party Hours																		
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hours																		
Phase 1	6028	6028	6028	6028	6028	6028	6548	7935	9668	9668	9668	8975	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	6028	6028	6028	6028	6028	602
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month

24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1213	1213	1213	1213	1213	1213	1733	312
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	3014	3014	3014	3014	3014	3014	3014	301
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690	690	690
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8975	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	6399	6399	6399	6399	6399	6399	6919	8305	10039	10039	10039	9345	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	4917	4917	4917	4917	4917	4917	5437	682
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated DOR Implementation Staffing Levels

	Payment Trigger ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mc
PHASE 1 Activities & Roles															
Project Management															
Project Management		347	347	347	347	347	347	347	347	347	347	347	347		
Development															
Business Analysts		520	520	520	520	520	520	520	520	520	520	520			
IT Resources		347	347	347	347	347	347	347	347	347	347	347			
Testing															
Business Analysts									347	347	347	347			
Testers									1040	1040	1040	1040			
Conversion															
Business Analysts								173	173	173	173	173	173		
IT Resources								347	347	347	347	347	347		
Training															
Trainers										1733	1733	1733	1733		
Production Cutover															
Business Analysts													867		
IT Resources													693		
Total Phase 1 Hours		1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0	
PHASE 2 Activities & Roles															
Project Management															
Project Management														347	3
Development															
Business Analysts														520	5
IT Resources														347	3
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 2 Hours		0	0	0	0	0	0	0	0	0	0	0	0	1213	12
PHASE 3 Activities & Roles															
Project Management															
Project Management															
Development															

	Payment Trigger ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mo
Business Analysts															
IT Resources															
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 3 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 4 Activities & Roles															
Project Management															
Project Management															
Development															
Business Analysts															
IT Resources															
Testing															
Business Analysts															
Testers															
Conversion															
Business Analysts															
IT Resources															
Training															
Trainers															
Production Cutover															
Business Analysts															
IT Resources															
Total Phase 4 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 5 Activities & Roles															
Total Phase 5 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	

Totals By Phase		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Mo
Phase 1														0	
Phase 2		0	0	0	0	0	0	0	0	0	0	0	0		
Phase 3		0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 4		0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 5		0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mont 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
347	347	347	347	347	347													
520	520	520	520	520														
347	347	347	347	347														
	347	347	347	347														
	1040	1040	1040	1040														
173	173	173	173	173	173													
347	347	347	347	347	347													
		1733	1733	1733	1733													
					867													
					693													
1733	3120	4853	4853	4853	4160	0	0	0	0	0	0	0	0	0	0	0	0	0
						347	347	347	347	347	347	347	347	347	347	347	347	

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mont 37
						520	520	520	520	520	520	520	520	520	520	520		
						347	347	347	347	347	347	347	347	347	347	347		
													347	347	347	347		
													1040	1040	1040	1040		
												173	173	173	173	173	173	
												347	347	347	347	347	347	
														1733	1733	1733	1733	
																	867	
																	693	
0	0	0	0	0	0	1213	1213	1213	1213	1213	1213	1733	3120	4853	4853	4853	4160	0
																		347
																		520
																		347
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Mont 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0													0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
347	347	347	347	347	347	347
520	520	520	520	520	520	
347	347	347	347	347	347	
		347	347	347	347	
		1040	1040	1040	1040	
	173	173	173	173	173	173
	347	347	347	347	347	347
			1733	1733	1733	1733
						867
						693
1213	1733	3120	4853	4853	4853	4160
0	0	0	0	0	0	0

Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

Attachment G3

Estimated Vendor Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo 1
PHASE 1 Activities & Roles																
Project Management																
Project Management	412	412	412	412	412	412	412	412	412	412	412	412				
Development																
Team Leaders	408	408	408	408	408	408	408	408	408	408	408	408				
Implementation Consultants	829	829	829	829	829	829	829	829	829	829	829	829				
Testing																
Team Leaders	272	272	272	272	272	272	272	272	272	272	272	272				
Implementation Consultants	553	553	553	553	553	553	553	553	553	553	553	553				
Conversion																
Team Leaders	204	204	204	204	204	204	204	204	204	204	204	204				
Implementation Consultants	415	415	415	415	415	415	415	415	415	415	415	415				
Training																
Team Leaders	204	204	204	204	204	204	204	204	204	204	204	204				
Implementation Consultants	415	415	415	415	415	415	415	415	415	415	415	415				
Production Cutover																
Team Leaders	136	136	136	136	136	136	136	136	136	136	136	136				
Implementation Consultants	276	276	276	276	276	276	276	276	276	276	276	276				
Total Phase 1 Hours	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	0	0	0	
PHASE 2 Activities & Roles																
Project Management																
Project Management													412	412	412	4
Development																
Team Leaders													408	408	408	4
Implementation Consultants													829	829	829	8
Testing																
Team Leaders													272	272	272	2
Implementation Consultants													553	553	553	5
Conversion																
Team Leaders													204	204	204	2
Implementation Consultants													415	415	415	4
Training																
Team Leaders													204	204	204	2
Implementation Consultants													415	415	415	4
Production Cutover																
Team Leaders													136	136	136	1
Implementation Consultants													276	276	276	2
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	4125	4125	4125	41
PHASE 3 Activities & Roles																
Project Management																
Project Management																
Development																

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo 1
Team Leaders																
Implementation Consultants																
Testing																
Team Leaders																
Implementation Consultants																
Conversion																
Team Leaders																
Implementation Consultants																
Training																
Team Leaders																
Implementation Consultants																
Production Cutover																
Team Leaders																
Implementation Consultants																
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 4 Activities & Roles																
Project Management																
Project Management																
Development																
Team Leaders																
Implementation Consultants																
Testing																
Team Leaders																
Implementation Consultants																
Conversion																
Team Leaders																
Implementation Consultants																
Training																
Team Leaders																
Implementation Consultants																
Production Cutover																
Team Leaders																
Implementation Consultants																
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 5 Activities & Roles																
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Mo 1
Phase 1													0	0	0	
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0				
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
412	412	412	412																
408	408	408	408																
829	829	829	829																
272	272	272	272																
553	553	553	553																
204	204	204	204																
415	415	415	415																
204	204	204	204																
415	415	415	415																
136	136	136	136																
276	276	276	276																
4125	4125	4125	4125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				450	450	450	450	450	450	450	450	450	450	450	450				

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
				445	445	445	445	445	445	445	445	445	445	445	445				
				904	904	904	904	904	904	904	904	904	904	904	904				
				297	297	297	297	297	297	297	297	297	297	297	297				
				602	602	602	602	602	602	602	602	602	602	602	602				
				223	223	223	223	223	223	223	223	223	223	223	223				
				452	452	452	452	452	452	452	452	452	452	452	452				
				223	223	223	223	223	223	223	223	223	223	223	223				
				452	452	452	452	452	452	452	452	452	452	452	452				
				148	148	148	148	148	148	148	148	148	148	148	148				
				301	301	301	301	301	301	301	301	301	301	301	301				
0	0	0	0	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	4495	0	0	0	
																301	301	301	3
																298	298	298	2
																606	606	606	6
																199	199	199	1
																404	404	404	4
																149	149	149	1
																303	303	303	3
																149	149	149	1
																303	303	303	3
																99	99	99	
																202	202	202	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3014	3014	3014	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Mo
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0													0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Month 45	Month 46	Month 47	Month 48
0	0	0	0
0	0	0	0

Month 45	Month 46	Month 47	Month 48
0	0	0	0
301	301	301	301
298	298	298	298
606	606	606	606
199	199	199	199
404	404	404	404
149	149	149	149
303	303	303	303
149	149	149	149
303	303	303	303
99	99	99	99
202	202	202	202
3014	3014	3014	3014
0	0	0	0

Month 45	Month 46	Month 47	Month 48
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Attachment G3

Estimated Vendor-Partner Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23
PHASE 1 Activities & Roles																							
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Development																							
Implementation Consultants	276	276	276	276	276	276	276	276	276	276	276	276											
Testing																							
Implementation Consultants	173	173	173	173	173	173	173	173	173	173	173	173											
Conversion																							
Implementation Consultants	104	104	104	104	104	104	104	104	104	104	104	104											
Training																							
Implementation Consultants	69	69	69	69	69	69	69	69	69	69	69	69											
Production Cutover																							
Implementation Consultants	69	69	69	69	69	69	69	69	69	69	69	69											
Total Phase 1 Hours	690	690	690	690	690	690	690	690	690	690	690	690	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 Activities & Roles																							
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Development																							
Implementation Consultants													276	276	276	276	276	276	276	276	276	276	276
Testing																							
Implementation Consultants													173	173	173	173	173	173	173	173	173	173	173
Conversion																							
Implementation Consultants													104	104	104	104	104	104	104	104	104	104	104
Training																							
Implementation Consultants													69	69	69	69	69	69	69	69	69	69	69
Production Cutover																							
Implementation Consultants													69	69	69	69	69	69	69	69	69	69	69
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	690	690	690	690	690	690	690	690	690	690	690
PHASE 3 Activities & Roles																							
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Development																							
Implementation Consultants																							
Testing																							
Implementation Consultants																							
Conversion																							
Implementation Consultants																							
Training																							
Implementation Consultants																							
Production Cutover																							
Implementation Consultants																							
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles																							
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Development																							
Implementation Consultants																							
Testing																							
Implementation Consultants																							
Conversion																							
Implementation Consultants																							
Training																							
Implementation Consultants																							
Production Cutover																							
Implementation Consultants																							
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles																							
N/A																							
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23
Phase 1													0	0	0	0	0	0	0	0	0	0	0
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0											
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partners (MBE, WBE, IVBE Subcontractors)																							

Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
276	276	276	276	276	276												
173	173	173	173	173	173												
104	104	104	104	104	104												
69	69	69	69	69	69												
69	69	69	69	69	69												
690	690	690	690	690	690	0	0	0	0	0	0	0	0	0	0	0	0
						276	276	276	276	276	276	276	276	276	276	276	276
						173	173	173	173	173	173	173	173	173	173	173	173
						104	104	104	104	104	104	104	104	104	104	104	104
						69	69	69	69	69	69	69	69	69	69	69	69
						69	69	69	69	69	69	69	69	69	69	69	69
0	0	0	0	0	0	690	690	690	690	690	690	690	690	690	690	690	690
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0												
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated Third-Party Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	I
PHASE 1 Activities & Roles																		
None used																		
Total Phase 1 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 2 Activities & Roles																		
None used																		
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 3 Activities & Roles																		
None used																		
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 4 Activities & Roles																		
None used																		
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHASE 5 Activities & Roles																		
None used																		
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

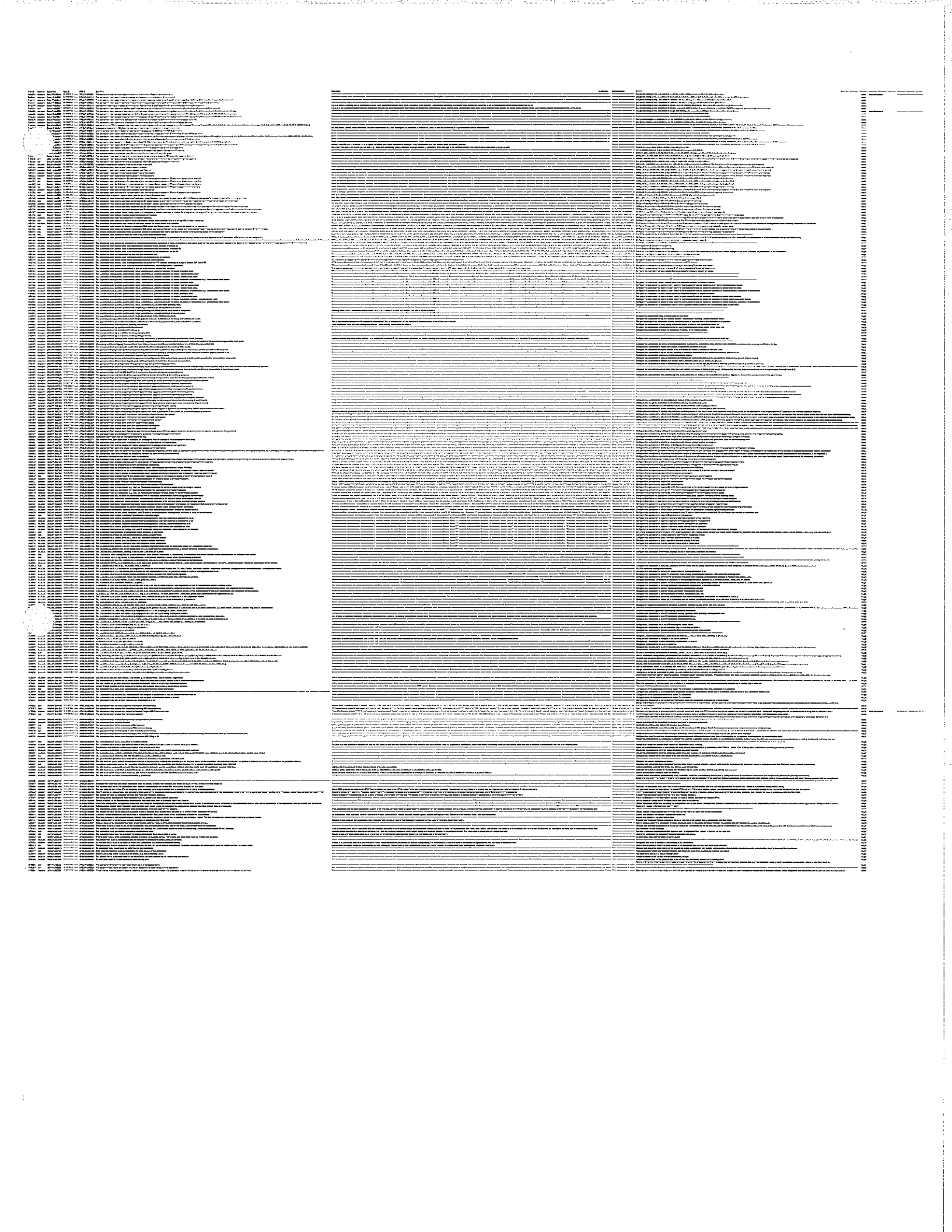
Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	I
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
None used																		
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
None used																		
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
None used																		
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
None used																		
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
None used																		

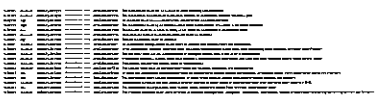
Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	th 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Additional Information Description
N/A

Assumption Description
These estimates are provided as required by the RFP. They are for informational puposes only. They will not be used in project planning or pro activities.
Only minimal IDOR IT resources have been included in these estimates since our work plans are not reliant on DOR IT development resou...s t implementation activities other than development of legacy data extraction processes and infrastructure support. DOR may want to assign IT de resources to the project to enhance the knowledge transfer process.
We have combined the MBE, WBE, and IVBE vendors into a single estimate since these resources will be performing the same activities during Determination of specific resources to specific activites will be made during project planning activities.
We did not estimate hours required for user training.







Vuln ID	Severity	Group Title	Rule ID	STIG ID	Rule Title
V-69239	medium	SRG-APP-000001	SV-83861r1_rule	APSC-DV-000010	The application must provide a capability to limit the number of logon sessions per user.
V-69241	medium	SRG-APP-000295	SV-83863r1_rule	APSC-DV-000060	The application must clear temporary storage and cookies when the session is terminated.
V-69243	medium	SRG-APP-000295	SV-83865r1_rule	APSC-DV-000070	The application must automatically terminate the non-privileged user session and log off non-privileged users after a 15 minute idle time period has elapsed.
[illegible]	medium	SRG-APP-000295	SV-83867r1_rule	APSC-DV-000080	The application must automatically terminate the admin user session and log off admin users after a 10 minute idle time period is exceeded.
[illegible]	medium	SRG-APP-000296	SV-83869r1_rule	APSC-DV-000090	Applications requiring user access authentication must provide a logoff capability for user initiated communication session.
[illegible]49	low	SRG-APP-000297	SV-83871r1_rule	APSC-DV-000100	The application must display an explicit logoff message to users indicating the reliable termination of authenticated communications sessions.
V-69251	medium	SRG-APP-000311	SV-83873r1_rule	APSC-DV-000110	The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in storage.
V-69253	medium	SRG-APP-000313	SV-83875r1_rule	APSC-DV-000120	The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in process.
V-69255	medium	SRG-APP-000314	SV-83877r1_rule	APSC-DV-000130	The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in transmission.
V-69257	medium	SRG-APP-000014	SV-83879r1_rule	APSC-DV-000160	The application must implement DoD-approved encryption to protect the confidentiality of remote access sessions.
V-69259	medium	SRG-APP-000015	SV-83881r1_rule	APSC-DV-000170	The application must implement cryptographic mechanisms to protect the integrity of remote access sessions.
V-69261	medium	SRG-APP-000015	SV-83883r1_rule	APSC-DV-000180	Applications with SOAP messages requiring integrity must include the following message elements:-Message ID-Service Request-Timestamp-SAML Assertion (optionally included in messages) and all elements
V-69279	high	SRG-APP-000014	SV-83901r1_rule	APSC-DV-000190	Messages protected with WS_Security must use time stamps with creation and expiration times.
V-69281	high	SRG-APP-000014	SV-83903r1_rule	APSC-DV-000200	Validity periods must be verified on all application messages using WS-Security or SAML assertions.
V-69283	medium	SRG-APP-000014	SV-83905r2_rule	APSC-DV-000210	The application must ensure each unique asserting party provides unique assertion ID references for each SAML assertion.
V-69285	medium	SRG-APP-000014	SV-83907r1_rule	APSC-DV-000220	The application must ensure encrypted assertions, or equivalent confidentiality protections are used when assertion data is passed through an intermediary, and confidentiality of the assertion data is require
V-69287	high	SRG-APP-000014	SV-83909r1_rule	APSC-DV-000230	The application must use the NotOnOrAfter condition when using the SubjectConfirmation element in a SAML assertion.
V-69289	high	SRG-APP-000014	SV-83911r1_rule	APSC-DV-000240	The application must use both the NotBefore and NotOnOrAfter elements or OneTimeUse element when using the Conditions element in a SAML assertion.
V-69291	medium	SRG-APP-000014	SV-83913r1_rule	APSC-DV-000250	The application must ensure if a OneTimeUse element is used in an assertion, there is only one of the same used in the Conditions element portion of an assertion.
V-69293	medium	SRG-APP-000014	SV-83915r1_rule	APSC-DV-000260	The application must ensure messages are encrypted when the SessionIndex is tied to privacy data.
V-69295	medium	SRG-APP-000023	SV-83917r1_rule	APSC-DV-000280	The application must provide automated mechanisms for supporting account management functions.
V-69297	medium	SRG-APP-000317	SV-83919r1_rule	APSC-DV-000290	Shared/group account credentials must be terminated when members leave the group.
V-69299	medium	SRG-APP-000024	SV-83921r1_rule	APSC-DV-000300	The application must automatically remove or disable temporary user accounts 72 hours after account creation.
V-70173	low	ASDV-PL-000310	SV-84795r1_rule	APSC-DV-000310	The application must have a process, feature or function that prevents removal or disabling of emergency accounts.
V-69301	low	SRG-APP-000025	SV-83923r1_rule	APSC-DV-000320	The application must automatically disable accounts after a 35 day period of account inactivity.
V-69303	medium	SRG-APP-000025	SV-83925r1_rule	APSC-DV-000330	Unnecessary application accounts must be disabled, or deleted.
V-69305	medium	SRG-APP-000026	SV-83927r1_rule	APSC-DV-000340	The application must automatically audit account creation.
V-69307	medium	SRG-APP-000027	SV-83929r1_rule	APSC-DV-000350	The application must automatically audit account modification.
V-69309	medium	SRG-APP-000028	SV-83931r1_rule	APSC-DV-000360	The application must automatically audit account disabling actions.
V-69311	medium	SRG-APP-000029	SV-83933r1_rule	APSC-DV-000370	The application must automatically audit account removal actions.
V-69313	low	SRG-APP-000291	SV-83935r1_rule	APSC-DV-000380	The application must notify System Administrators and Information System Security Officers when accounts are created.
V-69315	low	SRG-APP-000292	SV-83937r1_rule	APSC-DV-000390	The application must notify System Administrators and Information System Security Officers when accounts are modified.
V-69317	low	SRG-APP-000293	SV-83939r1_rule	APSC-DV-000400	The application must notify System Administrators and Information System Security Officers of account disabling actions.
V-69319	low	SRG-APP-000294	SV-83941r1_rule	APSC-DV-000410	The application must notify System Administrators and Information System Security Officers of account removal actions.
V-69321	medium	SRG-APP-000319	SV-83943r1_rule	APSC-DV-000420	The application must automatically audit account enabling actions.
V-69323	low	SRG-APP-000320	SV-83945r1_rule	APSC-DV-000430	The application must notify System Administrators and Information System Security Officers of account enabling actions.
V-69325	medium	SRG-APP-000323	SV-83947r1_rule	APSC-DV-000440	Application data protection requirements must be identified and documented.
V-69327	medium	SRG-APP-000324	SV-83949r1_rule	APSC-DV-000450	The application must utilize organization-defined data mining detection techniques for organization-defined data storage objects to adequately detect data mining attempts.
V-69329	high	SRG-APP-000033	SV-83951r1_rule	APSC-DV-000460	The application must enforce approved authorizations for logical access to information and system resources in accordance with applicable access control policies.
V-69331	medium	SRG-APP-000328	SV-83953r1_rule	APSC-DV-000470	The application must enforce organization-defined discretionary access control policies over defined subjects and objects.
V-69333	medium	SRG-APP-000038	SV-83955r1_rule	APSC-DV-000480	The application must enforce approved authorizations for controlling the flow of information within the system based on organization-defined information flow control policies.
V-69335	medium	SRG-APP-000039	SV-83957r1_rule	APSC-DV-000490	The application must enforce approved authorizations for controlling the flow of information between interconnected systems based on organization-defined information flow control policies.
V-69337	medium	SRG-APP-000340	SV-83959r1_rule	APSC-DV-000500	The application must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures.
V-69339	high	SRG-APP-000342	SV-83961r1_rule	APSC-DV-000510	The application must execute without excessive account permissions.
V-69341	medium	SRG-APP-000343	SV-83963r1_rule	APSC-DV-000520	The application must audit the execution of privileged functions.
V-69343	high	SRG-APP-000065	SV-83965r1_rule	APSC-DV-000530	The application must enforce the limit of three consecutive invalid logon attempts by a user during a 15 minute time period.
V-69347	medium	SRG-APP-000345	SV-83969r1_rule	APSC-DV-000540	The application administrator must follow an approved process to unlock locked user accounts.
V-69349	low	SRG-APP-000068	SV-83971r1_rule	APSC-DV-000550	The application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.
V-69351	low	SRG-APP-000069	SV-83973r1_rule	APSC-DV-000560	The application must retain the Standard Mandatory DoD Notice and Consent Banner on the screen until users acknowledge the usage conditions and take explicit actions to log on for further access.
V-69353	low	SRG-APP-000070	SV-83975r1_rule	APSC-DV-000570	The publicly accessible application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.
[illegible]55	low	APSC-DV-000580	SV-83977r1_rule	APSC-DV-000580	The application must display the time and date of the users last successful logon.
[illegible]!	medium	SRG-APP-000080	SV-83979r1_rule	APSC-DV-000590	The application must protect against an individual (or process acting on behalf of an individual) falsely denying having performed organization-defined actions to be covered by non-repudiation.
[illegible]9	medium	SRG-APP-000086	SV-83981r1_rule	APSC-DV-000600	For applications providing audit record aggregation, the application must compile audit records from organization-defined information system components into a system-wide audit trail that is time-correlate
V-69361	medium	SRG-APP-000353	SV-83983r1_rule	APSC-DV-000610	The application must provide the capability for organization-identified individuals or roles to change the auditing to be performed on all application components, based on all selectable event criteria within or
V-69363	medium	SRG-APP-000089	SV-83985r1_rule	APSC-DV-000620	The application must provide audit record generation capability for the creation of session IDs.
V-69365	medium	SRG-APP-000089	SV-83987r1_rule	APSC-DV-000630	The application must provide audit record generation capability for the destruction of session IDs.
V-69367	medium	SRG-APP-000089	SV-83989r1_rule	APSC-DV-000640	The application must provide audit record generation capability for the renewal of session IDs.
V-69369	medium	SRG-APP-000089	SV-83991r1_rule	APSC-DV-000650	The application must not write sensitive data into the application logs.
V-69371	medium	SRG-APP-000089	SV-83993r1_rule	APSC-DV-000660	The application must provide audit record generation capability for session timeouts.
V-69373	medium	SRG-APP-000089	SV-83995r1_rule	APSC-DV-000670	The application must record a time stamp indicating when the event occurred.
V-69375	medium	SRG-APP-000089	SV-83997r1_rule	APSC-DV-000680	The application must provide audit record generation capability for HTTP headers including User-Agent, Referer, GET, and POST.
V-69377	medium	SRG-APP-000089	SV-83999r1_rule	APSC-DV-000690	The application must provide audit record generation capability for connecting system IP addresses.
V-69379	medium	SRG-APP-000089	SV-84001r1_rule	APSC-DV-000700	The application must record the username or user ID of the user associated with the event.
V-69381	medium	SRG-APP-000091	SV-84003r1_rule	APSC-DV-000710	The application must generate audit records when successful/unsuccessful attempts to access privileges occur.
V-69383	medium	SRG-APP-000492	SV-84005r1_rule	APSC-DV-000720	The application must generate audit records when successful/unsuccessful attempts to access security objects occur.
V-69385	medium	SRG-APP-000493	SV-84007r1_rule	APSC-DV-000730	The application must generate audit records when successful/unsuccessful attempts to access security levels occur.
V-69387	medium	SRG-APP-000494	SV-84009r1_rule	APSC-DV-000740	The application must generate audit records when successful/unsuccessful attempts to access categories of information (e.g., classification levels) occur.
V-69389	medium	SRG-APP-000495	SV-84011r1_rule	APSC-DV-000750	The application must generate audit records when successful/unsuccessful attempts to modify privileges occur.
V-69391	medium	SRG-APP-000496	SV-84013r1_rule	APSC-DV-000760	The application must generate audit records when successful/unsuccessful attempts to modify security objects occur.
V-69393	medium	SRG-APP-000497	SV-84015r1_rule	APSC-DV-000770	The application must generate audit records when successful/unsuccessful attempts to modify security levels occur.
V-69395	medium	SRG-APP-000498	SV-84017r1_rule	APSC-DV-000780	The application must generate audit records when successful/unsuccessful attempts to modify categories of information (e.g., classification levels) occur.
V-69397	medium	SRG-APP-000499	SV-84019r1_rule	APSC-DV-000790	The application must generate audit records when successful/unsuccessful attempts to delete privileges occur.
V-69399	medium	SRG-APP-000500	SV-84021r1_rule	APSC-DV-000800	The application must generate audit records when successful/unsuccessful attempts to delete security levels occur.
V-69401	medium	SRG-APP-000501	SV-84023r1_rule	APSC-DV-000810	The application must generate audit records when successful/unsuccessful attempts to delete application database security objects occur.
V-69403	medium	SRG-APP-000502	SV-84025r1_rule	APSC-DV-000820	The application must generate audit records when successful/unsuccessful attempts to delete categories of information (e.g., classification levels) occur.
V-69405	medium	SRG-APP-000503	SV-84027r1_rule	APSC-DV-000830	The application must generate audit records when successful/unsuccessful logon attempts occur.

V-69407	medium	SRG-APP-000504	SV-84029r1_rule	APSC-DV-000840	The application must generate audit records for privileged activities or other system-level access.
V-69409	medium	SRG-APP-000505	SV-84031r1_rule	APSC-DV-000850	The application must generate audit records showing starting and ending time for user access to the system.
V-69411	medium	SRG-APP-000507	SV-84033r1_rule	APSC-DV-000860	The application must generate audit records when successful/unsuccessful accesses to objects occur.
V-69413	medium	SRG-APP-000508	SV-84035r1_rule	APSC-DV-000870	The application must generate audit records for all direct access to the information system.
V-69415	medium	SRG-APP-000509	SV-84037r1_rule	APSC-DV-000880	The application must generate audit records for all account creations, modifications, disabling, and termination events.
V-69417	medium	SRG-APP-000354	SV-84039r1_rule	APSC-DV-000900	The application must provide the capability for authorized users to select a user session to capture/record or view/hear.
V-69419	medium	SRG-APP-000092	SV-84041r1_rule	APSC-DV-000910	The application must initiate session auditing upon startup.
V-69421	medium	SRG-APP-000095	SV-84043r1_rule	APSC-DV-000940	The application must log application shutdown events.
V-69423	medium	SRG-APP-000095	SV-84045r1_rule	APSC-DV-000950	The application must log destination IP addresses.
V-69425	medium	SRG-APP-000095	SV-84047r1_rule	APSC-DV-000960	The application must log user actions involving access to data.
V-69427	medium	SRG-APP-000095	SV-84049r1_rule	APSC-DV-000970	The application must log user actions involving changes to data.
V-69429	medium	SRG-APP-000096	SV-84051r1_rule	APSC-DV-000980	The application must produce audit records containing information to establish when (date and time) the events occurred.
V-69431	medium	SRG-APP-000097	SV-84053r1_rule	APSC-DV-000990	The application must produce audit records containing enough information to establish which component, feature or function of the application triggered the audit event.
V-69433	medium	SRG-APP-000098	SV-84055r1_rule	APSC-DV-001000	When using centralized logging; the application must include a unique identifier in order to distinguish itself from other application logs.
V-69435	medium	SRG-APP-000099	SV-84057r1_rule	APSC-DV-001010	The application must produce audit records that contain information to establish the outcome of the events.
V-69437	medium	SRG-APP-000100	SV-84059r1_rule	APSC-DV-001020	The application must generate audit records containing information that establishes the identity of any individual or process associated with the event.
V-69439	medium	SRG-APP-000101	SV-84061r1_rule	APSC-DV-001030	The application must generate audit records containing the full-text recording of privileged commands or the individual identities of group account users.
V-69441	medium	SRG-APP-000101	SV-84063r1_rule	APSC-DV-001040	The application must implement transaction recovery logs when transaction based.
V-69443	medium	SRG-APP-000356	SV-84065r1_rule	APSC-DV-001050	The application must provide centralized management and configuration of the content to be captured in audit records generated by all application components.
V-69445	medium	SRG-APP-000358	SV-84067r1_rule	APSC-DV-001070	The application must off-load audit records onto a different system or media than the system being audited.
V-69447	medium	SRG-APP-000515	SV-84069r1_rule	APSC-DV-001080	The application must be configured to write application logs to a centralized log repository.
V-69449	medium	SRG-APP-000359	SV-84071r1_rule	APSC-DV-001090	The application must provide an immediate warning to the SA and ISSO (at a minimum) when allocated audit record storage volume reaches 75% of repository maximum audit record storage capacity.
V-69451	medium	SRG-APP-000360	SV-84073r1_rule	APSC-DV-001100	Applications categorized as having a moderate or high impact must provide an immediate real-time alert to the SA and ISSO (at a minimum) for all audit failure events.
V-69453	medium	SRG-APP-000108	SV-84075r1_rule	APSC-DV-001110	The application must alert the ISSO and SA (at a minimum) in the event of an audit processing failure.
V-69455	medium	SRG-APP-000109	SV-84077r1_rule	APSC-DV-001120	The application must shut down by default upon audit failure (unless availability is an overriding concern).
V-69457	medium	SRG-APP-000111	SV-84079r1_rule	APSC-DV-001130	The application must provide the capability to centrally review and analyze audit records from multiple components within the system.
V-69459	medium	SRG-APP-000115	SV-84081r1_rule	APSC-DV-001140	The application must provide the capability to filter audit records for events of interest based upon organization-defined criteria.
V-69461	medium	SRG-APP-000181	SV-84083r1_rule	APSC-DV-001150	The application must provide an audit reduction capability that supports on-demand reporting requirements.
V-69463	medium	SRG-APP-000364	SV-84085r1_rule	APSC-DV-001160	The application must provide an audit reduction capability that supports on-demand audit review and analysis.
V-69465	medium	SRG-APP-000365	SV-84087r1_rule	APSC-DV-001170	The application must provide an audit reduction capability that supports after-the-fact investigations of security incidents.
V-69467	medium	SRG-APP-000366	SV-84089r1_rule	APSC-DV-001180	The application must provide a report generation capability that supports on-demand audit review and analysis.
V-69469	medium	SRG-APP-000367	SV-84091r1_rule	APSC-DV-001190	The application must provide a report generation capability that supports on-demand reporting requirements.
V-69471	medium	SRG-APP-000368	SV-84093r1_rule	APSC-DV-001200	The application must provide a report generation capability that supports after-the-fact investigations of security incidents.
V-69473	medium	SRG-APP-000369	SV-84095r1_rule	APSC-DV-001210	The application must provide an audit reduction capability that does not alter original content or time ordering of audit records.
V-69475	medium	SRG-APP-000370	SV-84097r1_rule	APSC-DV-001220	The application must provide a report generation capability that does not alter original content or time ordering of audit records.
V-69477	medium	SRG-APP-000116	SV-84099r1_rule	APSC-DV-001250	The applications must use internal system clocks to generate time stamps for audit records.
V-69479	medium	SRG-APP-000374	SV-84101r1_rule	APSC-DV-001260	The application must record time stamps for audit records that can be mapped to Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT).
V-69481	medium	SRG-APP-000375	SV-84103r1_rule	APSC-DV-001270	The application must record time stamps for audit records that meet a granularity of one second for a minimum degree of precision.
V-69483	medium	SRG-APP-000118	SV-84105r1_rule	APSC-DV-001280	The application must protect audit information from any type of unauthorized read access.
V-69485	medium	SRG-APP-000119	SV-84107r1_rule	APSC-DV-001290	The application must protect audit information from unauthorized modification.
V-69487	medium	SRG-APP-000120	SV-84109r1_rule	APSC-DV-001300	The application must protect audit information from unauthorized deletion.
V-69489	medium	SRG-APP-000121	SV-84111r1_rule	APSC-DV-001310	The application must protect audit tools from unauthorized access.
V-69491	medium	SRG-APP-000122	SV-84113r1_rule	APSC-DV-001320	The application must protect audit tools from unauthorized modification.
V-69493	medium	SRG-APP-000123	SV-84115r1_rule	APSC-DV-001330	The application must protect audit tools from unauthorized deletion.
V-69495	medium	SRG-APP-000125	SV-84117r1_rule	APSC-DV-001340	The application must back up audit records at least every seven days onto a different system or system component than the system or component being audited.
V-69497	medium	SRG-APP-000126	SV-84119r1_rule	APSC-DV-001350	The application must use cryptographic mechanisms to protect the integrity of audit information.
V-69499	medium	SRG-APP-000290	SV-84121r1_rule	APSC-DV-001360	Application audit tools must be cryptographically hashed.
V-69501	medium	SRG-APP-000290	SV-84123r1_rule	APSC-DV-001370	The integrity of the audit tools must be validated by checking the files for changes in the cryptographic hash value.
V-69503	medium	SRG-APP-000378	SV-84125r1_rule	APSC-DV-001390	The application must prohibit user installation of software without explicit privileged status.
V-69505	medium	SRG-APP-000380	SV-84127r1_rule	APSC-DV-001410	The application must enforce access restrictions associated with changes to application configuration.
V-69507	medium	SRG-APP-000381	SV-84129r1_rule	APSC-DV-001420	The application must audit who makes configuration changes to the application.
V-69509	medium	SRG-APP-000131	SV-84131r1_rule	APSC-DV-001430	The application must have the capability to prevent the installation of patches, service packs, or application components without verification the software component has been digitally signed using a certifica
V-69511	medium	SRG-APP-000133	SV-84133r1_rule	APSC-DV-001440	The applications must limit privileges to change the software resident within software libraries.
V-69513	medium	SRG-APP-000516	SV-84135r1_rule	APSC-DV-001460	An application vulnerability assessment must be conducted.
V-69515	medium	SRG-APP-000384	SV-84137r1_rule	APSC-DV-001480	The application must prevent program execution in accordance with organization-defined policies regarding software program usage and restrictions, and/or rules authorizing the terms and conditions of soft
V-69517	medium	SRG-APP-000386	SV-84139r1_rule	APSC-DV-001490	The application must employ a deny-all, permit-by-exception (whitelist) policy to allow the execution of authorized software programs.
V-69519	medium	SRG-APP-000141	SV-84141r1_rule	APSC-DV-001500	The application must be configured to disable non-essential capabilities.
V-69521	medium	SRG-APP-000142	SV-84143r1_rule	APSC-DV-001510	The application must be configured to use only functions, ports, and protocols permitted to it in the PPSM CAL.
V-69523	medium	SRG-APP-000389	SV-84145r1_rule	APSC-DV-001520	The application must require users to reauthenticate when organization-defined circumstances or situations require reauthentication.
V-69525	medium	SRG-APP-000390	SV-84147r1_rule	APSC-DV-001530	The application must require devices to reauthenticate when organization-defined circumstances or situations requiring reauthentication.
V-69527	high	SRG-APP-000148	SV-84149r1_rule	APSC-DV-001540	The application must uniquely identify and authenticate organizational users (or processes acting on behalf of organizational users).
V-69529	medium	SRG-APP-000149	SV-84151r1_rule	APSC-DV-001550	The application must use multifactor (Alt. Token) authentication for network access to privileged accounts.
V-69531	medium	SRG-APP-000391	SV-84153r1_rule	APSC-DV-001560	The application must accept Personal Identity Verification (PIV) credentials.
V-69533	medium	SRG-APP-000392	SV-84155r1_rule	APSC-DV-001570	The application must electronically verify Personal Identity Verification (PIV) credentials.
V-69535	medium	SRG-APP-000150	SV-84157r1_rule	APSC-DV-001580	The application must use multifactor (e.g., CAC, Alt. Token) authentication for network access to non-privileged accounts.
V-69537	medium	SRG-APP-000151	SV-84159r1_rule	APSC-DV-001590	The application must use multifactor (Alt. Token) authentication for local access to privileged accounts.
V-69539	medium	SRG-APP-000152	SV-84161r1_rule	APSC-DV-001600	The application must use multifactor (e.g., CAC, Alt. Token) authentication for local access to non-privileged accounts.
V-69541	medium	SRG-APP-000153	SV-84163r1_rule	APSC-DV-001610	The application must ensure users are authenticated with an individual authenticator prior to using a group authenticator.
V-69543	medium	SRG-APP-000156	SV-84165r1_rule	APSC-DV-001620	The application must implement replay-resistant authentication mechanisms for network access to privileged accounts.
V-69545	medium	SRG-APP-000157	SV-84167r1_rule	APSC-DV-001630	The application must implement replay-resistant authentication mechanisms for network access to non-privileged accounts.
V-69547	medium	SRG-APP-000158	SV-84169r1_rule	APSC-DV-001640	The application must utilize mutual authentication when endpoint device non-repudiation protections are required by DoD policy or by the data owner.
V-69549	medium	SRG-APP-000394	SV-84171r1_rule	APSC-DV-001650	The application must authenticate all network connected endpoint devices before establishing any connection.
V-69551	medium	SRG-APP-000395	SV-84173r1_rule	APSC-DV-001660	Service-Oriented Applications handling non-releasable data must authenticate endpoint devices via mutual SSL/TLS.
V-69553	medium	SRG-APP-000163	SV-84175r2_rule	APSC-DV-001670	The application must disable device identifiers after 35 days of inactivity unless a cryptographic certificate is used for authentication.
V-69555	high	SRG-APP-000164	SV-84177r1_rule	APSC-DV-001680	The application must enforce a minimum 15-character password length.
V-69557	medium	SRG-APP-000166	SV-84179r1_rule	APSC-DV-001690	The application must enforce password complexity by requiring that at least one upper-case character be used.
V-69559	medium	SRG-APP-000167	SV-84181r1_rule	APSC-DV-001700	The application must enforce password complexity by requiring that at least one lower-case character be used.

V-69561	medium	SRG-APP-000168	SV-84183r1_rule	APSC-DV-001710	The application must enforce password complexity by requiring that at least one numeric character be used.
V-69563	medium	SRG-APP-000169	SV-84185r1_rule	APSC-DV-001720	The application must enforce password complexity by requiring that at least one special character be used.
V-69565	medium	SRG-APP-000170	SV-84187r1_rule	APSC-DV-001730	The application must require the change of at least 8 of the total number of characters when passwords are changed.
V-69567	high	SRG-APP-000171	SV-84189r1_rule	APSC-DV-001740	The application must only store cryptographic representations of passwords.
V-69[illegible]	high	SRG-APP-000172	SV-84191r1_rule	APSC-DV-001750	The application must transmit only cryptographically-protected passwords.
V-69[illegible]	medium	SRG-APP-000173	SV-84193r1_rule	APSC-DV-001760	The application must enforce 24 hours/1 day as the minimum password lifetime.
V-69[illegible]73	medium	SRG-APP-000174	SV-84195r1_rule	APSC-DV-001770	The application must enforce a 60-day maximum password lifetime restriction.
V-69575	medium	SRG-APP-000165	SV-84197r1_rule	APSC-DV-001780	The application must prohibit password reuse for a minimum of five generations.
V-69577	medium	SRG-APP-000397	SV-84199r1_rule	APSC-DV-001790	The application must allow the use of a temporary password for system logons with an immediate change to a permanent password.
V-70145	medium	ASDV-PL-001795	SV-84767r1_rule	APSC-DV-001795	The application password must not be changeable by users other than the administrator or the user with which the password is associated.
V-70147	medium	SRG-APP-000400	SV-84769r1_rule	APSC-DV-001800	The application must terminate existing user sessions upon account deletion.
V-70149	high	SRG-APP-000175	SV-84771r1_rule	APSC-DV-001810	The application, when utilizing PKI-based authentication, must validate certificates by constructing a certification path (which includes status information) to an accepted trust anchor.
V-70151	high	SRG-APP-000176	SV-84773r1_rule	APSC-DV-001820	The application, when using PKI-based authentication, must enforce authorized access to the corresponding private key.
V-70153	medium	SRG-APP-000177	SV-84775r1_rule	APSC-DV-001830	The application must map the authenticated identity to the individual user or group account for PKI-based authentication.
V-70155	medium	SRG-APP-000401	SV-84777r1_rule	APSC-DV-001840	The application, for PKI-based authentication, must implement a local cache of revocation data to support path discovery and validation in case of the inability to access revocation information via the networ
V-70157	high	SRG-APP-000178	SV-84779r1_rule	APSC-DV-001850	The application must not display passwords/PINs as clear text.
V-70159	medium	SRG-APP-000179	SV-84781r1_rule	APSC-DV-001860	The application must use mechanisms meeting the requirements of applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance for authentication to a cryptographic mo
V-70161	medium	SRG-APP-000180	SV-84783r1_rule	APSC-DV-001870	The application must uniquely identify and authenticate non-organizational users (or processes acting on behalf of non-organizational users).
V-70163	medium	SRG-APP-000402	SV-84785r1_rule	APSC-DV-001880	The application must accept Personal Identity Verification (PIV) credentials from other federal agencies.
V-70165	medium	SRG-APP-000403	SV-84787r1_rule	APSC-DV-001890	The application must electronically verify Personal Identity Verification (PIV) credentials from other federal agencies.
V-70167	medium	SRG-APP-000404	SV-84789r1_rule	APSC-DV-001900	The application must accept FICAM-approved third-party credentials.
V-70169	medium	SRG-APP-000405	SV-84791r1_rule	APSC-DV-001910	The application must conform to FICAM-issued profiles.
V-70171	medium	SRG-APP-000409	SV-84793r1_rule	APSC-DV-001930	Applications used for non-local maintenance sessions must audit non-local maintenance and diagnostic sessions for organization-defined auditable events.
V-70175	medium	SRG-APP-000411	SV-84797r1_rule	APSC-DV-001940	Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the integrity of non-local maintenance and diagnostic communications.
V-70177	medium	SRG-APP-000412	SV-84799r1_rule	APSC-DV-001950	Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the confidentiality of non-local maintenance and diagnostic communications.
V-70179	medium	SRG-APP-000413	SV-84801r1_rule	APSC-DV-001960	Applications used for non-local maintenance sessions must verify remote disconnection at the termination of non-local maintenance and diagnostic sessions.
V-70181	medium	SRG-APP-000185	SV-84803r1_rule	APSC-DV-001970	The application must employ strong authenticators in the establishment of non-local maintenance and diagnostic sessions.
V-70183	medium	SRG-APP-000186	SV-84805r1_rule	APSC-DV-001980	The application must terminate all sessions and network connections when non-local maintenance is completed.
V-70185	medium	ASDV-PL-001995	SV-84807r1_rule	APSC-DV-001995	The application must not be vulnerable to race conditions.
V-70187	medium	SRG-APP-000190	SV-84809r1_rule	APSC-DV-002000	The application must terminate all network connections associated with a communications session at the end of the session.
V-70189	medium	SRG-APP-000416	SV-84811r2_rule	APSC-DV-002010	The application must implement NSA-approved cryptography to protect classified information in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.
V-70191	medium	SRG-APP-000514	SV-84813r2_rule	APSC-DV-002020	The application must utilize FIPS-validated cryptographic modules when signing application components.
V-70193	medium	SRG-APP-000514	SV-84815r2_rule	APSC-DV-002030	The application must utilize FIPS-validated cryptographic modules when generating cryptographic hashes.
V-70195	medium	SRG-APP-000514	SV-84817r1_rule	APSC-DV-002040	The application must utilize FIPS-validated cryptographic modules when protecting unclassified information that requires cryptographic protection.
V-70197	medium	SRG-APP-000514	SV-84819r1_rule	APSC-DV-002050	Applications making SAML assertions must use FIPS-approved random numbers in the generation of SessionIndex in the SAML element AuthnStatement.
V-70199	medium	SRG-APP-000211	SV-84821r1_rule	APSC-DV-002150	The application user interface must be either physically or logically separated from data storage and management interfaces.
V-70201	medium	SRG-APP-000219	SV-84823r1_rule	APSC-DV-002210	The application must set the HTTPOnly flag on session cookies.
V-70203	medium	SRG-APP-000219	SV-84825r1_rule	APSC-DV-002220	The application must set the secure flag on session cookies.
V-70205	high	SRG-APP-000219	SV-84827r1_rule	APSC-DV-002230	The application must not expose session IDs.
V-70207	high	SRG-APP-000220	SV-84829r1_rule	APSC-DV-002240	The application must destroy the session ID value and/or cookie on logoff or browser close.
V-70209	medium	SRG-APP-000223	SV-84831r1_rule	APSC-DV-002250	Applications must use system-generated session identifiers that protect against session fixation.
V-70211	medium	SRG-APP-000223	SV-84833r1_rule	APSC-DV-002260	Applications must validate session identifiers.
V-70213	medium	SRG-APP-000223	SV-84835r1_rule	APSC-DV-002270	Applications must not use URL embedded session IDs.
V-70215	medium	SRG-APP-000223	SV-84837r1_rule	APSC-DV-002280	The application must not re-use or recycle session IDs.
V-70217	medium	SRG-APP-000224	SV-84839r1_rule	APSC-DV-002290	The application must use the Federal Information Processing Standard (FIPS) 140-2-validated cryptographic modules and random number generator if the application implements encryption, key exchange, di
V-70219	medium	SRG-APP-000427	SV-84841r1_rule	APSC-DV-002300	The application must only allow the use of DoD-approved certificate authorities for verification of the establishment of protected sessions.
V-70221	high	SRG-APP-000225	SV-84843r1_rule	APSC-DV-002310	The application must fail to a secure state if system initialization fails, shutdown fails, or aborts fail.
V-70223	medium	SRG-APP-000226	SV-84845r1_rule	APSC-DV-002320	In the event of a system failure, applications must preserve any information necessary to determine cause of failure and any information necessary to return to operations with least disruption to mission pro
V-70225	medium	SRG-APP-000231	SV-84847r1_rule	APSC-DV-002330	The application must protect the confidentiality and integrity of stored information when required by DoD policy or the information owner.
V-70227	medium	SRG-APP-000428	SV-84849r1_rule	APSC-DV-002340	The application must implement approved cryptographic mechanisms to prevent unauthorized modification of organization-defined information at rest on organization-defined information system compone
V-70[illegible]9	medium	SRG-APP-000429	SV-84851r1_rule	APSC-DV-002350	The application must use appropriate cryptography in order to protect stored DoD information when required by the information owner or DoD policy.
V-70[illegible]	medium	SRG-APP-000233	SV-84853r1_rule	APSC-DV-002360	The application must isolate security functions from non-security functions.
V-70[illegible]3	medium	SRG-APP-000431	SV-84855r1_rule	APSC-DV-002370	The application must maintain a separate execution domain for each executing process.
V-70235	medium	SRG-APP-000243	SV-84857r1_rule	APSC-DV-002380	Applications must prevent unauthorized and unintended information transfer via shared system resources.
V-70237	medium	SRG-APP-000435	SV-84859r1_rule	APSC-DV-002390	XML-based applications must mitigate DoS attacks by using XML filters, parser options, or gateways.
V-70239	medium	SRG-APP-000246	SV-84861r1_rule	APSC-DV-002400	The application must restrict the ability to launch Denial of Service (DoS) attacks against itself or other information systems.
V-70241	medium	SRG-APP-000247	SV-84863r1_rule	APSC-DV-002410	The web service design must include redundancy mechanisms when used with high-availability systems.
V-70243	medium	APSC-DV-002420	SV-84865r1_rule	APSC-DV-002420	An XML firewall function must be deployed to protect web services when exposed to untrusted networks.
V-70245	high	SRG-APP-000439	SV-84867r1_rule	APSC-DV-002440	The application must protect the confidentiality and integrity of transmitted information.
V-70247	medium	SRG-APP-000440	SV-84869r1_rule	APSC-DV-002450	The application must implement cryptographic mechanisms to prevent unauthorized disclosure of information and/or detect changes to information during transmission unless otherwise protected by alterna
V-70249	medium	SRG-APP-000441	SV-84871r1_rule	APSC-DV-002460	The application must maintain the confidentiality and integrity of information during preparation for transmission.
V-70251	medium	SRG-APP-000442	SV-84873r1_rule	APSC-DV-002470	The application must maintain the confidentiality and integrity of information during reception.
V-70253	medium	SRG-APP-000441	SV-84875r1_rule	APSC-DV-002480	The application must not disclose unnecessary information to users.
V-70255	high	SRG-APP-000441	SV-84877r1_rule	APSC-DV-002485	The application must not store sensitive information in hidden fields.
V-70257	high	SRG-APP-000251	SV-84879r1_rule	APSC-DV-002490	The application must protect from Cross-Site Scripting (XSS) vulnerabilities.
V-70259	medium	SRG-APP-000251	SV-84881r1_rule	APSC-DV-002500	The application must protect from Cross-Site Request Forgery (CSRF) vulnerabilities.
V-70261	high	SRG-APP-000251	SV-84883r1_rule	APSC-DV-002510	The application must protect from command injection.
V-70263	medium	SRG-APP-000251	SV-84885r1_rule	APSC-DV-002520	The application must protect from canonical representation vulnerabilities.
V-70265	medium	SRG-APP-000251	SV-84887r1_rule	APSC-DV-002530	The application must validate all input.
V-70267	high	SRG-APP-000251	SV-84889r1_rule	APSC-DV-002540	The application must not be vulnerable to SQL Injection.
V-70269	high	SRG-APP-000251	SV-84891r1_rule	APSC-DV-002550	The application must not be vulnerable to XML-oriented attacks.
V-70271	high	SRG-APP-000447	SV-84893r1_rule	APSC-DV-002560	The application must not be subject to input handling vulnerabilities.
V-70273	medium	SRG-APP-000266	SV-84895r1_rule	APSC-DV-002570	The application must generate error messages that provide information necessary for corrective actions without revealing information that could be exploited by adversaries.

V-70275	medium	SRG-APP-000267	SV-84897r1_rule	APSC-DV-002580	The application must reveal error messages only to the ISSO, ISSM, or SA.
V-70277	high	SRG-APP-000450	SV-84899r1_rule	APSC-DV-002590	The application must not be vulnerable to overflow attacks.
V-70279	medium	SRG-APP-000454	SV-84901r1_rule	APSC-DV-002610	The application must remove organization-defined software components after updated versions have been installed.
V-70281	medium	SRG-APP-000456	SV-84903r1_rule	APSC-DV-002630	Security-relevant software updates and patches must be kept up to date.
V-70283	medium	SRG-APP-000472	SV-84905r1_rule	APSC-DV-002760	The application performing organization-defined security functions must verify correct operation of security functions.
V-70285	medium	SRG-APP-000473	SV-84907r1_rule	APSC-DV-002770	The application must perform verification of the correct operation of security functions: upon system startup and/or restart; upon command by a user with privileged access; and/or every 30 days
V-70287	low	SRG-APP-000275	SV-84909r1_rule	APSC-DV-002780	The application must notify the ISSO and ISSM of failed security verification tests.
V-70289	medium	SRG-APP-000206	SV-84911r1_rule	APSC-DV-002870	Unsigned Category 1A mobile code must not be used in the application in accordance with DoD policy.
V-70291	medium	ASDV-PL-002880	SV-84913r1_rule	APSC-DV-002880	The ISSO must ensure an account management process is implemented, verifying only authorized users can gain access to the application, and individual accounts designated as inactive, suspended, or termin
V-70293	high	ASDV-PL-002890	SV-84915r1_rule	APSC-DV-002890	Application web servers must be on a separate network segment from the application and database servers if it is a tiered application operating in the DoD DMZ.
V-70295	medium	ASDV-PL-002900	SV-84917r1_rule	APSC-DV-002900	The ISSO must ensure application audit trails are retained for at least 1 year for applications without SAMI data, and 5 years for applications including SAMI data.
V-70297	medium	ASDV-PL-002910	SV-84919r1_rule	APSC-DV-002910	The ISSO must review audit trails periodically based on system documentation recommendations or immediately upon system security events.
V-70301	medium	ASDV-PL-002920	SV-84923r1_rule	APSC-DV-002920	The ISSO must report all suspected violations of IA policies in accordance with DoD information system IA procedures.
V-70303	medium	ASDV-PL-002930	SV-84925r1_rule	APSC-DV-002930	The ISSO must ensure active vulnerability testing is performed.
V-70305	medium	ASDV-PL-002940	SV-84927r1_rule	APSC-DV-002940	AO risk acceptance must be obtained for all public domain, shareware, freeware, and other software products/libraries with both (1) no source code to review, repair, and extend, and (2) limited or no warrant
V-70307	medium	ASDV-PL-002950	SV-84929r1_rule	APSC-DV-002950	Execution flow diagrams and design documents must be created to show how deadlock and recursion issues in web services are being mitigated.
V-70309	medium	ASDV-PL-002960	SV-84931r1_rule	APSC-DV-002960	The designer must ensure the application does not store configuration and control files in the same directory as user data.
V-70311	medium	ASDV-PL-002970	SV-84933r1_rule	APSC-DV-002970	The ISSO must ensure if a DoD STIG or NSA guide is not available, a third-party product will be configured by following available guidance.
V-70313	medium	ASDV-PL-002980	SV-84935r1_rule	APSC-DV-002980	New IP addresses, data services, and associated ports used by the application must be submitted to the appropriate approving authority for the organization, which in turn will be submitted through the DoD I
V-70317	medium	ASDV-PL-002990	SV-84939r1_rule	APSC-DV-002990	The application must be registered with the DoD Ports and Protocols Database.
V-70339	medium	ASDV-PL-002995	SV-84961r1_rule	APSC-DV-002995	The Configuration Management (CM) repository must be properly patched and STIG compliant.
V-70341	medium	ASDV-PL-003000	SV-84963r1_rule	APSC-DV-003000	Access privileges to the Configuration Management (CM) repository must be reviewed every three months.
V-70343	medium	ASDV-PL-003010	SV-84965r1_rule	APSC-DV-003010	A Software Configuration Management (SCM) plan describing the configuration control and change management process of application objects developed by the organization and the roles and responsibilities
V-70345	medium	ASDV-PL-003020	SV-84967r1_rule	APSC-DV-003020	A Configuration Control Board (CCB) that meets at least every release cycle, for managing the Configuration Management (CM) process must be established.
V-70347	medium	ASDV-PL-003030	SV-84969r1_rule	APSC-DV-003030	The application services and interfaces must be compatible with and ready for IPv6 networks.
V-70349	medium	ASDV-PL-003040	SV-84971r1_rule	APSC-DV-003040	The application must not be hosted on a general purpose machine if the application is designated as critical or high availability by the ISSO.
V-70351	medium	ASDV-PL-003050	SV-84973r1_rule	APSC-DV-003050	A disaster recovery/continuity plan must exist in accordance with DoD policy based on the applications availability requirements.
V-70353	medium	ASDV-PL-003060	SV-84975r1_rule	APSC-DV-003060	Recovery procedures and technical system features must exist so recovery is performed in a secure and verifiable manner. The ISSO will document circumstances inhibiting a trusted recovery.
V-70355	medium	ASDV-PL-003070	SV-84977r1_rule	APSC-DV-003070	Data backup must be performed at required intervals in accordance with DoD policy.
V-70357	medium	ASDV-PL-003080	SV-84979r1_rule	APSC-DV-003080	Back-up copies of the application software or source code must be stored in a fire-rated container or stored separately (offsite).
V-70359	medium	ASDV-PL-003090	SV-84981r1_rule	APSC-DV-003090	Procedures must be in place to assure the appropriate physical and technical protection of the backup and restoration of the application.
V-70361	medium	ASDV-PL-003100	SV-84983r1_rule	APSC-DV-003100	The application must use encryption to implement key exchange and authenticate endpoints prior to establishing a communication channel for key exchange.
V-70363	high	ASDV-PL-003110	SV-84985r1_rule	APSC-DV-003110	The application must not contain embedded authentication data.
V-70365	high	ASDV-PL-003120	SV-84987r1_rule	APSC-DV-003120	The application must have the capability to mark sensitive/classified output when required.
V-70367	low	ASDV-PL-003130	SV-84989r1_rule	APSC-DV-003130	Prior to each release of the application, updates to system, or applying patches; tests plans and procedures must be created and executed.
V-70369	medium	ASDV-PL-003140	SV-84991r1_rule	APSC-DV-003140	Application files must be cryptographically hashed prior to deploying to DoD operational networks.
V-70371	medium	ASDV-PL-003150	SV-84993r1_rule	APSC-DV-003150	At least one tester must be designated to test for security flaws in addition to functional testing.
V-70373	low	ASDV-PL-003160	SV-84995r1_rule	APSC-DV-003160	Test procedures must be created and at least annually executed to ensure system initialization, shutdown, and aborts are configured to verify the system remains in a secure state.
V-70375	medium	ASDV-PL-003170	SV-84997r1_rule	APSC-DV-003170	An application code review must be performed on the application.
V-70377	low	ASDV-PL-003180	SV-84999r1_rule	APSC-DV-003180	Code coverage statistics must be maintained for each release of the application.
V-70379	medium	ASDV-PL-003190	SV-85001r1_rule	APSC-DV-003190	Flaws found during a code review must be tracked in a defect tracking system.
V-70381	medium	ASDV-PL-003200	SV-85003r1_rule	APSC-DV-003200	The changes to the application must be assessed for IA and accreditation impact prior to implementation.
V-70383	medium	ASDV-PL-003210	SV-85005r1_rule	APSC-DV-003210	Security flaws must be fixed or addressed in the project plan.
V-70385	low	ASDV-PL-003215	SV-85007r1_rule	APSC-DV-003215	The application development team must follow a set of coding standards.
V-70387	low	ASDV-PL-003220	SV-85009r1_rule	APSC-DV-003220	The designer must create and update the Design Document for each release of the application.
V-70389	medium	ASDV-PL-003230	SV-85011r1_rule	APSC-DV-003230	Threat models must be documented and reviewed for each application release and updated as required by design and functionality changes or when new threats are discovered.
V-70391	medium	ASDV-PL-003235	SV-85013r1_rule	APSC-DV-003235	The application must not be subject to error handling vulnerabilities.
V-70393	medium	ASDV-PL-003236	SV-85015r1_rule	APSC-DV-003236	The application development team must provide an application incident response plan.
V-70395	high	ASDV-PL-003240	SV-85017r1_rule	APSC-DV-003240	All products must be supported by the vendor or the development team.
V-70397	high	ASDV-PL-003250	SV-85019r1_rule	APSC-DV-003250	The application must be decommissioned when maintenance or support is no longer available.
V-70399	low	ASDV-PL-003260	SV-85021r1_rule	APSC-DV-003260	Procedures must be in place to notify users when an application is decommissioned.
V-70401	medium	ASDV-PL-003270	SV-85023r1_rule	APSC-DV-003270	Unnecessary built-in application accounts must be disabled.
V-70403	high	ASDV-PL-003280	SV-85025r1_rule	APSC-DV-003280	Default passwords must be changed.
V-70405	medium	ASDV-PL-003285	SV-85027r1_rule	APSC-DV-003285	An Application Configuration Guide must be created and included with the application.
V-70407	medium	ASDV-PL-003290	SV-85029r1_rule	APSC-DV-003290	If the application contains classified data, a Security Classification Guide must exist containing data elements and their classification.
V-70409	medium	ASDV-PL-003300	SV-85031r2_rule	APSC-DV-003300	The designer must ensure uncategorized or emerging mobile code is not used in applications.
V-70411	medium	ASDV-PL-003310	SV-85033r1_rule	APSC-DV-003310	Production database exports must have database administration credentials and sensitive data removed before releasing the export.
V-70413	medium	ASDV-PL-003320	SV-85035r1_rule	APSC-DV-003320	Protections against DoS attacks must be implemented.
V-70415	medium	ASDV-PL-003330	SV-85037r1_rule	APSC-DV-003330	The system must alert an administrator when low resource conditions are encountered.
V-70417	low	ASDV-PL-003340	SV-85039r1_rule	APSC-DV-003340	At least one application administrator must be registered to receive update notifications, or security alerts, when automated alerts are available.
V-70419	low	ASDV-PL-003345	SV-85041r1_rule	APSC-DV-003345	The application must provide notifications or alerts when product update and security related patches are available.
V-70421	medium	ASDV-PL-003350	SV-85043r1_rule	APSC-DV-003350	Connections between the DoD enclave and the Internet or other public or commercial wide area networks must require a DMZ.
V-70423	low	SRG-APP-000505	SV-85045r1_rule	APSC-DV-003360	The application must generate audit records when concurrent logons from different workstations occur.
V-70425	medium	ASDV-PL-003400	SV-85047r1_rule	APSC-DV-003400	The Program Manager must verify all levels of program management, designers, developers, and testers receive annual security training pertaining to their job function.

Discussion

Application management includes the ability to control the number of users and user sessions that utilize an application. Limiting the number of allowed users and sessions per user is helpful in limiting risks related to DoS attacks.This requirement may be met via the application or by utilizin

Persistent cookies are a primary means by which a web application will store application state and user information. Since HTTP is a stateless protocol, this persistence allows the web application developer to provide a robust and customizable user experience.However, if a web application

Leaving a user's application session established for an indefinite period of time increases the risk of session hijacking.Session termination terminates an individual user's logical application session after 15 minutes of application inactivity at which time the user must re-authenticate and a new

an admin user's application session established for an indefinite period of time increases the risk of session hijacking.Session termination terminates an individual user's logical application session after 10 minutes of application inactivity at which time the user must re-authenticate a

cannot explicitly end an application session, the session may remain open and be exploited by an attacker. Applications providing user access must provide the ability for users to manually terminate their sessions and log off.

h er is not explicitly notified that their application session has been terminated, they cannot be certain that their session did not remain open. Applications with a user access interface must provide an explicit logoff message to the user upon successful termination of the user session.

Without the association of security attributes to information, there is no basis for the application to make security related access-control decisions.Security attributes are abstractions representing the basic properties or characteristics of an entity (e.g., subjects and objects) with respect to sa

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Without confidentiality protection mechanisms, unauthorized individuals may gain access to sensitive information via a remote access session.Remote access is access to DoD nonpublic information systems by an authorized user (or an information system) communicating through an extern

Without integrity protection mechanisms, unauthorized individuals may gain access to sensitive information via a remote access session.Remote access is access to DoD nonpublic information systems by an authorized user (or an information system) communicating through an external, nor

Digitally signed SOAP messages provide message integrity and authenticity of the signer of the message independent of the transport layer. Service requests may be intercepted and changed in transit and the data integrity may be at risk if the SOAP message is not digitally signed.Functional

The lack of time stamps could lead to the eventual replay of the message, leaving the application susceptible to replay events which may result in an immediate loss of confidentiality.

When using WS-Security in SOAP messages, the application should check the validity of the time stamps with creation and expiration times. Time stamps that are not validated may lead to a replay event and provide immediate unauthorized access of the application. Unauthorized access res

SAML is a standard for exchanging authentication and authorization data between security domains. SAML uses security tokens containing assertions to pass information about a principal (usually an end user) between a SAML authority, (identity provider), and a SAML consumer, (service pr

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Multiple <OneTimeUse> elements used in a SAML assertion can lead to elevation of privileges, if the application does not process SAML assertions correctly.

When the SessionIndex is tied to privacy data (e.g., attributes containing privacy data) the message should be encrypted. If the message is not encrypted there is the possibility of compromise of privacy data.

Enterprise environments make application account management challenging and complex. A manual process for account management functions adds the risk of a potential oversight or other error.Manual examples include but are not limited to admin staff logging into the system or system

If shared/group account credentials are not terminated when individuals leave the group, the user that left the group can still gain access even though they are no longer authorized. A shared/group account credential is a shared form of authentication that allows multiple individuals to acce

If temporary user accounts remain active when no longer needed or for an excessive period, these accounts may be used to gain unauthorized access. To mitigate this risk, automated termination of all temporary accounts must be set upon account creation.Temporary accounts are establisl

Emergency accounts are administrator accounts which are established in response to crisis situations where the need for rapid account activation is required. Therefore, emergency account activation may bypass normal account authorization processes.If these accounts are automatically di

Attackers that are able to exploit an inactive account can potentially obtain and maintain undetected access to an application. Owners of inactive accounts will not notice if unauthorized access to their user account has been obtained. Applications need to track periods of user inactivity and

Test or demonstration accounts are sometimes created during the application installation process. This creates a security risk as these accounts often remain after the initial installation process and can be used to gain unauthorized access to the application. Applications must be designed an

Once an attacker establishes initial access to a system, the attacker often attempts to create a persistent method of re-establishing access. One way to accomplish this is for the attacker to simply create a new account. Auditing of account creation is one method for mitigating this risk. A com

One way for an attacker to establish persistent access is for the attacker to modify or copy an existing account. Auditing of account modification is one method for mitigating this risk. A comprehensive account management process will ensure an audit trail documents the modification of apj

When application accounts are disabled, user accessibility is affected. Accounts are utilized for identifying individual application users or for identifying the application processes themselves. In order to detect and respond to events affecting user accessibility and application processing, appli

When application accounts are removed, user accessibility is affected. Accounts are utilized for identifying individual application users or for identifying the application processes themselves. In order to detect and respond to events affecting user accessibility and application processing, appl

Once an attacker establishes access to a system, the attacker often attempts to create a persistent method of re-establishing access. One way to accomplish this is for the attacker to simply create a new account. Notification of account creation is one method for mitigating this risk. A compr

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Once an attacker establishes access to a system, the attacker often attempts to create a persistent method of re-establishing access. One way to accomplish this is for the attacker to simply enable an existing account that has been previously disabled. Notification when account enabling acti

Failure to protect organizational information from data mining may result in a compromise of information. In order to assign the appropriate data protections, application data must be identified and then protection requirements assigned. Access to sensitive data and sensitive data objects

Failure to protect organizational information from data mining may result in a compromise of information.Data mining occurs when the application is programmatically probed and data is automatically extracted. While there are valid uses for data mining within data sets, the organization sl

To mitigate the risk of unauthorized access to sensitive information by entities that have been issued certificates by DoD-approved PKIs, all DoD systems (e.g., networks, web servers, and web portals) must be properly configured to incorporate access control methods that do not rely solely

Discretionary Access Control allows users to determine who is allowed to access their data. To mitigate the risk of unauthorized access to sensitive information by entities that have been issued certificates by DoD-approved PKIs, all DoD systems (e.g., networks, web servers, and web portals)

A mechanism to detect and prevent unauthorized communication flow must be configured or provided as part of the system design. If information flow is not enforced based on approved authorizations, the system may become compromised. Information flow control regulates where infor

A mechanism to detect and prevent unauthorized communication flow must be configured or provided as part of the system design. If information flow is not enforced based on approved authorizations, the system may become compromised. Information flow control regulates where infor

Preventing non-privileged users from executing privileged functions mitigates the risk that unauthorized individuals or processes may gain unnecessary access to information or privileges.Privileged functions include, for example, establishing accounts, performing system integrity checks, or

Applications are often designed to utilize a user account. The account represents a means to control application permissions and access to OS resources, application resources or both. When the application is designed and installed, care must be taken not to assign excessive permissions to

Misuse of privileged functions, either intentionally or unintentionally by authorized users, or by unauthorized external entities that have compromised information system accounts, is a serious and ongoing concern and can have significant adverse impacts on organizations. Auditing the use

By limiting the number of failed logon attempts, the risk of unauthorized system access via user password guessing, otherwise known as brute forcing, is reduced.Limits are imposed by locking the account.User notification when three failed logon attempts are exceeded is an operational con

Once a user account has been locked, it must be unlocked by an administrator.An ISSM and ISSO approved process must be created and followed to ensure the user requesting access is properly authenticated prior to access being re-established.The process must include having the user pro

Display of the DoD-approved use notification before granting access to the application ensures privacy and security notification verbiage used is consistent with applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance.System use notifications are re

The banner must be acknowledged by the user prior to allowing the user access to the application. This provides assurance that the user has seen the message and accepted the conditions for access. If the consent banner is not acknowledged by the user, DoD will not be in compliance with

Display of a standardized and approved use notification before granting access to the publicly accessible application ensures privacy and security notification verbiage used is consistent with applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance.Sy

ng a last successful logon date and time stamp notification to the user when they authenticate and access the application allows the user to determine if their application account has been used without their knowledge. Armed with that information, the user can notify the applicatio

non-repudiation, it is impossible to positively attribute an action to an individual (or process acting on behalf of an individual).Non-repudiation services can be used to determine if information originated from a particular individual, or if an individual took specific actions (e.g., sendi

t the ability to collate records based on the time when the events occurred, the ability to perform forensic analysis and investigations across multiple components is significantly degraded.Audit trails are time-correlated if the time stamps in the individual audit records can be reliably

If authorized individuals do not have the ability to modify auditing parameters in response to a changing threat environment, the organization may not be able to effectively respond, and important forensic information may be lost.This requirement enables organizations to extend or limit a

Applications create session IDs at the onset of a user session in order to manage user access to the application and differentiate between different user sessions. It is important to log the creation of these session ID creation events for forensic purposes.It is equally important to not log the se

Applications should destroy session IDs at the end of a user session in order to terminate user access to the application session and to reduce the possibility of an unauthorized attacker high jacking the session and impersonating the user. It is important to log when session IDs are destroyed

Application design sometimes requires the renewal of session IDs in order to continue approved user access to the application.Session renewal is done on a case by case basis under circumstances defined by the application architecture. The following are some examples of when session rene

It is important to identify and exclude certain types of data that is written into the logs. If the logs are compromised and sensitive data is included in the logs, this could assist an attacker in furthering their attack or it could completely compromise the system.Examples of such data include bu

When a user's session times out, it is important to be able to identify these events in the application logs.Without the capability to generate audit records, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit

It is important to include the time stamps for when an event occurred. Failure to include time stamps in the event logs is detrimental to forensic analysis.

HTTP header information is a critical component of data that is used when evaluating forensic activity.Without the capability to generate audit records, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit rec

Without the capability to generate audit records, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit records can be generated from various components within the application (e.g., process, module). Certai

When users conduct activity within an application, that user's identity must be recorded in the audit log. Failing to record the identity of the user responsible for the activity within the application is detrimental to forensic analysis.

Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit records can be generated from various componer

Security objects represent application objects that provide or require security protections or have a security role within the application. Examples include but are not limited to, files, application modules, folders, and database records. Essentially, if permissions are assigned to protect it, it ca

A security level denotes a permissions or authorization capability within the application. This is most often associated with a user role. Attempts to access a security level can occur when a user attempts an action such as escalating their privilege from within the application itself. Attempts to

Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Categories of information is information that is identifie

Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit records can be generated from various componer

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A security level denotes a permissions or authorization capability within the application. This is most often associated with a user role. Attempts to modify a security level can be construed as an attempt to change the configuration of the application so as to create a new security role or moc

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A security level denotes a permissions or authorization capability within the application. This is most often associated with a user role. Attempts to delete a security level can be construed as an attempt to change the configuration of the application so as to delete an existing security role. So

Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Audit records can be generated from various componer

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Privileged activities include the tasks or actions taken by users in an administrative role (admin, backup operator, manager, etc.) which are used to manage or reconfigure application function. Examples include but are not limited to:Modifying application logging verbosity, starting or stoppin
Knowing when a user's application session began and when it ended is critical information that aids in forensic analysis.
Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.Application objects are system or application componer
Without generating audit records that are specific to the security and mission needs of the organization, it would be difficult to establish, correlate, and investigate the events relating to an incident, or identify those responsible for one.When an application provides direct access to underlyin
When application user accounts are created, modified, disabled or terminated the event must be logged.Centralized management of user accounts allows for rapid response to user related security events and also provides ease of management.Allowing the centralized user manar -t sol
This is a specialized requirement for monitoring applications. Not all applications will be required to capture/record or view/hear user sessions.
If the application does not begin logging upon startup, important log events could be missed.
Forensics is a large part of security incident response. Applications must provide a record of their actions so application events can be investigated post-event. Attackers may attempt to shut off the application logging capability to cover their activity while on the system. Recording the shut
The IP addresses of the systems that the application connects to are an important aspect of identifying application network related activity. Recording the IP addresses of the system the application connects to in the application logs provides forensic evidence and aids in investigating and co
When users access application data, there is risk of data compromise or seepage if the account used to access is compromised or access is granted improperly. To be able to investigate which account accessed data, the account access must be logged. Without establishing when the access ev
When users change/modify application data, there is risk of data compromise if the account used to access is compromised or access is granted improperly. To be able to investigate which account accessed data, the account making the data changes must be logged. Without establishing wh
Without establishing when events occurred, it is impossible to establish, correlate, and investigate the events relating to an incident.In order to compile an accurate risk assessment, and provide forensic analysis, it is essential for security personnel to know when events occurred (date and tir
It is impossible to establish, correlate, and investigate the events relating to an incident if the details regarding the source of the event it not available.In order to compile an accurate risk assessment, and provide forensic analysis, it is essential for security personnel to know where within the
Without establishing the source, it is impossible to establish, correlate, and investigate the events leading up to an outage or attack.In the case of centralized logging, or other instances where log files are consolidated, there is risk that the application's log data could be co-mingled with other
Without information about the outcome of events, security personnel cannot make an accurate assessment as to whether an attack was successful or if changes were made to the security state of the system.Event outcomes can include indicators of event success or failure and event-specifi
Without information that establishes the identity of the subjects (i.e., users or processes acting on behalf of users) associated with the events, security personnel cannot determine responsibility for the potentially harmful event.Event identifiers (if authenticated or otherwise known) include,
Reconstruction of harmful events or forensic analysis is not possible if audit records do not contain enough information.Organizations consider limiting the additional audit information to only that information explicitly needed for specific audit requirements. The additional information requ
Without required logging and access control, security issues related to data changes will not be identified. This could lead to security compromises such as data misuse, unauthorized changes, or unauthorized access.Transaction logs contain a sequential record of all changes to the database.
Without the ability to centrally manage the content captured in the audit records, identification, troubleshooting, and correlation of suspicious behavior would be difficult and could lead to a delayed or incomplete analysis of an ongoing attack.This requirement requires that the content cap
Information stored in one location is vulnerable to accidental or incidental deletion or alteration. In addition, attackers often manipulate logs to hide or obfuscate their activity.The goal is to off-load application logs to a separate server as quickly and efficiently as possible so as to mitigate th
Information stored in one location is vulnerable to accidental or incidental deletion or alteration. In addition, attackers often manipulate logs to hide or obfuscate their activity.Off-loading is a common process in information systems with limited audit storage capacity or when trying to assu
If security personnel are not notified immediately upon storage volume utilization reaching 75%, they are unable to plan for storage capacity expansion.Due to variances in application usage and audit records storage usage, the SA and the ISSO may evaluate usage patterns and determine if
Applications that are categorized as having a high or moderate impact on the organization must provide immediate alerts when encountering failures with the application audit system. It is critical for the appropriate personnel to be aware if a system is at risk of failing to process audit logs a
It is critical for the appropriate personnel to be aware if a system is at risk of failing to process audit logs as required. Without this notification, the security personnel may be unaware of an impending failure of the audit capability and system operation may be adversely affected. Audit proce
It is critical that when the application is at risk of failing to process audit logs as required, it take action to mitigate the failure. Audit processing failures include: software/hardware errors; failures in the audit capturing mechanisms; and audit storage capacity being reached or exceeded. Respo
Successful incident response and auditing relies on timely, accurate system information and analysis in order to allow the organization to identify and respond to potential incidents in a proficient manner. If the application does not provide the ability to centrally review the application logs, f
The ability to specify the event criteria that are of interest provides the persons reviewing the logs with the ability to quickly isolate and identify these events without having to review entries that are of little or no consequence to the investigation. Without this capability, forensic investigatio
The ability to generate on-demand reports, including after the audit data has been subjected to audit reduction, greatly facilitates the organization's ability to generate incident reports as needed to better handle larger-scale or more complex security incidents.Audit reduction is a process th
The ability to perform on-demand audit review and analysis, including after the audit data has been subjected to audit reduction, greatly facilitates the organization's ability to generate incident reports as needed to better handle larger-scale or more complex security incidents.Audit reducti
If the audit reduction capability does not support after-the-fact investigations, it is difficult to establish, correlate, and investigate the events leading up to an outage or attack, or identify those responses for one. This capability is also required to comply with applicable Federal laws and DoD
The report generation capability must support on-demand review and analysis in order to facilitate the organization's ability to generate incident reports as needed to better handle larger-scale or more complex security incidents.Report generation must be capable of generating on-demand
The report generation capability must support on-demand reporting in order to facilitate the organization's ability to generate incident reports as needed to better handle larger-scale or more complex security incidents.The report generation capability provided by the application must be ca
If the report generation capability does not support after-the-fact investigations, it is difficult to establish, correlate, and investigate the events leading up to an outage or attack, or identify those responses for one. This capability is also required to comply with applicable Federal laws and Do
If the audit reduction capability alters the content or time ordering of audit records, the integrity of the audit records is compromised, and the records are no longer usable for forensic analysis. Time ordering refers to the chronological organization of records based on time stamps. The degr
If the audit report generation capability alters the original content or time ordering of audit records, the integrity of the audit records is compromised, and the records are no longer usable for forensic analysis. Time ordering refers to the chronological organization of records based on time st
Without an internal clock used as the reference for the time stored on each event to provide a trusted common reference for the time, forensic analysis would be impeded. Determining the correct time a particular event occurred on a system is critical when conducting forensic analysis and i
If time stamps are not consistently applied and there is no common time reference, it is difficult to perform forensic analysis.Time stamps generated by the application include date and time. Time is commonly expressed in Coordinated Universal Time (UTC), a modern continuation of Greenv
Without sufficient granularity of time stamps, it is not possible to adequately determine the chronological order of records.Time stamps generated by the application include date and time. Granularity of time measurements refers to the degree of synchronization between information syste
If audit data were to become compromised, then competent forensic analysis and discovery of the true source of potentially malicious system activity is difficult if not impossible to achieve. In addition, access to audit records provides information an attacker could potentially use to his or h
If audit data were to become compromised, then forensic analysis and discovery of the true source of potentially malicious system activity is impossible to achieve.To ensure the veracity of audit data, the information system and/or the application must protect audit information from unaut
If audit data were to become compromised, then forensic analysis and discovery of the true source of potentially malicious system activity is impossible to achieve.To ensure the veracity of audit data, the information system and/or the application must protect audit information from unaut
Protecting audit data also includes identifying and protecting the tools used to view and manipulate log data. Therefore, protecting audit tools is necessary to prevent unauthorized operation on audit data.Applications providing tools to interface with audit data will leverage user permission
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Protection of log data includes assuring log data is not accidentally lost or deleted. Backing up audit records to a different system or onto separate media than the system being audited on an organizationally defined frequency helps to assure in the event of a catastrophic system failure, the
Audit records may be tampered with; if the integrity of audit data were to become compromised, then forensic analysis and discovery of the true source of potentially malicious system activity is impossible to achieve.Protection of audit records and audit data is of critical importance. Crypto
Protecting the integrity of the tools used for auditing purposes is a critical step to ensuring the integrity of audit data. Audit data includes all information (e.g., audit records, audit settings, and audit reports) needed to successfully audit information system activity.Audit tools include, but are
Protecting the integrity of the tools used for auditing purposes is a critical step to ensuring the integrity of audit data. Audit data includes all information (e.g., audit records, audit settings, and audit reports) needed to successfully audit information system activity.Audit tools include, but are
Allowing regular users to install software, without explicit privileges, creates the risk that untested or potentially malicious software will be installed on the system. Explicit privileges (escalated or administrative privileges) provide the regular user with explicit capabilities and control that exce
Failure to provide logical access restrictions associated with changes to application configuration may have significant effects on the overall security of the system.When dealing with access restrictions pertaining to change control, it should be noted that any changes to the hardware, softwa
Without auditing the enforcement of access restrictions against changes to the application configuration, it will be difficult to identify attempted attacks and an audit trail will not be available for forensic investigation for after-the-fact actions.Enforcement actions are the methods or mechar
Changes to any software components can have significant effects on the overall security of the application. Verifying software components have been digitally signed using a certificate that is recognized and approved by the organization ensures the software has not been tampered with an
If the application were to allow any user to make changes to software libraries, then those changes might be implemented without undergoing the appropriate testing and approvals that are part of a robust change management process.This requirement applies to applications v ar
An application vulnerability assessment is a test conducted in order to identify weaknesses and security vulnerabilities that may exist within an application. The testing must cover all aspects and components of the application architecture. If an application consists of a web serv Jat
Control of application execution is a mechanism used to prevent execution of unauthorized applications in order to follow the rules of least privilege. Some applications may provide a capability that runs counter to the mission or provides users with functionality that exceeds mission requir
Utilizing a whitelist provides a configuration management method for allowing the execution of only authorized software. Using only authorized software decreases risk by limiting the number of potential vulnerabilities.The organization must identify authorized software programs and perm
It is detrimental for applications to provide, or install by default, functionality exceeding requirements or mission objectives. These unnecessary capabilities or services are often overlooked and therefore may remain unsecured. They increase the risk to the platform by providing additional a
In order to prevent unauthorized connection of devices, unauthorized transfer of information, or unauthorized tunneling (i.e., embedding of data types within data types), organizations must disable or restrict unused or unnecessary physical and logical ports/protocols on information syster
Without reauthentication, users may access resources or perform tasks for which they do not have authorization.When applications provide the capability to change security roles or escalate the functional capability of the application, it is critical the user reauthenticate.In addition to the rea
Without reauthenticating devices, unidentified or unknown devices may be introduced; thereby facilitating malicious activity.In addition to the reauthentication requirements associated with session locks, organizations may require reauthentication of devices, including (but not limited to),
To assure accountability and prevent unauthenticated access, organizational users must be identified and authenticated to prevent potential misuse and compromise of the system.Organizational users include organizational employees or individuals the organization deems to have equivale
Multifactor authentication requires using two or more factors to achieve authentication and access.Factors include:(i) something a user knows (e.g., password/PIN);(ii) something a user has (e.g., cryptographic identification device, token); or(iii) something a user is (e.g., biometric).Multifactor
The use of PIV credentials facilitates standardization and reduces the risk of unauthorized access.DoD has mandated the use of the CAC to support identity management and personal authentication for systems covered under HSPD 12, as well as a primary component of layered protection fo
The use of PIV credentials facilitates standardization and reduces the risk of unauthorized access.DoD has mandated the use of the CAC to support identity management and personal authentication for systems covered under HSPD 12, as well as a primary component of layered protection fo
To assure accountability and prevent unauthenticated access, non-privileged users must utilize multifactor authentication to prevent potential misuse and compromise of the system.Multifactor authentication uses two or more factors to achieve authentication.Factors include:(i) Something
Multifactor authentication requires using two or more factors to achieve authentication and access.Factors include:(i) something a user knows (e.g., password/PIN);(ii) something a user has (e.g., cryptographic identification device, token); or(iii) something a user is (e.g., biometric).Multifactor
To assure accountability, prevent unauthenticated access, and prevent misuse of the system, privileged users must utilize multifactor authentication for local access.Multifactor authentication is defined as: using two or more factors to achieve authentication.Factors include:(i) Something a u
To assure individual accountability and prevent unauthorized access, application users must be individually identified and authenticated. Individual accountability mandates that each user is uniquely identified.A group authenticator is a shared account or some other form of authentication
A replay attack may enable an unauthorized user to gain access to the application. Authentication sessions between the authenticator and the application validating the user credentials must not be vulnerable to a replay attack.An authentication process resists replay attacks if it is impractic
A replay attack is a man-in-the-middle style attack which allows an attacker to repeat or alter a valid data transmission that may enable unauthorized access to the application. Authentication sessions between the authenticating client and the application server validating the user credential
Without identifying devices, unidentified or unknown devices may be introduced, thereby facilitating malicious activity.With one way SSL authentication which is the typical form of SSL authentication done between a web browser client and a web server, the client requests the server certifi
Without authenticating devices, unidentified or unknown devices may be introduced, thereby facilitating malicious activity.For distributed architectures (e.g., service-oriented architectures), the decisions regarding the validation of authentication claims may be made by services separate fro
Without identifying devices, unidentified or unknown devices may be introduced, thereby facilitating malicious activity.One way SSL/TLS authentication is the typical form of authentication done between a web browser client and a web server. The client requests the server certificate to val
Device identifiers are used to identify hardware devices that interact with the application much like a user account is used to identify an application user. Examples of hardware devices include but are not limited to mobile phones, application gateways or other types of smart hardware. Thi
The shorter the password, the lower the number of possible combinations that need to be tested before the password is compromised.Use of passwords for application authentication is intended only for limited situations and should not be used as a replacement for two-factor CAC-enable
Use of passwords for application authentication is intended only for limited situations and should not be used as a replacement for two-factor CAC-enabled authentication.Examples of situations where a user ID and password might be used include but are not limited to:- When the applicati
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If the application allows user A to change user B's password, user B can be locked out of the application, and user A is provided the ability to grant themselves access to the application as user B. This violates application integrity and availability principles.Many applications provide a passwo
Simply removing a user from a web application without terminating any existing application user sessions can introduce a scenario where the deleted user still has access to the application even though their account has been deleted from the authentication store. This can be attributed to b
Without path validation, an informed trust decision by the relying party cannot be made when presented with any certificate not already explicitly trusted.A trust anchor is an authoritative entity represented via a public key and associated data. It is used in the context of public key infrastru
If the private key is discovered, an attacker can use the key to authenticate as an authorized user and gain access to the network infrastructure.The cornerstone of the PKI is the private key used to encrypt or digitally sign information.If the private key is stolen, this will lead to the compromis

Without mapping the certificate used to authenticate to a corresponding user account, the ability to determine the identity of the individual user or group will not be available for forensic analysis.Some CAs will include identifying information like an email address within the certificate itself.
A local cache of revocation data is also known as a CRL list. This list contains a list of revoked certificates and can be periodically downloaded to ensure certificates can still be checked for revocation when network access is not available or access to the Online Certificate Status Protocol OCSP
To prevent the compromise of authentication information such as passwords during the authentication process, the feedback from the information system must not provide any information that would allow an unauthorized user to compromise the authentication mechanism.Obfuscation
Unapproved mechanisms that are used for authentication to the cryptographic module are not verified, and therefore cannot be relied upon to provide confidentiality or integrity and DoD data may be compromised.Applications utilizing encryption are required to use FIPS compliant mechai
Lack of authentication and identification enables non-organizational users to gain access to the application or possibly other information systems and provides an opportunity for intruders to compromise resources within the application or information system.Non-organizational users inclu
Access may be denied to authorized users if federal agency PIV credentials are not accepted.Personal Identity Verification (PIV) credentials are those credentials issued by federal agencies that conform to FIPS Publication 201 and supporting guidance documents. OMB Memorandum 11-11 re
Inappropriate access may be granted to unauthorized users if federal agency PIV credentials are not electronically verified.Personal Identity Verification (PIV) credentials are those credentials issued by federal agencies that conform to FIPS Publication 201 and supporting guidance documents
FICAM establishes a federated identity framework for the Federal Government. FICAM provides Government-wide services for common identity, Credential and Access Management (ICAM) requirements. The FICAM Trust Framework Solutions (TFS) is the federated identity framework for th
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Non-local maintenance and diagnostic activities are those activities conducted by individuals communicating through a network, either an external network (e.g., the Internet) or an internal network. Local maintenance and diagnostic activities are those activities carried out by individuals ph
Privileged access contains control and configuration information which is particularly sensitive, so additional protections are necessary. This is maintained by using cryptographic mechanisms to protect integrity.Non-local maintenance and diagnostic activities are those activities conducted b
Privileged access contains control and configuration information which is particularly sensitive, so additional protections are necessary. This is maintained by using cryptographic mechanisms to protect confidentiality.Non-local maintenance and diagnostic activities are those activities condu
Non-local maintenance and diagnostic activities are those activities conducted by individuals communicating through a network, either an external network (e.g., the Internet) or an internal network. Local maintenance and diagnostic activities are those activities carried out by individuals ph
If maintenance tools are used by unauthorized personnel, they may accidentally or intentionally damage or compromise the system. The act of managing systems and applications includes the ability to access sensitive application information, such as, system configuration details, diagnostic
If a maintenance session or connection remains open after maintenance is completed, it may be hijacked by an attacker and used to compromise or damage the system.Non-local maintenance and diagnostic activities are those activities conducted by individuals communicating through a ne
A race condition is a timing event within an application that can become a security vulnerability. A race condition can occur when a pair of programming calls operating simultaneously do not work in a sequential or coordinated manner. A race condition is a timing event within software tha
Networked applications routinely open connections to and from other systems as part of their design and function. When connections are opened by the application, system resources are consumed. Terminating the network connection at the end of the application session frees up these r
Use of weak or untested encryption algorithms undermines the purposes of utilizing encryption to protect classified data. The application must implement cryptographic modules adhering to the higher standards approved by the federal government since this provides assurance they have t
Applications that distribute components of the application must sign the components to provide an identity assurance to consumers of the application component. Components can include application messages or application code.Use of weak or untested encryption algorithms undermine
Use of weak or untested encryption algorithms undermines the purposes of utilizing encryption to protect data. The application must implement cryptographic modules adhering to the higher standards approved by the federal government since this provides assurance they have been teste
Use of weak or untested encryption algorithms undermines the purposes of utilizing encryption to protect data. The application must implement cryptographic modules adhering to the higher standards approved by the federal government since this provides assurance they have been teste
A predictable SessionIndex could lead to an attacker computing a future SessionIndex, thereby, possibly compromising the application.Use of weak or untested encryption algorithms undermines the purposes of utilizing encryption to protect data. The application must implement cryptograi
Application management functionality includes functions necessary for administration and requires privileged user access. Allowing non-privileged users to access application management functionality capabilities increases the risk that non-privileged users may obtain elevated privileges.Thi
HTTPOnly is a flag included in a Set-Cookie HTTP response header. If the HTTPOnly flag is included in the HTTP response header, the cookie cannot be accessed through client side scripts like JavaScript.If the HTTPOnly flag is set, even if a cross-site scripting (XSS) flaw in the application exists, a
Many web development frameworks such as PHP, .NET, ASP as well as application servers include their own mechanisms for session management. Whenever possible it is recommended to utilize the provided session management framework.Setting the secure bit on session cookie ensures i
Authenticity protection provides protection against man-in-the-middle attacks/session hijacking and the insertion of false information into sessions.Application communication sessions are protected utilizing transport encryption protocols, such as SSL or TLS. SSL/TLS provides web applicatio
Many web development frameworks such as PHP, .NET, and ASP include their own mechanisms for session management. Whenever possible it is recommended to utilize the provided session management framework.Session cookies contain application session information that can be used
Session fixation allows an attacker to hijack a valid user's application session. The attack focuses on the manner in which a web application manages the user's session ID. Applications become vulnerable when they do not assign a new session ID when authenticating users thereby using the
Many web development frameworks such as PHP, .NET, and ASP include their own mechanisms for session management. Whenever possible it is recommended to utilize the provided session management framework.
Many web development frameworks such as PHP, .NET, and ASP include their own mechanisms for session management. Whenever possible it is recommended to utilize the provided session management framework.Using a session ID that is copied to the URL introduces the risks that the se
Many web development frameworks such as PHP, .NET, and ASP include their own mechanisms for session management. Whenever possible it is recommended to utilize the provided session management framework.Session identifiers are assigned to application users so they can be unique
Sequentially generated session IDs can be easily guessed by an attacker. Employing the concept of randomness in the generation of unique session identifiers helps to protect against brute-force attacks to determine future session identifiers.Unique session IDs address man-in-the-middle att
Untrusted Certificate Authorities (CA) can issue certificates, but they may be issued by organizations or individuals that seek to compromise DoD systems or by organizations with insufficient security controls. If the CA used for verifying the certificate is not a DoD-approved CA, trust of this C/
Failure to a known safe state helps prevent systems from failing to a state that may cause loss of data or unauthorized access to system resources. Applications or systems that fail suddenly and with no incorporated failure state planning may leave the hosting system available but with a rec
Failure to a known state can address safety or security in accordance with the mission/business needs of the organization. Failure to a known secure state helps prevent a loss of confidentiality, integrity, or availability in the event of a failure of the information system or a component of the
Information at rest refers to the state of information when it is located on a secondary storage device (e.g., disk drive and tape drive) within an organizational information system. Mobile devices, laptops, desktops, and storage devices can be either lost or stolen, and the contents of their dat
Applications handling data requiring 'data at rest' protections must employ cryptographic mechanisms to prevent unauthorized disclosure and modification of the information at rest.Selection of a cryptographic mechanism is based on the need to protect the integrity of organizational infor
tions handling data requiring 'data at rest' protections must employ cryptographic mechanisms to prevent unauthorized disclosure and modification of the information at rest.Selection of a cryptographic mechanism is based on the need to protect the confidentiality of organizationa
ion boundary provides access control and protects the integrity of the hardware, software, and firmware that perform security functions.Security functions are the hardware, software, and/or firmware of the information system responsible for enforcing the system security policy a
tions can maintain separate execution domains for each executing process by assigning each process a separate address space. Each process has a distinct address space so that communication between processes is performed in a manner controlled through the security functions, an
Preventing unauthorized information transfers mitigates the risk of information, including encrypted representations of information, produced by the actions of prior users/roles (or the actions of processes acting on behalf of prior users/roles) from being available to any current users/roles

DoS is a condition when a resource is not available for legitimate users. When this occurs, the organization either cannot accomplish its mission or must operate at degraded capacity.XML-based applications are susceptible to DoS attacks due to the nature of XML parsing being processor inte
Denial of Service (DoS) is a condition where a resource is not available for legitimate users. When this occurs, the organization either cannot accomplish its mission or must operate at degraded capacity.Individuals of concern can include hostile insiders or external adversaries that have acces
DoS is a condition when a resource is not available for legitimate users. When this occurs, the organization either cannot accomplish its mission or must operate at degraded capacity.In the case of application DoS attacks, care must be taken when designing the application to ensure the appl
Web Services are vulnerable to many types of attacks such as XML injection or XML External Entity (XXE) attacks. The risks increase when these applications are exposed to untrusted networks.XML-based firewall functionality can be used to prevent common attacks and aid in protecting and
Without protection of the transmitted information, confidentiality and integrity may be compromised since unprotected communications can be intercepted and either read or altered.This requirement applies to those applications that transmit data, or allow access to data non-locally. App
Data is subject to manipulation and other integrity related attacks whenever that data is transferred across a network. To protect data integrity during transmission, the application must implement mechanisms to ensure the integrity of all transmitted information.All transmitted informatio
Data is subject to manipulation and other integrity related attacks whenever that data is transferred across a network. To protect data integrity during transmission, the application must implement mechanisms to ensure the integrity of all transmitted information. All transmitted informatic
Data is subject to manipulation and other integrity related attacks whenever that data is transferred across a network. To protect data integrity during transmission, the application must implement mechanisms to ensure the integrity of all transmitted information. All transmitted informatic
Applications should not disclose information not required for the transaction. (e.g., a web application should not divulge the fact there is a SQL server database and/or its version).These events usually occur when the web application has not been configured to send specific error messages f

Hidden fields allow developers to process application data without having to display it on the screen. Using hidden fields to pass data in forms is a common practice among web applications and by itself is not a security risk. However, hidden fields are not secure and can be easily manipulat
XSS attacks are essentially code injection attacks against the various language interpreters contained within the browser. XSS can be executed via HTML, JavaScript, VBScript, ActiveX; essentially any scripting language a browser is capable of processing.XSS vulnerabilities are created when a w
Cross-Site Request Forgery (CSRF) is an attack where a website user is forced to execute an unwanted action on a website that he or she is currently authenticated to. An attacker, through social engineering (e.g., e-mail or chat) creates a hyperlink which executes unwanted actions on the we
A command injection attack is an attack on a vulnerable application where improperly validated input is passed to a command shell setup in the application. The result is the ability of an attacker to execute OS commands via the application.A command injection allows an attacker to executi

Canonical representation vulnerabilities can occur when a data conversion process does not convert the data to its simplest form resulting in the possible misrepresentation of the data.The application may behave in an unexpected manner when acting on input that has not been sanitized o
Checking the valid syntax and semantics of information system inputs (e.g., character set, length, numerical range, and acceptable values) verifies that inputs match specified definitions for format and content. Software applications typically follow well-defined protocols that use structured
SQL injection is a code injection attack against database applications. Malicious SQL statements are inserted into an application data entry field where they are submitted to the database and executed. This is a direct result of not validating input that is used by the application to perform a c
Extensible Markup Language (XML) is widely employed in web technology and applications like web services (SOAP, REST, and WSDL) and is also used for configuration files. XML vulnerability examples include XML injection, XML Spoofing, XML-based Denial of Service attacks and information
A common application vulnerability is unpredictable behavior due to improper input validation. This requirement guards against adverse or unintended system behavior caused by invalid inputs, where information system responses to the invalid input may be disruptive or cause the system
Only authorized personnel should be aware of errors and the details of the errors. Error messages are an indicator of an organization's operational state or can identify application components. Additionally, Personally Identifiable Information (PII) and operational information must not be re

Only authorized personnel should be aware of errors and the details of the errors. Error messages are an indicator of an organization's operational state or can identify application components. Additionally, Personally Identifiable Information (PII) and operational information must not be rev

A buffer overflow occurs when a program exceeds the amount of data allocated to a buffer. The buffer is a sequential section of memory and when the data is written outside the memory bounds, the program can crash or malicious code can be executed.Security safeguards employed to pr
Previous versions of software components that are not removed from the information system after updates have been installed may be exploited by adversaries. Some information technology products may remove older versions of software automatically from the information system.
Security flaws with software applications are discovered daily. Vendors are constantly updating and patching their products to address newly discovered security vulnerabilities. Organizations (including any contractor to the organization) are required to promptly install security-rel soft
Without verification, security functions may not operate correctly and this failure may go unnoticed.Security function is defined as the hardware, software, and/or firmware of the information system responsible for enforcing the system security policy and supporting the isolatio ar
Without verification, security functions may not operate correctly and this failure may go unnoticed.Security function is defined as the hardware, software, and/or firmware of the information system responsible for enforcing the system security policy and supporting the isolatio ar
If personnel are not notified of failed security verification tests, they will not be able to take corrective action and the unsecure condition(s) will remain.Security function is defined as the hardware, software, and/or firmware of the information system responsible for enforcing the system se
Use of un-trusted Level 1A mobile code technologies can introduce security vulnerabilities and malicious code into the client system.1A code is defined as:- ActiveX controls- Mobile code script (JavaScript, VBScript)- Windows Scripting Host (WSH) (downloaded via URL or email)When JavaScri
A comprehensive account management process will ensure that only authorized users can gain access to applications and that individual accounts designated as inactive, suspended, or terminated are promptly deactivated. Such a process greatly reduces the risk that accounts will be misuse
A tiered application usually consists of 3 tiers, the web layer (presentation tier), the application layer (application logic tier), and the database layer (data storage tier).Using one system for hosting all 3 tiers introduces risk that if one tier is compromised, there are no additional protection laye
Log files are a requirement to trace intruder activity or to audit user activity.
Without access control the data is not secure. It can be compromised, misused, or changed by unauthorized access at any time.
Violations of IA policies must be reviewed and reported. If there are no policies regarding the reporting of IA violations, IA violations may not be tracked or addressed in a proper manner.
Use of automated scanning tools accompanied with manual testing/validation which confirms or expands on the automated test results is an accepted best practice when performing application security testing. Automated scanning tools expedite and help to standardize security testing, the

The security posture of the enclave could be compromised if untested or unwarranted software is used due to the risk of software failure, hidden vulnerabilities, or other malware embedded in the application. AO risk acceptance approvals must be obtained prior to using this type of softwa
In order to understand data flows within web services, the process flow of data must be developed and documented.There are several different ways that web service deadlock occurs, many times it is due to when a client invokes a synchronous method on a web service, the client will block
Application configuration settings and user data are required to be stored in separate locations in order to prevent application users from possibly being able to access application configuration settings or application data files. Without proper access controls and separation of application co
Not all COTS products are covered by a STIG. Those products not covered by a STIG, should follow commercially accepted best practices, independent testing results and vendors lock down guides and recommendations if they are available.
Failure to comply with DoD Ports, Protocols, and Services (PPS) Vulnerability Analysis and associated PPS mitigations may result in compromise of enclave boundary protections and/or functionality of the application.
Failure to register the applications usage of ports, protocols, and services with the DoD PPS Database may result in a Denial of Service (DoS) because of enclave boundary protections at other end points within the network.
A Configuration Management (CM) repository is used to manage application code versions and to securely store application code.Failure to properly apply security patches and secure the software Configuration Management system could affect the confidentiality and integrity of the applic
A Configuration Management (CM) repository is used to manage application code versions and to securely store application code.Incorrect access privileges to the CM repository can lead to malicious code or unintentional code being introduced into the application.This requirement is intend
Software Configuration Management (SCM) is very important in tracking code releases, baselines, and managing access to the configuration management repository. The SCM plan identifies what should be under configuration management control.Without an SCM plan that addresses code
Software Configuration Management (SCM) is very important in tracking code releases, baselines, and managing access to the configuration management repository. The SCM plan identifies what should be under configuration management control. Without an SCM plan code, and a CCB, rel
If the application has not been upgraded to execute on an IPv6-only network, there is a possibility the application will not execute properly, and as a result, a denial of service could occur.In order to operate on an IPV6 network, the application must be capable of making IPV6 compatible net
Critical applications should not be hosted on a multi-purpose server with other applications. Applications that share resources are susceptible to the other shared application security defects. Even if the critical application is designed and deployed securely, an application that is not designed
All applications must document disaster recovery/continuity procedures to include business recovery plans, system contingency plans, facility disaster recovery plans, and plan acceptance.
Without a disaster recovery plan, the application is susceptible to interruption in service due to damage within the processing site.If the application is part of the site's disaster recovery plan, ensure that the plan contains detailed instructions pertaining to the application. Verify that recovery
Without proper backups, the application is not protected from the loss of data or the operating environment in the event of hardware or software failure.
Application developers and application administrators must take steps to ensure continuity of development effort and operations should a disaster strike. Steps include protecting back-up copies of development code and application software.Improper storage of the back-up copies can res
Protection of backup and restoration assets is essential for the successful restore of operations after a catastrophic failure or damage to the system or data files. Failure to follow proper procedures may result in the permanent loss of system data and/or the loss of system capability resulting
If the application does not use encryption and authenticate endpoints prior to establishing a communication channel and prior to transmitting encryption keys, these keys may be intercepted, and could be used to decrypt the traffic of the current session, leading to potential loss or compro
Authentication data stored in code could potentially be read and used by anonymous users to gain access to a backend database or application servers. This could lead to compromise of application data.
Failure to properly mark output could result in a disclosure of sensitive or classified data which is an immediate loss in confidentiality.
Without test plans and procedures for application releases or updates, unexpected results may occur which could lead to a denial of service to the application or components.This requirement is meant to apply to developers or organizations that are doing development work when releasing
When application code and binaries are transferred from one environment to another, there is the potential for malware to be introduced into either the application code or even the application binaries themselves. Care must be taken to ensure that application code and binaries are valida
If there is no person designated to test for security flaws, vulnerabilities can potentially be missed during testing.This requirement is meant to apply to developers or organizations that are doing development work.
Secure state assurance cannot be accomplished without testing the system state at least annually to ensure the system remains in a secure state upon initialization, shutdown, and aborts.
A code review is a systematic evaluation of computer source code conducted for the purposes of identifying and remediating the security flaws in the software.This requirement is meant to apply to developers or organizations that are doing application development work and have the resp
This requirement is meant to apply to developers or organizations that are doing application development work.Code coverage statistics describes the overall functionality provided by the application and how much of the source code has been tested during the release cycle.To avoid the po
This requirement is meant to apply to developers or organizations that are doing application development work.If flaws are not tracked they may possibly be forgotten to be included in a release. Tracking flaws in the configuration management repository will help identify code elements to l
When changes are made to an application, either in the code or in the configuration of underlying components such as the OS or the web or application server, there is the potential for security vulnerabilities to be opened up on the system.IA assessment of proposed changes is necessary to
This requirement is meant to apply to developers or organizations that are doing application development work.Application development efforts include the creation of a project plan to track and organize the development work.If security flaws are not tracked within the project plan, it is pc

Coding standards are guidelines established by the development team or individual developers that recommend programming style, practices and methods. The coding standards employed will vary based upon the programming language that is being used to develop the application and th
This requirement is meant to apply to developers or organizations that are doing application development work.The application design document or configuration guide includes configuration settings, recommendations and best practices that pertain to the secure deployment of the applic
Threat modeling is an approach for analyzing the security of an application. It is a structured approach that enables you to identify, quantify, and address the security risks associated with an application. Threat modeling is not an approach to reviewing code, but it does complement the secu
Error handling is the failure to check the return values of functions or catch top level exceptions within a program. Improper error handling in an application can lead to an application failure or possibly result in the application entering an insecure state. The primary way to detect error hand
An application incident response process is managed by the development team and should include a method for individuals to submit potential security vulnerabilities to the development or maintenance team. The plan should dictate what is to be done with the reported vulnerabilities. Rep
Unsupported commercial and government developed software products should not be used because fixes to newly identified bugs will not be implemented by the vendor or development team. The lack of security updates can result in potential vulnerabilities.
Unsupported software products should not be used because fixes to newly identified bugs will not be implemented by the vendor or development team. The lack of security updates can result in potential vulnerabilities.When maintenance updates and patches are no longer ava ap
When maintenance no longer exists for an application, there are no individuals responsible for making security updates. The application support staff should maintain procedures for decommissioning. The decommissioning process should include notifying users of the pending dec...missio
Default passwords and properties of built-in accounts are often publicly available. Anyone with necessary knowledge, internal or external, can compromise an application using built-in accounts.Built-in accounts are those that are added as part of the installation of the application software.
Default passwords can easily be compromised by attackers allowing immediate access to the applications.
The Application Configuration Guide is any document or collection of documents used to configure the application. These documents may be part of a user guide, secure configuration guide, or any guidance that satisfies the requirements provided herein. Configuration examples include bu
Without a classification guide the marking, storage, and output media of classified material can be inadvertently mixed with unclassified material, leading to its possible loss or compromise.
By definition, mobile code is software obtained from remote systems outside the enclave boundary, transferred across a network, and then downloaded and executed on a local system without explicit installation or execution by the recipient. For a complete list of mobile code categorizatic
Production database exports are often used to populate development databases. Test and development environments do not typically have the same rigid security protections that production environments do. When production data is used in test and development, the production databa
Known DoS threats documented in the threat model should be mitigated, to prevent DoS type attacks.
In order to prevent DoS type attacks, applications should be monitored when resource conditions reach a predefined threshold. This could indicate the onset of a DoS attack or could be the precursor to an application outage.
Administrators should register for updates to all COTS and custom-developed software, so when security flaws are identified, they can be tracked for testing and updates of the application can be applied.Admin personnel should be registered to receive updates to all components of the app
An application vulnerability management and update process must be in place to notify and provide users and administrators with a means of obtaining security patches and updates for the application.An important part of the maintenance phase of an application is managing vulnerabilitie
In order to protect DoD data and systems, all remote access to DoD information systems must be mediated through a managed access control point, such as a remote access server in a DMZ.
When an application provides users with the ability to concurrently logon, an event must be recorded that indicates the user has logged on from different workstations. It is important to ensure that audit logs differentiate between the two sessions.The event data must include the user ID, tl
Many application team members may not be aware of the security implications regarding the code that they design, write and test. To address this concern, the Program Manager will ensure all levels of program management receive security training regarding the necessity, impact, and ben

Fix Text	False Posit	False Nega	Document	Mitig
Design and configure the application to specify the number of logon sessions that are allowed per user.	FALSE		APSC-	
Design and configure the application to clear sensitive data from cookies and local storage when the user logs out of the application.	FALSE			
Design and configure the application to terminate the non-privileged users session after 15 minutes of inactivity.	FALSE			
nd configure the application to terminate the admin users session after 10 minutes of inactivity.	FALSE			
nd configure the application to provide all users with the capability to manually terminate their application session.	FALSE			
, and configure the application to provide an explicit logoff message to users indicating a successful logoff has occurred upon user session termination.	FALSE			
Design and configure the application to assign data marking and ensure the marking is retained when the data is stored.	FALSE		APSC-	
Design and configure the application to retain the data marking when processing data.	FALSE			
Design and configure the application to retain the data marking when transmitting data.	FALSE			
Design and configure applications to use TLS encryption to protect the confidentiality of remote access sessions.	FALSE			
Design and configure applications to use TLS encryption to protect the integrity of remote access sessions.	FALSE			
Design and configure the application to sign the following message elements for SOAP messages requiring integrity:- Message ID- Service Request- Timestamp- SAML Assertion- Message elements	FALSE			
Design and configure applications using WS-Security messages to use time stamps with creation and expiration times and sequence numbers.	FALSE			
Design and configure the application to use validity periods, ensure validity periods are verified on all WS-Security token profiles and SAML Assertions.	FALSE			
Design and configure each SAML assertion authority to use unique assertion identifiers.	FALSE			
Encrypt assertions or use equivalent confidentiality when sensitive assertion data is passed through an intermediary.	FALSE			
Design and configure the application to use the <NotOnOrAfter> condition when using the <SubjectConfirmation> element in a SAML assertion.	FALSE			
Design and configure the application to implement the use of the <NotBefore> and <NotOnOrAfter> or <OneTimeUse> when using the <Conditions> element in a SAML assertion.	FALSE			
When using OneTimeUse elements in a SAML assertion only allow one, OneTimeUse element to be used in the conditions element of a SAML assertion.	FALSE			
Encrypt messages when the SessionIndex is tied to privacy data.	FALSE			
Use automated processes and mechanisms for account management functions.	FALSE			
Create a procedure for deleting either member accounts or the entire group account when members leave the group.	FALSE			
Configure temporary accounts to be automatically removed or disabled after 72 hours after account creation.	FALSE			
Identify accounts that are created in an emergency situation and ensure procedures or processes are in place to prevent disabling or deleting the account while the emergency is underway.	FALSE			
Design and configure the application to expire user accounts after 35 days of inactivity.	FALSE			
Design the application so unessential user accounts are not created during installation. Disable or delete all unnecessary application user accounts.	FALSE			
Configure the application to write a log entry when a new user account is created.At a minimum, ensure account name, date and time of the event are recorded.	FALSE			
Configure the application to write a log entry when a user account is modified.At a minimum, ensure account name, date and time of the event are recorded.	FALSE			
Configure the application to write a log entry when a user account is disabled.At a minimum, ensure account name, date and time of the event are recorded.	FALSE			
Configure the application to write a log entry when a user account is removed.At a minimum, ensure account name, date and time of the event are recorded.	FALSE			
Configure the application to notify the system administrator and the ISSO when application accounts are created.	FALSE			
Configure the application to notify the system administrator and the ISSO when application accounts are modified.	FALSE			
Configure the application to notify the system administrator and the ISSO when application accounts are disabled.	FALSE			
Configure the application to notify the system administrator and the ISSO when application accounts are removed.	FALSE			
Configure the application to write a log entry when a user account is enabled. At a minimum, ensure account name, date and time of the event are recorded.	FALSE			
Configure the application to notify the system administrator and the ISSO when application accounts are enabled.	FALSE			
Identify and document the application data elements and the data protection requirements.	FALSE			
Utilize and implement data mining protections when requirements specify it.	FALSE			
Design or configure the application to enforce access to application resources.	FALSE			
Design and configure the application to enforce discretionary access control policies.	FALSE			
Configure the application to enforce data flow control in accordance with data flow control policies.	FALSE			
Configure the application to enforce data flow control in accordance with data flow control policies.	FALSE			
Modify the application to limit access and prevent the disabling or circumvention of security safeguards.	FALSE			
Configure the application accounts with minimalist privileges. Do not allow the application to operate with admin credentials.	FALSE			
Configure the application to write log entries when privileged functions are executed. At a minimum, ensure the specific action taken, date and time of event are recorded.	FALSE			
Configure the application to enforce an account lock after 3 failed logon attempts occurring within a 15-minute window.	FALSE			
Create a standard approved process for unlocking locked application accounts which includes validating user identity prior to unlocking the account.Use that process when unlocking application user accounts.	FALSE			
Configure the application to present the standard DoD-approved banner prior to granting access to the application.	FALSE			
Configure the application to retain the standard DoD-approved banner until the user accepts the usage conditions prior to granting access to the application.	FALSE			
Configure the application to present the standard DoD-approved banner prior to granting access to the application.	FALSE			
and configure the application to display the date and time when the user was last successfully granted access to the application.	FALSE			
e the application to provide users with a non-repudiation function in the form of digital signatures when it is required by the organization or by the application design and architecture.	FALSE			
re the application to correlate time stamps when aggregating audit records.	FALSE			
Design the application to provide the capability for individuals or roles to change the auditing to be performed on all application components.	FALSE			
Enable session ID creation event auditing.	FALSE			
Enable session ID destruction event auditing.	FALSE			
Design or reconfigure the application to log session renewal events on those application events that provide changes in the users privileges or permissions to the application.	FALSE			
Design or reconfigure the application to not write sensitive data to the logs.	FALSE			
Configure the application to record session timeout events in the logs.	FALSE			
Configure the application to record the time the event occurred when recording the event.	FALSE			
Configure the web application and/or the web server to log HTTP headers.	FALSE			
Configure the application or application server to log all connecting IP address information	FALSE			
Configure the application to record the user ID of the user responsible for the log event entry.	FALSE			
Configure the application to audit successful and unsuccessful attempts to grant privileges.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to access security objects.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to access security levels.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to access protected categories of information.	FALSE			
Configure the application to audit successful and unsuccessful attempts to modify privileges.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to modify security objects.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to modify security levels.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to modify protected categories of information.	FALSE			
Configure the application to audit successful and unsuccessful attempts to delete privileges.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to delete security levels.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to delete database security objects.	FALSE			
Configure the application to create an audit record for both successful and unsuccessful attempts to delete protected categories of information.	FALSE			
Configure the application or application server to write a log entry when successful and unsuccessful logon events occur.	FALSE			

Configure the application to write a log entry when privileged activities or other system-level events occur.	FALSE
Configure the application or application server to record the start and end time of user session activity.	FALSE
Configure the application to log successful and unsuccessful access to application objects.	FALSE
Configure the application to log all direct access to the system.	FALSE
Configure the application to log user account creation, modification, disabling, and termination events.	FALSE
Design and configure the application to allow authorized users to capture/record and view/hear user sessions.	FA
Configure the application to begin logging application events as soon as the application starts up.	FA
Configure the application or application server to record application shutdown events in the event logs.	FALSE
Configure the application to record the destination IP address of the remote system.	FALSE
Identify the specific data elements requiring protection and audit access to the data.	FALSE
Configure the application to log all changes to application data.	FALSE
Configure the application or application server to include the date and the time of the event in the audit logs.	FALSE
Configure the application to log which component, feature or functionality of the application triggered the event.	FALSE
Configure the application logs or the centralized log storage facility so the application name and the hosts hosting the application are uniquely identified in the logs.	FALSE
Configure the application to include the outcome of application functions or events.	FALSE
Configure the application to log the identity of the user and/or the process associated with the event.	FALSE
Configure the application to log the full text recording of privileged commands or the individual identities of group users.	FALSE
Configure the application database to utilize transactional logging.	FALSE
Configure the application to utilize a centralized log management system that provides the capability to configure the content of audit records.	FALSE
Configure the application to off-load audit records onto a different system as per approved schedule.	FALSE
Configure the application to utilize a centralized log repository and ensure the logs are off-loaded from the application system as quickly as possible.	FALSE
Configure the application to send an immediate alarm to the application admin/SA and the ISSO when the allocated log storage capacity exceeds 75% of usage or exceeds the capacity value the SA and ISSO have determined will provide adequate time to plan for capacity ex	FALSE
Configure the log alerts to send an alarm when the audit system is in danger of failing or has failed. Configure the log alerts to be immediately sent to the application admin/SA and ISSO.	FALSE
Configure the application to send an alarm in the event the audit system has failed or is failing.	FALSE
Configure the application to cease processing if the audit system fails or configure the application to continue logging in a manner that compensates for the audit failure.	FALSE
Configure the application so all of the applications logs are available for review from one centralized location.	FALSE
Configure the application filters to search event logs based on defined criteria.	FALSE
Configure the application to generate soft copy, hard copy and/or screen-based reports based on the selected filtered event data.	FALSE
Configure the application to log to a centralized auditing capability that provides on-demand reports based on the filtered audit event data or design or configure the application to meet the requirement.	FALSE
Configure the application to provide an audit reduction capability that supports forensic investigations.	FALSE
Design or configure the application to provide an immediate audit review capability or utilize a centralized utility designed for the purpose of on-demand log management and reporting.	FALSE
Design or configure the application to provide an on-demand report generation capability or utilize a centralized utility designed for the purpose of on-demand log management and reporting.	FALSE
Design or configure the application to provide after-the-fact report generation capability or utilize a centralized utility designed for the purpose of log management and reporting.	FALSE
Configure the application to not alter original log content or time ordering of audit records.	FALSE
Configure and design the application to not modify source logs when filtering events.	FALSE
Configure the application to use the hosting systems internal clock for audit record generation.	FALSE
Configure the application to use the underlying system clock that maps to relevant UTC or GMT timezone.	FALSE
Configure the application to leverage the underlying operating system as the time source when recording time stamps or design the application to ensure granularity of 1 second as the minimum degree of precision.	FALSE
Configure the application to protect audit data from unauthorized access. Limit users to roles that are assigned the rights to view, edit or copy audit data, and establish permissions that control access to the audit logs and audit configuration settings.	FALSE
Configure the application to protect audit data from unauthorized modification and changes. Limit users to roles that are assigned the rights to edit audit data and establish permissions that control access to the audit logs and audit configuration settings.	FALSE
Configure the application to protect audit data from unauthorized deletion. Limit users to roles that are assigned the rights to delete audit data and establish permissions that control access to the audit logs and audit configuration settings.	FALSE
Configure the application to protect audit data from unauthorized access. Limit users to roles that are assigned the rights to view, edit or copy audit data, and establish file permissions that control access to the audit tools and audit tool capabilities and configuration setting	FALSE
Configure the application to protect audit tools from unauthorized modifications. Limit users to roles that are assigned the rights to edit or update audit tools and establish file permissions that control access to the audit tools and audit tool capabilities and configuration se	FALSE
Configure the application to protect audit tools from unauthorized deletions. Limit users to roles that are assigned the rights to edit or delete audit tools and establish file permissions that control access to the audit tools and audit tool capabilities and configuration settings	FALSE
Configure application backup settings to backup application audit logs every 7 days.	FALSE
Configure the application to create an integrity check consisting of a cryptographic hash or one-way digest that can be used to establish the integrity when storing log files.	FALSE
Cryptographically hash the audit tool files used by the application. Store and protect the generated hash values for future reference.	FALSE
Establish a process to periodically check the audit tool cryptographic hashes to ensure the audit tools have not been tampered with.	FALSE
Configure the application to prohibit user installation of software without explicit permission.	FALSE
Configure the application to limit access to configuration settings to only authorized users.	FALSE
Configure the application to create log entries that can be used to identify the user accounts that make application configuration changes.	FALSE
Design and configure the application to have the capability to prevent unsigned patches and packages from being installed.Provide a cryptographic hash value that can be verified by a system administrator prior to installation.	FALSE
Configure the application OS file permissions to restrict access to software libraries and configure the application to restrict user access regarding software library update functionality to only authorized users or processes.	FA
Configure the application vulnerability scanners to test all components of the application, conduct vulnerability scans on a regular basis and remediate identified issues. Retain scan results for compliance verification.	FA
Restrict application execution in accordance with the policy, terms, and conditions specified.	FALSE
Configure the application to utilize a deny-all, permit-by-exception policy when allowing the execution of authorized software.	FALSE
Disable application extraneous application functionality that is not required in order to fulfill the application's mission.	FALSE
Configure the application to utilize application ports approved by the PPSM CAL.	FALSE
Configure the application to require reauthentication before user privilege is escalated and user roles are changed.	FALSE
Configure the application to require reauthentication periodically.	FALSE
Configure the application to uniquely identify and authenticate users and user processes.	FALSE
Configure the application to use an Alt. Token when providing network access to privileged application accounts.	FALSE
Configure the application to require CAC authentication.	FALSE
Configure the application to require CAC authentication.	FALSE
Configure the application to require CAC or Alt. Token authentication for non-privileged network access to non-privileged accounts.	FALSE
Configure the application to only use Alt. Tokens when locally accessing privileged application accounts.	FALSE
Configure the application to require CAC or Alt. Token authentication for non-privileged network access.	FALSE
Design and configure the application to individually authenticate group account members prior to allowing access.	FALSE
Design and configure the application to utilize replay-resistant mechanisms when authenticating privileged accounts.	FALSE
Design and configure the application to utilize replay-resistant mechanisms when authenticating non-privileged accounts.	FALSE
Configure the application to utilize mutual authentication when specified by data protection requirements.	FALSE
Configure the application to authenticate all network connected endpoint devices/service consumers before establishing connections.	FALSE
Configure the application to utilize mutual authentication when the application is processing non-releasable data.	FALSE
Configure the application to disable device accounts after 35 days of inactivity or to utilize DoD PKI certificates that provide an expiration date.	FALSE
Configure the application to require 15 characters in the password.	FALSE
Configure the application to require at least one upper-case character in the password.	FALSE
Configure the application to require at least one lower-case character in the password.	FALSE

Configure the application to require at least one numeric character in the password.	FALSE	
Configure the application to require at least one special character in the password.	FALSE	
Configure the application to require the change of at least 8 characters in the password when passwords are changed.	FALSE	
Use strong cryptographic hash functions when creating password hash values.Utilize random salt values when creating the password hash.Ensure strong access control permissions on data files containing authentication data.	FALSE	
re the application to encrypt passwords when they are being transmitted.	FALSE	
e the application to have a minimum password lifetime of 24 hours.	FALSE	
ure the application to have a maximum password lifetime of 60 days.	FALSE	
Configure the application to prohibit password reuse for up to 5 passwords.	FALSE	
Configure the application to specify when a password is temporary and change the temporary password on the first use.	FALSE	
Use a CAC to authenticate users instead of using passwords. If application users are prohibited or prevented from obtaining a CAC due to DoD policy requirements and passwords are the only viable option, design the application to utilize a secure password change or passv	FALSE	
Configure the application to terminate existing sessions of users whose accounts are deleted.	FALSE	
Design the application to construct a certification path to an accepted trust anchor when using PKI-based authentication.	FALSE	
Configure the application or relevant access control mechanism to enforce authorized access to the application private key(s).	FALSE	
Configure the application to map certificate information to individual users or group accounts or create a process for automatically determining the individual user or group based on certificate information provided in the logs.	FALSE	
Implement a Certificate Revocation List (CRL) import process and configure the application to check the CRL if OCSP is not available.	FALSE	
Configure the application to obfuscate passwords and PINs when they are being entered so they cannot be read.Design the application so obfuscated passwords cannot be copied and then pasted as clear text.	FALSE	
Use FIPS-approved cryptographic modules.	FALSE	
Configure the application to identify and authenticate all non-organizational users.	FALSE	
Configure the application to accept PIV credentials when utilizing authentication provided by Federal (Non-DoD) agencies.	FALSE	
Configure the application to verify the PIV credentials presented when utilizing authentication provided by Federal (Non-DoD) agencies.	FALSE	
Configure applications intended to be accessible to non-federal government agencies to use FICAM-approved third-party credentials.	FALSE	
Configure the application to conform to FICAM-issued technical profiles when providing services that rely on external (Federal Government) identity providers.	FALSE	
Configure the application to log when application maintenance functionality is executed remotely.	FALSE	
Configure the application to encrypt remote application maintenance sessions.	FALSE	
Configure the application to encrypt remote application maintenance sessions.	FALSE	
Configure the application to verify termination of remote maintenance sessions.	FALSE	
Configure the application to use strong authentication (CAC) when accessing the application for maintenance purposes.	FALSE	
Configure the application to expire idle user sessions after 10 minutes of inactivity for admin users and after 15 minutes of inactivity for regular users.	FALSE	
Be aware of potential timing issues related to application programming calls when designing and building the application.Validate that variable values do not change while a switch event is occurring.	FALSE	
Configure or design the application to terminate application network sessions at the end of the session.	FALSE	
Configure application to encrypt stored classified information; Ensure encryption is performed using NIST FIPS 140-2-validated encryption.Encrypt stored, non-SAMI classified information using NIST FIPS 140-2-validated encryption.Implement NSA-validated type-1 encryptic	FALSE	
Utilize FIPS-validated algorithms when signing application components.	FALSE	
Configure the application to use a FIPS-validated hashing algorithm when creating a cryptographic hash.	FALSE	
Configure the application to use a FIPS-validated cryptographic module.	FALSE	
Configure the application to use a FIPS-validated cryptographic module.	FALSE	
Configure the application so user interface to the application and management interface to the application is separated.	FALSE	
Configure the application to set the HTTPOnly flag on session cookies.	FALSE	
Configure the application to ensure the secure flag is set on session cookies.	FALSE	
Configure the application to protect session IDs from interception or from manipulation.	FALSE	
Configure the application to destroy session ID cookies once the application session has terminated.	FALSE	
Design the application to generate new session IDs with unique values when authenticating user sessions.	FALSE	
Configure the application to configure user session identifiers.	FALSE	
Configure the application to transmit session ID information via cookies.	FALSE	
Design the application to not re-use session IDs.	FALSE	
Configure the application to use FIPS 140-2-validated cryptographic modules when the application implements encryption, key exchange, digital signatures, random number generators, and hash functionality.	FALSE	
Configure the application to utilize DoD-approved PKI established CAs when verifying DoD-signed certificates.	FALSE	
Fix any vulnerability found when the application is an insecure state (initialization, shutdown and aborts).	FALSE	
Create operational configuration documentation that identifies information needed for the application to return back into service or specify no such data is required, and retain data required to determine root cause of application failures.	FALSE	
Identify data elements that require protection. Document the data types and specify protection requirements and methods used.	FALSE	
Identify data elements that require protection.Document the data types and specify encryption requirements.Encrypt data according to DoD policy or data owner requirements.	FALSE	
data elements that require protection.Document the data types and specify encryption requirements.Encrypt classified data using Type 1, Suite B, or other NSA-approved encryption solutions.	FALSE	
nt controls within the application that limits access to security configuration functionality and isolates regular application function from security-oriented function.	FALSE	
and configure applications to maintain a separate execution domain for each executing process.	FALSE	
Configure or design the application to utilize a security control that will implement a boundary that will prevent unauthorized and unintended information transfer via shared system resources.	FALSE	
Implement:- Validation against recursive payloads- Validation against oversized payloads- Protection against XML entity expansion- Validation against overlong element names- Optimized configuration for maximum message throughput in order to ensure DoS attacks against web services are limited.	FALSE	
Design and deploy the application to utilize controls that will prevent the application from being affected by DoS attacks or being used to attack other systems. This includes but is not limited to utilizing throttling techniques for application traffic such as QoS or implementir	FALSE	
Build the application to address issues that are found in a redundant environment and utilize redundancy mechanisms to provide high availability.	FALSE	
Deploy an XML firewall functionality to protect web services.	FALSE	
Configure all of the application systems to require TLS encryption in accordance with data protection requirements.	FALSE	
Configure the application to use cryptographic protections to prevent unauthorized disclosure of application data based upon the application architecture.	FALSE	
Configure all of the application systems to require TLS encryption.	FALSE	
Configure all of the application systems to require TLS encryption.	FALSE	
Configure the application to not display technical details about the application architecture on error events.	FALSE	
Design and configure the application to not store sensitive information in hidden fields. Encrypt sensitive information stored in hidden fields using DoD-approved encryption and use server side session management techniques for user session management.	FALSE	
Verify user input is validated and encode or escape user input to prevent embedded script code from executing.Develop your application using a web template system or a web application development framework that provides auto escaping features rather than building y	FALSE	
Configure the application to use unpredictable challenge tokens and check the HTTP referrer to ensure the request was issued from the site itself. Implement mitigating controls as required such as using web reputation services.	FALSE	APSC-
Modify the application so as to escape/sanitize special character input or configure the system to protect against command injection attacks based on application architecture.	FALSE	
A suitable canonical form should be chosen and all user input canonicalized into that form before any authorization decisions are performed.Security checks should be carried out after decoding is completed. Moreover, it is recommended to check that the encoding method chosen is a valid canonical encoding for the symbol it represents.	FALSE	
Design and configure the application to validate input prior to executing commands.	FALSE	
Modify the application and remove SQL injection vulnerabilities.	FALSE	
Design the application to utilize components that are not vulnerable to XML attacks.Patch the application components when vulnerabilities are discovered.	FALSE	
Follow best practice when accepting user input and verify that all input is validated before the application processes the input.Remediate identified vulnerabilities and obtain documented risk acceptance for those issues that cannot be remediated immediately.	FALSE	
Configure the server to not send error messages containing system information or sensitive data to users.Use generic error messages.	FALSE	

Configure the server to only send error messages containing system information or sensitive data to privileged users.Use generic error messages for non-privileged users.	FALSE
Design the application to use a language or compiler that performs automatic bounds checking.Use an abstraction library to abstract away risky APIs.Use compiler-based canary mechanisms such as StackGuard, ProPolice, and the Microsoft Visual Studio/GS flag.Use OS-level preventative functionality and control user input validation.Patch applications when overflows are identified in vendor products.	FALSE
Configure or design the application to remove old components when updating.	FALSE
Check for application updates at least weekly and apply patches immediately or in accordance with POA&Ms, IAVMs, CTOs, DTMs or other authoritative patching guidelines or sources.	FALSF
Design the application to verify the correct operation of security functions.	FA
Design the application to verify the correct operation of security functions on command and on application startup and restart.	FA
Configure the application to send notices to the ISSO and ISSM indicating the application failed a verification test.	FALSE
Configure the application so Category 1A mobile code is signed.	FALSE
Establish an account management process.	FALSE
Separate web server from other application tiers and place it on a separate network segment apart from the application and database servers in accordance with DoD DMZ data access controls requirements.	FALSE
Retain application audit log files for one year and five years for SAMI data.	FALSE
Establish a scheduled process for reviewing logs.Maintain a log or records of dates and times audit logs are reviewed.	FALSE
Create and maintain a policy to report IA violations.	FALSE
Perform active vulnerability and fuzz testing of the application.Verify the vulnerability scanning tool is configured to test all application components and functionality.Address discovered vulnerabilities.	FALSE
Document and obtain the AO acknowledgment and acceptance of risk and approval for all binary or machine executable public domain software products such as freeware/shareware and other software products with no warranty and no source code review capability.Implement policy and procedures to verify the organization is in compliance with software licensing agreements. Implement policy and procedures to verify the organization is in compliance with software usage restrictions.	FALSE
Develop web services to account for deadlock issues.	FALSE
Separate the application user data into a different directory than the application code and user file permissions to restrict user access to application configuration settings.	FALSE
Configure the application according to the product STIG or when a STIG is not available, utilize:- commercially accepted practices,- independent testing results, or- vendor literature and lock down guides.	FALSE
Verify the accreditation documentation lists all interfaces and the ports, protocols, and services used.Verify that all ports, protocols, and services are used in accordance with the DoD PPSM.	FALSE
Register the application and ports in the Ports and Protocols Database.	FALSE
Patch the CM system when new security patches are made available and apply the relevant STIGs.	FALSE
Review access privileges to the CM repository at least every three months.	FALSE
Create and update a SCM plan describing the configuration control and change management process of application objects developed by the organization and the roles and responsibilities of the organization. Configure CMR to comply.	FALSE
Setup and maintain a Configuration Control Board.	FALSE
Design application to be compliant with all Department of Defense (DoD) Information Technology Standards Registry (DISR) IPv6 profiles.	FALSE
Deploy mission critical applications on servers that are not shared by other less critical applications.	FALSE
Create and maintain the disaster recovery/continuity plan.	FALSE
Create and maintain a disaster recovery plan.	FALSE
Develop and implement backup procedures based on risk level of the system and in accordance with DoD policy.	FALSE
Store a back-up copy of the application software and source code in a fire-rated container or store it separately (offsite) from their respective environments.	FALSE
Develop and implement procedures to insure that backup and restoration assets are properly protected and stored in an area/location where it is unlikely they would be affected by an event that would affect the primary assets.	FALSE
Use encryption for key exchange.	FALSE
Remove embedded authentication data stored in code, configuration files, scripts, HTML file, or any ASCII files.	FALSE
Enable the application to adequately mark sensitive/classified output.	FALSE
Execute tests plans prior to release or patch update.	FALSE
Developers/release managers create cryptographic hash values of application files and/or application packages prior to transitioning the application from test to a production environment. They protect cryptographic hash information so it cannot be altered and make a rea	FALSE
Designate personnel to conduct security testing on the applications.	FALSE
Create test procedures to test the security state of the application and exercise test procedures annually.	FALSE
Conduct and document code reviews on the application during development and identify and remediate all known and potential security vulnerabilities prior to releasing the application.	FALSE
Track application testing and maintain statistics that show how much of the application function was tested.	FALSE
Track software defects in a defect tracking system.	FALSE
Review IA impact to the system prior to implementing changes.	FALSE
Address security flaws within a project plan to ensure they are tracked and addressed by management.	FALSE
Create and maintain a coding standard process and documentation for developers to follow. Include programming best practices based on the languages being used for application development. Include items that should be standardized across the team that deal with how developers write their application code.	FALSE
Create and maintain the Design Document for each release of the application and identify the following:- All external interfaces (from the threat model)- The nature of information being exchanged- Categories of sensitive information processed or stored and their specific p	FALSE
Establish and maintain threat models and review for each application release and when new threats are discovered. Identify potential mitigations to identified threats. Verify mitigations are implemented to threats based on their risk analysis.	FALSE
Ensure proper return code and exception handling is implemented throughout the application.	FALSE
The development team creates an application incident response plan documenting and establishing a process that at a minimum:- Tracks reported vulnerabilities and bugs- Confirms reported vulnerabilities and bugs- Tracks remediation effort- Notifies application users of s	FALSE
Remove or decommission all unsupported software products in the application.	FA'
Ensure there is maintenance for the application.	FA
Create and establish procedures to notify users when an application is decommissioned.	FALSE
Disable unnecessary built-in userids, use other strong authentication when possible and use strong passwords if accounts are necessary for application operation.	FALSE
Configure the application to use strong authenticators instead of passwords when possible. Otherwise, change default passwords to a DoD-approved strength password and follow all guidance for passwords.	FALSE
Create the application configuration guide in accordance with configuration examples provided in the vulnerability discussion and check.Verify the application configuration guide is distributed along with the application.	FALSE
Create and maintain a security classification guide.	FALSE
Remove uncategorized or emerging mobile code from the application or obtain a waiver and risk acceptance to operate.	FALSE
Remove sensitive data from production database exports.	FALSE
Implement mitigations from the threat model for DOS attacks.	FALSE
Implement mechanisms to alert system administrators about a low resource condition.	FALSE
Register administrators to receive update notifications so they can patch and update applications and application components.	FALSE
Provide a distribution mechanism for obtaining updates to the application.Include a description of the issue, a summary of risk as well as potential mitigations and how to obtain the update.	FALSE
Setup a DMZ between DoD and public networks.	FALSE
Configure the application to log concurrent logons from different workstations.	FALSE
Provide application development/operational related security specific annual training for managers, designers, developers, and testers.	FALSE

Classificati	STIG	VMS	Asset Status	Finding De	Severity Or	Severity Or	CCI Data	FAST App
Unclass	Applicatior	3009	Not_Reviewed				CCI-000054 NIST SP 800-53 :: AC-10 NIST SP 800-53A :: AC-10.1 (ii) NIST SP 800-53 Revision 4 :: AC-10	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002361 NIST SP 800-53 Revision 4 :: AC-12	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002361 NIST SP 800-53 Revision 4 :: AC-12	Yes
	Applicatior	3009	Not_Reviewed				CCI-002361 NIST SP 800-53 Revision 4 :: AC-12	Yes
	Applicatior	3009	Not_Reviewed				CCI-002363 NIST SP 800-53 Revision 4 :: AC-12 (1)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002364 NIST SP 800-53 Revision 4 :: AC-12 (1)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002262 NIST SP 800-53 Revision 4 :: AC-16 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002263 NIST SP 800-53 Revision 4 :: AC-16 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002264 NIST SP 800-53 Revision 4 :: AC-16 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001453 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001453 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-000068 NIST SP 800-53 :: AC-17 (2) NIST SP 800-53A :: AC-17 (2).1 NIST SP 800-53 Revision 4 :: AC-17 (2)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000015 NIST SP 800-53 :: AC-2 (1) NIST SP 800-53A :: AC-2 (1).1 NIST SP 800-53 Revision 4 :: AC-2 (1)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002142 NIST SP 800-53 Revision 4 :: AC-2 (10)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000016 NIST SP 800-53 :: AC-2 (2) NIST SP 800-53A :: AC-2 (2).1 (ii) NIST SP 800-53 Revision 4 :: AC-2 (2)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000011 NIST SP 800-53 :: AC-2 e NIST SP 800-53A :: AC-2.1 (i) NIST SP 800-53 Revision 4 :: AC-2 f	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000017 NIST SP 800-53 :: AC-2 (3) NIST SP 800-53A :: AC-2 (3).1 (ii) NIST SP 800-53 Revision 4 :: AC-2 (3)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000017 NIST SP 800-53 :: AC-2 (3) NIST SP 800-53A :: AC-2 (3).1 (ii) NIST SP 800-53 Revision 4 :: AC-2 (3)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000018 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001403 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001404 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001405 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001683 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001684 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001685 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001686 NIST SP 800-53 :: AC-2 (4) NIST SP 800-53A :: AC-2 (4).1 (i&ii) NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002130 NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002132 NIST SP 800-53 Revision 4 :: AC-2 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002346 NIST SP 800-53 Revision 4 :: AC-23	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002347 NIST SP 800-53 Revision 4 :: AC-23	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000213 NIST SP 800-53 :: AC-3 NIST SP 800-53A :: AC-3.1 NIST SP 800-53 Revision 4 :: AC-3	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002165 NIST SP 800-53 Revision 4 :: AC-3 (4)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001368 NIST SP 800-53 :: AC-4 NIST SP 800-53A :: AC-4.1 (iii) NIST SP 800-53 Revision 4 :: AC-4	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001414 NIST SP 800-53 :: AC-4 NIST SP 800-53A :: AC-4.1 (iii) NIST SP 800-53 Revision 4 :: AC-4	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002235 NIST SP 800-53 Revision 4 :: AC-6 (10)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002233 NIST SP 800-53 Revision 4 :: AC-6 (8)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002234 NIST SP 800-53 Revision 4 :: AC-6 (9)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000044 NIST SP 800-53 :: AC-7 a NIST SP 800-53A :: AC-7.1 (ii) NIST SP 800-53 Revision 4 :: AC-7 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-002238 NIST SP 800-53 Revision 4 :: AC-7 b	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000048 NIST SP 800-53 :: AC-8 a NIST SP 800-53A :: AC-8.1 (ii) NIST SP 800-53 Revision 4 :: AC-8 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000050 NIST SP 800-53 :: AC-8 b NIST SP 800-53A :: AC-8.1 (iii) NIST SP 800-53 Revision 4 :: AC-8 b	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-001384 CCI-001385 CCI-001386 CCI-001387 CCI-001388 NIST SP 800-53 :: AC-8 c NIST SP 800-53A :: AC-8.2 (i) NIST S	Yes
	Applicatior	3009	Not_Reviewed				CCI-000052 NIST SP 800-53 :: AC-9 NIST SP 800-53A :: AC-9.1 NIST SP 800-53 Revision 4 :: AC-9	Yes
	Applicatior	3009	Not_Reviewed				CCI-000166 NIST SP 800-53 :: AU-10 NIST SP 800-53A :: AU-10.1 NIST SP 800-53 Revision 4 :: AU-10	Yes
	Applicatior	3009	Not_Reviewed				CCI-000174 NIST SP 800-53 :: AU-12 (1) NIST SP 800-53A :: AU-12 (1).1 (iii&v) NIST SP 800-53 Revision 4 :: AU-12 (1)	N/A
Unclass	Applicatior	3009	Not_Reviewed				CCI-001914 NIST SP 800-53 Revision 4 :: AU-12 (3)	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	No
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	No
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	No
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000169 NIST SP 800-53 :: AU-12 a NIST SP 800-53A :: AU-12.1 (ii) NIST SP 800-53 Revision 4 :: AU-12 a	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Applicatior	3009	Not_Reviewed				CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes

Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001919 NIST SP 800-53 Revision 4 :: AU-14	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001464 NIST SP 800-53 :: AU-14 (1) NIST SP 800-53A :: AU-14 (1).1 NIST SP 800-53 Revision 4 :: AU-14 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000130 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000130 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000130 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000130 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000131 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000132 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000133 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000134 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001487 NIST SP 800-53 :: AU-3 NIST SP 800-53A :: AU-3.1 NIST SP 800-53 Revision 4 :: AU-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000135 NIST SP 800-53 :: AU-3 (1) NIST SP 800-53A :: AU-3 (1).1 (ii) NIST SP 800-53 Revision 4 :: AU-3 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000135 NIST SP 800-53 :: AU-3 (1) NIST SP 800-53A :: AU-3 (1).1 (ii) NIST SP 800-53 Revision 4 :: AU-3 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001844 NIST SP 800-53 Revision 4 :: AU-3 (2)	No
Unclass	Application	3009	Not_Reviewed	CCI-001851 NIST SP 800-53 Revision 4 :: AU-4 (1)	No
Unclass	Application	3009	Not_Reviewed	CCI-001851 NIST SP 800-53 Revision 4 :: AU-4 (1)	No
Unclass	Application	3009	Not_Reviewed	CCI-001855 NIST SP 800-53 Revision 4 :: AU-5 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001858 NIST SP 800-53 Revision 4 :: AU-5 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000139 NIST SP 800-53 :: AU-5 a NIST SP 800-53A :: AU-5.1 (ii) NIST SP 800-53 Revision 4 :: AU-5 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000140 NIST SP 800-53 :: AU-5 b NIST SP 800-53A :: AU-5.1 (iv) NIST SP 800-53 Revision 4 :: AU-5 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000154 NIST SP 800-53 :: AU-6 (4) NIST SP 800-53A :: AU-6 (4).1 NIST SP 800-53 Revision 4 :: AU-6 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000158 NIST SP 800-53 :: AU-7 (1) NIST SP 800-53A :: AU-7 (1).1 NIST SP 800-53 Revision 4 :: AU-7 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001876 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001875 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001877 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001878 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001879 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001880 NIST SP 800-53 Revision 4 :: AU-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001881 NIST SP 800-53 Revision 4 :: AU-7 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001882 NIST SP 800-53 Revision 4 :: AU-7 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000159 NIST SP 800-53 :: AU-8 NIST SP 800-53A :: AU-8.1 NIST SP 800-53 Revision 4 :: AU-8 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001890 NIST SP 800-53 Revision 4 :: AU-8 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001889 NIST SP 800-53 Revision 4 :: AU-8 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000162 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000163 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000164 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001493 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001494 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001495 NIST SP 800-53 :: AU-9 NIST SP 800-53A :: AU-9.1 NIST SP 800-53 Revision 4 :: AU-9	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001348 NIST SP 800-53 :: AU-9 (2) NIST SP 800-53A :: AU-9 (2).1 (iii) NIST SP 800-53 Revision 4 :: AU-9 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001350 NIST SP 800-53 :: AU-9 (3) NIST SP 800-53A :: AU-9 (3).1 NIST SP 800-53 Revision 4 :: AU-9 (3)	No
Unclass	Application	3009	Not_Reviewed	CCI-001496 NIST SP 800-53 :: AU-9 (3) NIST SP 800-53A :: AU-9 (3).1 NIST SP 800-53 Revision 4 :: AU-9 (3)	No
Unclass	Application	3009	Not_Reviewed	CCI-001496 NIST SP 800-53 :: AU-9 (3) NIST SP 800-53A :: AU-9 (3).1 NIST SP 800-53 Revision 4 :: AU-9 (3)	No
Unclass	Application	3009	Not_Reviewed	CCI-001812 NIST SP 800-53 Revision 4 :: CM-11 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001813 NIST SP 800-53 Revision 4 :: CM-5 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001814 NIST SP 800-53 Revision 4 :: CM-5 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001749 NIST SP 800-53 Revision 4 :: CM-5 (3)	No
Unclass	Application	3009	Not_Reviewed	CCI-001499 NIST SP 800-53 :: CM-5 (6) NIST SP 800-53A :: CM-5 (6).1 NIST SP 800-53 Revision 4 :: CM-5 (6)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000366 NIST SP 800-53 :: CM-6 b NIST SP 800-53A :: CM-6.1 (iv) NIST SP 800-53 Revision 4 :: CM-6 b	N/A
Unclass	Application	3009	Not_Reviewed	CCI-001764 NIST SP 800-53 Revision 4 :: CM-7 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001774 NIST SP 800-53 Revision 4 :: CM-7 (5) (b)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-000381 NIST SP 800-53 :: CM-7 NIST SP 800-53A :: CM-7.1 (ii) NIST SP 800-53 Revision 4 :: CM-7 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000382 NIST SP 800-53 :: CM-7 NIST SP 800-53A :: CM-7.1 (iii) NIST SP 800-53 Revision 4 :: CM-7 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002038 NIST SP 800-53 Revision 4 :: IA-11	No
Unclass	Application	3009	Not_Reviewed	CCI-002039 NIST SP 800-53 Revision 4 :: IA-11	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000764 NIST SP 800-53 :: IA-2 NIST SP 800-53A :: IA-2.1 NIST SP 800-53 Revision 4 :: IA-2	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000765 NIST SP 800-53 :: IA-2 (1) NIST SP 800-53A :: IA-2 (1).1 NIST SP 800-53 Revision 4 :: IA-2 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001953 NIST SP 800-53 Revision 4 :: IA-2 (12)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-001954 NIST SP 800-53 Revision 4 :: IA-2 (12)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-000766 NIST SP 800-53 :: IA-2 (2) NIST SP 800-53A :: IA-2 (2).1 NIST SP 800-53 Revision 4 :: IA-2 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000767 NIST SP 800-53 :: IA-2 (3) NIST SP 800-53A :: IA-2 (3).1 NIST SP 800-53 Revision 4 :: IA-2 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000768 NIST SP 800-53 :: IA-2 (4) NIST SP 800-53A :: IA-2 (4).1 NIST SP 800-53 Revision 4 :: IA-2 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000770 NIST SP 800-53 :: IA-2 (5) (b) NIST SP 800-53A :: IA-2 (5).2 (ii) NIST SP 800-53 Revision 4 :: IA-2 (5)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001941 NIST SP 800-53 Revision 4 :: IA-2 (8)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001942 NIST SP 800-53 Revision 4 :: IA-2 (9)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000778 NIST SP 800-53 :: IA-3 NIST SP 800-53A :: IA-3.1 (ii) NIST SP 800-53 Revision 4 :: IA-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001958 NIST SP 800-53 Revision 4 :: IA-3	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001967 NIST SP 800-53 Revision 4 :: IA-3 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000795 NIST SP 800-53 :: IA-4 e NIST SP 800-53A :: IA-4.1 (iii) NIST SP 800-53 Revision 4 :: IA-4 e	No
Unclass	Application	3009	Not_Reviewed	CCI-000205 NIST SP 800-53 :: IA-5 (1) (a) NIST SP 800-53A :: IA-5 (1).1 (i) NIST SP 800-53 Revision 4 :: IA-5 (1) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000192 NIST SP 800-53 :: IA-5 (1) (a) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000193 NIST SP 800-53 :: IA-5 (1) (a) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (a)	Yes

Unclass	Application	3009	Not_Reviewed	CCI-000194 NIST SP 800-53 :: IA-5 (1) (a) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001619 NIST SP 800-53 :: IA-5 (1) (a) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000195 NIST SP 800-53 :: IA-5 (1) (b) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (b)	No
Unclass	Application	3009	Not_Reviewed	CCI-000196 NIST SP 800-53 :: IA-5 (1) (c) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (c)	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-000197 NIST SP 800-53 :: IA-5 (1) (c) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (c)	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-000198 NIST SP 800-53 :: IA-5 (1) (d) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (d)	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-000199 NIST SP 800-53 :: IA-5 (1) (d) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (d)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000200 NIST SP 800-53 :: IA-5 (1) (e) NIST SP 800-53A :: IA-5 (1).1 (v) NIST SP 800-53 Revision 4 :: IA-5 (1) (e)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002041 NIST SP 800-53 Revision 4 :: IA-5 (1) (f)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000184 NIST SP 800-53 :: IA-5 i NIST SP 800-53A :: IA-5.1 (ii) NIST SP 800-53 Revision 4 :: IA-5 i	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002007 NIST SP 800-53 Revision 4 :: IA-5 (13)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000185 NIST SP 800-53 :: IA-5 (2) NIST SP 800-53A :: IA-5 (2).1 NIST SP 800-53 Revision 4 :: IA-5 (2) (a)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-000186 NIST SP 800-53 :: IA-5 (2) NIST SP 800-53A :: IA-5 (2).1 NIST SP 800-53 Revision 4 :: IA-5 (2)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-000187 NIST SP 800-53 :: IA-5 (2) NIST SP 800-53A :: IA-5 (2).1 NIST SP 800-53 Revision 4 :: IA-5 (2) (c)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-001991 NIST SP 800-53 Revision 4 :: IA-5 (2) (d)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-000206 NIST SP 800-53 :: IA-6 NIST SP 800-53A :: IA-6.1 NIST SP 800-53 Revision 4 :: IA-6	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000803 NIST SP 800-53 :: IA-7 NIST SP 800-53A :: IA-7.1 NIST SP 800-53 Revision 4 :: IA-7	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000804 NIST SP 800-53 :: IA-8 NIST SP 800-53A :: IA-8.1 NIST SP 800-53 Revision 4 :: IA-8	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002009 NIST SP 800-53 Revision 4 :: IA-8 (1)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002010 NIST SP 800-53 Revision 4 :: IA-8 (1)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002011 NIST SP 800-53 Revision 4 :: IA-8 (2)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002014 NIST SP 800-53 Revision 4 :: IA-8 (4)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002884 NIST SP 800-53 Revision 4 :: MA-4 (1) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002890 NIST SP 800-53 Revision 4 :: MA-4 (6)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003123 NIST SP 800-53 Revision 4 :: MA-4 (6)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002891 NIST SP 800-53 Revision 4 :: MA-4 (7)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000877 NIST SP 800-53 :: MA-4 c NIST SP 800-53A :: MA-4.1 (iv) NIST SP 800-53 Revision 4 :: MA-4 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000879 NIST SP 800-53 :: MA-4 e NIST SP 800-53A :: MA-4.1 (vi) NIST SP 800-53 Revision 4 :: MA-4 e	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003178 NIST SP 800-53 Revision 4 :: SA-11 e	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001133 NIST SP 800-53 :: SC-10 NIST SP 800-53A :: SC-10.1 (ii) NIST SP 800-53 Revision 4 :: SC-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002450 NIST SP 800-53 Revision 4 :: SC-13	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002450 NIST SP 800-53 Revision 4 :: SC-13	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002450 NIST SP 800-53 Revision 4 :: SC-13	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002450 NIST SP 800-53 Revision 4 :: SC-13	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002450 NIST SP 800-53 Revision 4 :: SC-13	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001082 NIST SP 800-53 :: SC-2 NIST SP 800-53A :: SC-2.1 NIST SP 800-53 Revision 4 :: SC-2	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001184 NIST SP 800-53 :: SC-23 NIST SP 800-53A :: SC-23.1 NIST SP 800-53 Revision 4 :: SC-23	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001184 NIST SP 800-53 :: SC-23 NIST SP 800-53A :: SC-23.1 NIST SP 800-53 Revision 4 :: SC-23	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001184 NIST SP 800-53 :: SC-23 NIST SP 800-53A :: SC-23.1 NIST SP 800-53 Revision 4 :: SC-23	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001185 NIST SP 800-53 :: SC-23 (1) NIST SP 800-53A :: SC-23 (1).1 NIST SP 800-53 Revision 4 :: SC-23 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001664 NIST SP 800-53 :: SC-23 (3) NIST SP 800-53A :: SC-23 (3).1 (i) NIST SP 800-53 Revision 4 :: SC-23 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001664 NIST SP 800-53 :: SC-23 (3) NIST SP 800-53A :: SC-23 (3).1 (ii) NIST SP 800-53 Revision 4 :: SC-23 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001664 NIST SP 800-53 :: SC-23 (3) NIST SP 800-53A :: SC-23 (3).1 (iii) NIST SP 800-53 Revision 4 :: SC-23 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001664 NIST SP 800-53 :: SC-23 (3) NIST SP 800-53A :: SC-23 (3).1 (iii) NIST SP 800-53 Revision 4 :: SC-23 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001188 NIST SP 800-53 :: SC-23 (4) NIST SP 800-53A :: SC-23 (4).1 (ii) NIST SP 800-53 Revision 4 :: SC-23 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002470 NIST SP 800-53 Revision 4 :: SC-23 (5)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001190 NIST SP 800-53 :: SC-24 NIST SP 800-53A :: SC-24.1 (iv) NIST SP 800-53 Revision 4 :: SC-24	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001665 NIST SP 800-53 :: SC-24 NIST SP 800-53A :: SC-24.1 (v) NIST SP 800-53 Revision 4 :: SC-24	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001199 NIST SP 800-53 :: SC-28 NIST SP 800-53A :: SC-28.1 NIST SP 800-53 Revision 4 :: SC-28	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002475 NIST SP 800-53 Revision 4 :: SC-28 (1)	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-002476 NIST SP 800-53 Revision 4 :: SC-28 (1)	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-001084 NIST SP 800-53 :: SC-3 NIST SP 800-53A :: SC-3.1 (ii) NIST SP 800-53 Revision 4 :: SC-3	Yes
[redacted]	Application	3009	Not_Reviewed	CCI-002530 NIST SP 800-53 Revision 4 :: SC-39	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001090 NIST SP 800-53 :: SC-4 NIST SP 800-53A :: SC-4.1 NIST SP 800-53 Revision 4 :: SC-4	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002385 NIST SP 800-53 Revision 4 :: SC-5	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001094 NIST SP 800-53 :: SC-5 (1) NIST SP 800-53A :: SC-5 (1).1 NIST SP 800-53 Revision 4 :: SC-5 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001095 NIST SP 800-53 :: SC-5 (2) NIST SP 800-53A :: SC-5 (2).1 NIST SP 800-53 Revision 4 :: SC-5 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001125 NIST SP 800-53 :: SC-7 (17) NIST SP 800-53A :: SC-7 (17).1 NIST SP 800-53 Revision 4 :: SC-7 (17)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002418 NIST SP 800-53 Revision 4 :: SC-8	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002421 NIST SP 800-53 Revision 4 :: SC-8 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002420 NIST SP 800-53 Revision 4 :: SC-8 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002422 NIST SP 800-53 Revision 4 :: SC-8 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002420 NIST SP 800-53 Revision 4 :: SC-8 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002420 NIST SP 800-53 Revision 4 :: SC-8 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001310 NIST SP 800-53 :: SI-10 NIST SP 800-53A :: SI-10.1 NIST SP 800-53 Revision 4 :: SI-10	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002754 NIST SP 800-53 Revision 4 :: SI-10 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001312 NIST SP 800-53 :: SI-11 b NIST SP 800-53A :: SI-11.1 (iii) NIST SP 800-53 Revision 4 :: SI-11 a	Yes

Unclass	Application	3009	Not_Reviewed	CCI-001314 NIST SP 800-53 :: SI-11 c NIST SP 800-53A :: SI-11.1 (iv) NIST SP 800-53 Revision 4 :: SI-11 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002824 NIST SP 800-53 Revision 4 :: SI-16	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002617 NIST SP 800-53 Revision 4 :: SI-2 (6)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002605 NIST SP 800-53 Revision 4 :: SI-2 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002696 NIST SP 800-53 Revision 4 :: SI-6 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002699 NIST SP 800-53 Revision 4 :: SI-6 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001294 NIST SP 800-53 :: SI-6 (1) NIST SP 800-53A :: SI-6 (1).1 NIST SP 800-53 Revision 4 :: SI-6 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001166 NIST SP 800-53 :: SC-18 (1) NIST SP 800-53A :: SC-18 (1).1 (i) NIST SP 800-53 Revision 4 :: SC-18 (1)	N/A
Unclass	Application	3009	Not_Reviewed	CCI-002121 NIST SP 800-53 Revision 4 :: AC-2 f	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002225 NIST SP 800-53 Revision 4 :: AC-6 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000167 NIST SP 800-53 :: AU-11 NIST SP 800-53A :: AU-11.1 (iii) NIST SP 800-53 Revision 4 :: AU-11	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001872 NIST SP 800-53 Revision 4 :: AU-6 (10)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000149 NIST SP 800-53 :: AU-6 a NIST SP 800-53A :: AU-6.1 (iii) NIST SP 800-53 Revision 4 :: AU-6 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000256 NIST SP 800-53 :: CA-2 (2) NIST SP 800-53A :: CA-2 (2).1 (i) NIST SP 800-53 Revision 4 :: CA-2 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001734 NIST SP 800-53 Revision 4 :: CM-10 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000336 NIST SP 800-53 :: CM-4 (2) NIST SP 800-53A :: CM-4 (2).1 NIST SP 800-53 Revision 4 :: CM-4 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000345 NIST SP 800-53 :: CM-5 NIST SP 800-53A :: CM-5.1 NIST SP 800-53 Revision 4 :: CM-5	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000363 NIST SP 800-53 :: CM-6 a NIST SP 800-53A :: CM-6.1 (i) NIST SP 800-53 Revision 4 :: CM-6 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000388 NIST SP 800-53 :: CM-7 (3) NIST SP 800-53A :: CM-7 (3).1 (ii) NIST SP 800-53 Revision 4 :: CM-7 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000387 NIST SP 800-53 :: CM-7 (3) NIST SP 800-53A :: CM- 7(3).1 (i) NIST SP 800-53 Revision 4 :: CM-7 (3)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001795 NIST SP 800-53 Revision 4 :: CM-9 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001795 NIST SP 800-53 Revision 4 :: CM-9 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001795 NIST SP 800-53 Revision 4 :: CM-9 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001795 NIST SP 800-53 Revision 4 :: CM-9 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002853 NIST SP 800-53 Revision 4 :: CP-11	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002828 NIST SP 800-53 Revision 4 :: CP-2 (8)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000445 NIST SP 800-53 :: CP-2 a NIST SP 800-53A :: CP-2.1 (i) NIST SP 800-53 Revision 4 :: CP-2 a 1	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000448 NIST SP 800-53 :: CP-2 a NIST SP 800-53A :: CP-2.1 (i) NIST SP 800-53 Revision 4 :: CP-2 a 2	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000537 NIST SP 800-53 :: CP-9 (b) NIST SP 800-53A :: CP-9.1 (v) NIST SP 800-53 Revision 4 :: CP-9 (b)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000540 NIST SP 800-53 :: CP-9 (d) NIST SP 800-53A :: CP-9.2 NIST SP 800-53 Revision 4 :: CP-9 (d)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000540 NIST SP 800-53 :: CP-9 (d) NIST SP 800-53A :: CP-9.2 NIST SP 800-53 Revision 4 :: CP-9 (d)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000201 NIST SP 800-53 :: IA-5 (6) NIST SP 800-53A :: IA-5 (6).1 NIST SP 800-53 Revision 4 :: IA-5 (6)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002367 NIST SP 800-53 Revision 4 :: IA-5 (7)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001010 NIST SP 800-53 :: MP-3 a NIST SP 800-53A :: MP-3.1 (ii) NIST SP 800-53 Revision 4 :: MP-3 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003004 NIST SP 800-53 Revision 4 :: PM-14 a 2	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000698 NIST SP 800-53 :: SA-10 (1) NIST SP 800-53A :: SA-10 (1).1 NIST SP 800-53 Revision 4 :: SA-10 (1)	No
Unclass	Application	3009	Not_Reviewed	CCI-003182 NIST SP 800-53 Revision 4 :: SA-11 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003182 NIST SP 800-53 Revision 4 :: SA-11 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003187 NIST SP 800-53 Revision 4 :: SA-11 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003188 NIST SP 800-53 Revision 4 :: SA-11 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003197 NIST SP 800-53 Revision 4 :: SA-11 (8)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003173 NIST SP 800-53 Revision 4 :: SA-11 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003178 NIST SP 800-53 Revision 4 :: SA-11 e	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003233 NIST SP 800-53 Revision 4 :: SA-15	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003233 NIST SP 800-53 Revision 4 :: SA-15	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003256 NIST SP 800-53 Revision 4 :: SA-15 (4)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003272 NIST SP 800-53 Revision 4 :: SA-15 (5)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003289 NIST SP 800-53 Revision 4 :: SA-15 (10)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003372 NIST SP 800-53 Revision 4 :: SA-22 (1)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003376 NIST SP 800-53 Revision 4 :: SA-22 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003374 NIST SP 800-53 Revision 4 :: SA-22 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003109 NIST SP 800-53 Revision 4 :: SA-4 (5) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003109 NIST SP 800-53 Revision 4 :: SA-4 (5) (a)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003124 NIST SP 800-53 Revision 4 :: SA-5 a 1	Yes
Unclass	Application	3009	Not_Reviewed	CCI-003124 NIST SP 800-53 Revision 4 :: SA-5 a 1	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001167 NIST SP 800-53 :: SC-18 (2) NIST SP 800-53A :: SC-18 (2).1 (ii) NIST SP 800-53 Revision 4 :: SC-18 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002478 NIST SP 800-53 Revision 4 :: SC-28 (2)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-002386 NIST SP 800-53 Revision 4 :: SC-5	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001275 NIST SP 800-53 :: SI-4 (12) NIST SP 800-53A :: SI-4 (12).1 (i) NIST SP 800-53 Revision 4 :: SI-4 (12)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001285 NIST SP 800-53 :: SI-5 a NIST SP 800-53A :: SI-5.1 (i) NIST SP 800-53 Revision 4 :: SI-5 a	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001286 NIST SP 800-53 :: SI-5 b NIST SP 800-53A :: SI-5.1 (ii) NIST SP 800-53 Revision 4 :: SI-5 b	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001119 NIST SP 800-53 :: SC-7 (13) NIST SP 800-53A :: SC-7 (13).1 (ii) NIST SP 800-53 Revision 4 :: SC-7 (13)	Yes
Unclass	Application	3009	Not_Reviewed	CCI-000172 NIST SP 800-53 :: AU-12 c NIST SP 800-53A :: AU-12.1 (iv) NIST SP 800-53 Revision 4 :: AU-12 c	Yes
Unclass	Application	3009	Not_Reviewed	CCI-001567 NIST SP 800-53 :: AT-3 (2) NIST SP 800-53A :: AT-3 (2).1 (iii) NIST SP 800-53 Revision 4 :: AT-3 (2)	Yes

STATE OF INDIANA

Request for Proposal 17-082

INDIANA DEPARTMENT OF ADMINISTRATION

On Behalf Of
Indiana Department of Revenue

Solicitation For:
Revenue Modernization Integrated Tax Systems and Services

Response Due Date:
September 6, 2017

Lottie Hooyer, Senior Account Manager
Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468
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SECTION ONE

GENERAL INFORMATION AND REQUESTED PRODUCTS/SERVICES

1.1 INTRODUCTION

In accordance with Indiana statute, including IC 5-22-9, the Indiana Department of Administration (IDOA), acting on behalf of the Indiana Department of Revenue (DOR), requires a Respondent to provide, implement, support and maintain an Integrated Tax System (ITS). It is the intent of IDOA to solicit responses to this Request for Proposals (RFP) in accordance with the statement of work, proposal preparation section, and specifications contained in this document. This RFP is being posted to the IDOA website (http://www.IN.gov/idoa/2354.htm) for downloading. A nominal fee will be charged for providing hard copies. Neither this RFP nor any response (proposal) submitted hereto are to be construed as a legal offer.

In order to ensure we receive the best possible proposals from all qualified vendors and meet our goal to make solution and service decisions in December of this year, DOR is executing a multi-step process which includes issuing an RFP Amendment in July. The RFP Amendment will include any sections of the main RFP document and any attachments that are changed. The RFP Amendment is expected to include additional requirements and contract language changes affecting at least Attachments B, F1, F2 and several process description attachments.

In 2015, the Indiana Legislature (House Enrolled Act 1472, Section 25) required and funded DOR to conduct a study and develop a plan to modernize its current operational environment including processes and technology.

DOR collaborated with Deloitte to complete the requested study near mid-year 2016. As part of that study, Deloitte and the DOR team analyzed current and future states, and defined a large number of gaps. Utilizing the current and future state information, DOR and Deloitte assessed ITS implementation options and developed both an implementation approach and future state roadmap.

As a result of the study and planning, the Governor's office, Office of Management and Budget (OMB) and DOR have prioritized an initiative to modernize DOR business processes, tools and technology including the implementation of an ITS. This modernization project will include the rapid and complete implementation of an ITS that automates most major state revenue tax processes.

The mission of this strategic initiative is to modernize business processes and technologies in order to deliver industry leading, customer-centric services that provide transparent and accurate controls to enhance compliance and protect Indiana revenue, while facilitating sustainable process efficiencies within a culture of continuous improvement. This mission is aligned with DOR's Pyramid of Excellence shown below.



1.2 DEFINITIONS AND ABBREVIATIONS

Following are explanations of major terms and abbreviations appearing throughout this RFP. Other special terms may be used in the RFP, but they are more localized and defined where they appear, rather than in the following list.

Terms and Abbreviations	Description
ADA	Federal Americans with Disabilities Act
AES	Advanced Encryption Standard
Baseline Services	Services performed by the contractor as part of the negotiated Fixed Fee portion of the contract.
BRMS	Business Rules Management System
CAT	Categories of DISA Severity Categorization Code. Categories I through III
CIS CSC	Center for Internet Security Critical Security Controls
CMS	Content Management System
CO	Change Order
Contractor	Any successful Respondent selected as a result of the procurement process to deliver the products and services requested by this RFP. Also referred to as Vendor.

CUF	Commercially Useful Function
DISA	United States Defense Information Security Agency
DLN	Document Locator Number
DMZ	Demilitarised Zone
DOR	Indiana Department of Revenue
DoS	Denial of Service
DR	Disaster Recovery
DSS	Data Security Standard
DWD	Indiana Department of Workforce Development
EA	Enterprise Architecture
EFT	Electronic Funds Transfer
FedRAMP	Federal Risk and Assessment Management Program
FIPS 200	Federal Information Processing Standard Publication (200)
FISMA	Federal Information Security Management Act
Fixed-Bid Costs	Fixed costs for specific products and services that will be a commitment in the contractual agreement
FMCSA	Federal Motor Carrier Safety Administration
FRIC	Forms, Reports, Interfaces and Conversions
FTE	Full Time Equivalent - The State defines FTE as a measurement of an employee's productivity on a specific project or contract. One (1) FTE equals one (1) Indiana resident fully engaged in the execution of activities or services germane to the scope of work included in this solicitation and the resulting contract; forty (40) hours a week, fifty-two (52) weeks a year.
FTI	Specialized case of PTI sourced from a US Government agency, primarily the Internal Revenue Service (IRS).
IAC	Indiana Administrative Code
IC	Indiana Code
IDOA	Indiana Department of Administration
IDOI	Indiana Department of Insurance
Implementation	The complete, successful implementation of an ITS as defined by the Implementation Alternative and finalized by DOR completion approval.
Implementation Timeline	The length of the project as defined in the Implementation Alternative.
Implementation Alternative	DOR is interested in evaluating alternative implementation strategies, approaches and cost structures that provide a variety of benefit opportunities, timelines and costs. In order to uncover the available implementation strategies and approaches, DOR will allow qualified Respondents to provide up to two (2) Implementation Alternatives. An Implementation Alternative consists of a separate submission of the following Attachments: 1) M/WBE Participation Form (Attachment A) 2) I/VBE Participation Form (Attachment A1)

3) Indiana Economic Impact Form (Attachment C)
4) Cost Proposal Template (Attachment D)
5) Business Proposal Template (Attachment E)
6) Technical Proposal – Technical and Service Level Requirements Template (Attachment F1)
7) Technical Proposal – Process Driven Functional Requirements Template (Attachment F2)
8) Technical Proposal – Project Related Requirements Template (Attachment F3)
9) Implementation Proposal – Strategy and Approach Template (Attachment G1)
10) Implementation Proposal - Project Plan Template (Attachment G2)
11) Implementation Proposal - Staffing Plan Template (Attachment G3)
12) Mandatory Requirements Template (Attachment H)

While it is possible that some of the above submission Attachments (i.e. Business Proposal Template, Technical Proposal Templates and Mandatory Requirements Template) could be identical across all Implementation Alternatives, we require a separate copy be included with each Implementation Alternative for clarity.

IN.gov	The portal for most Indiana government services
INBiz	The portal for business users to register with various State agencies in one stop.
Installation	The delivery and physical setup of products or services requested in this RFP
IOT	Indiana Office of Technology
IRS	Internal Revenue Service
ISF	Information Security Framework
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
ITS	An Integrated Tax System providing broad functional capabilities including tax administration, audit, case management, customer service and analytics for individual, corporate and special tax types.
IVR	Interactive Voice Response
Maintenance, Support and Upgrade Timeline	A period of ten (10) calendar years following the successful Implementation.
MOU	Memorandum of Understanding; an agreement usually between departments that outlines shared services or data sharing arrangements.
N|Frame	The current IN.gov Data Center located in Carmel, IN and a secondary site in Pittsburgh, PA which hosts the portal Website and its Applications. N|Frame has been renamed to Expedient
NACHA	ACH Network Administrator - Administers and facilitates private-sector operating rules for ACH payments which define the roles and responsibilities of financial institutions and other ACH Network participants
NIST	National Institute of Science and Technology
NIST 800-53	National Institute of Standards and Technology publication 800-53 (revision 4)

NOC	Network Operations Center
Other Governmental Body	An agency, a board, a branch, a bureau, a commission, a council, a department, an institution, an office, or another establishment of any of the following: 1) The judicial branch 2) The legislative branch 3) A political subdivision (includes towns, cities, local governments, etc.) 4) A state educational institution
PCI DSS	Payment Card Industry Data Security Standard
PIA	Privacy Impact Assessment
PII	Personally Identifiable Information
PIRP	Privacy Incident Response Plan
PRA	Privacy Risk Assessment
Products	Tangible goods or manufactured items as specified in this RFP
Proposal	An offer as defined in IC 5-22-2-17
PTI	Personal Tax Information
PZ	Protected Zone: area inside of IOT used to support computer infrastructure with enhanced security requirements.
QA	Quality Assurance
QPA	Quantity Purchase Agreement
QSA	Qualified Security Assessor
Respondent	An offeror as defined in IC 5-22-2-18. The State will not consider a proposal responsive if two or more offerors submit a joint or combined proposal. One entity or individual must be clearly identified as the Respondent who will be ultimately responsible for performance of the contract
RFP	Request for Proposal
RFP Amendment	In order to ensure we receive the best possible proposals from all qualified vendors and meet our goal to make solution and service decisions in December of this year, DOR is executing a multi-step process which includes issuing an RFP Amendment in July. The RFP Amendment will include all sections of the main RFP document and any attachments that are changed. The RFP Amendment is expected to include additional requirements and contract language changes affecting at least attachments B, F2 and P as well as several sub-attachments in Attachment O.
RFQ	Request for Quote
ROC	Report on Compliance
Section 508	The United States Access Board's Section 508 Standards apply to electronic and information technology, including computer hardware and software, websites, phone systems, and copiers. They were issued under section 508 of the Rehabilitation Act which requires access for both members of the public and employees to such technologies when developed, procured, maintained, or used by government agencies.
Services	Work to be performed as specified in this RFP
SLA	Service Level Agreement

SOIAD	State of Indiana Active Directory
SOW	Statement of Work document prepared for every new application, or enhancement to an existing application, to be developed by the Contractor using Fixed Fee staff
SOX	Sarbanes Oxley
SSAE	Statement on Standards for Attestation Engagements
State	State of Indiana
State Agency	As defined in IC 4-13-1, "state agency" means an authority, board, branch, commission, committee, department, division, or other instrumentality of the executive, including the administrative, department of state government
STIGS	Specific Technical Implementation Guides; the STIGS are a practical way to evaluate compliance with the NIST security controls. STIGs are defined for specific technologies used in an application and for the design, development, operation, and maintenance of the application itself.
SVPN	Secure Virtual Private Network
T&M	Work billed on a Time and Materials basis, also referred to as Variable Services
TO	Task Order document prepared for contractor services falling outside Baseline Services
US CERT	United States Computer Emergency Readiness Team
Variable Services	Contractor services initiated as a Task Order (TO) and performed on a Time and Materials basis
Vendor	Vendor is used interchangeably with Respondent. Respondent is an offeror as defined in IC 5-22-2-18. The State will not consider a proposal responsive if two or more offerors submit a joint or combined proposal. One entity or individual must be clearly identified as the Respondent or Vendor who will be ultimately responsible for performance of the contract

1.3 PURPOSE OF THE RFP

The purpose of this RFP is to select a vendor that can satisfy the State's need for an ITS. It is the intent of DOR to contract with a vendor that provides a high quality, proven ITS solution as well as implementation and ongoing support services. DOR is interested in evaluating alternative implementation strategies and approaches that provide the earliest benefit to taxpayers and reflects the realization that time is the enemy of major transformation projects. Each implementation strategy and approach must be submitted in a separate Implementation Alternative as defined in section 1.2.

1.4 SUMMARY SCOPE OF WORK

DOR is a large and complex organization that employs numerous business processes for tax administration, supported by a variety of applications and technology products. Over the last two decades, DOR has evolved to support additional tax types, implement legislative changes, automate manual business processes, and provide enhanced reporting capabilities.

During FY 2016, DOR served more than 4.3 million individual taxpayers and more than 225,000 business taxpayers, collecting more than $18 billion in revenue for the State of Indiana. These taxes included individual and corporate income taxes, sales taxes, state and county payroll withholding taxes, and more than 40 specialized taxes.

The information below include statistics and descriptions that illustrate the scope of DOR's services.

Annual Revenue Report

	INDIVIDUAL	BUSINESS	SPECIAL
Annual Revenue	$900,000,000	$15,950,000,000	$1,100,000,000
Returns	3,650,262	4,253,665	40,000
Payments	2,442,126	2,893,140	39,000
Refunds	2,390,537	57,590	1,250
Tax Types	• Individual Income • Fiduciary	• Alternative Fuel User • Aviation Fuel Tax • Consumer Use • Controlled Substance • Corporate Income • County Admissions • County Innkeeper • Employment Agency • Financial Institutions • Firework Public Safety Fee • Food & Beverage • Gasoline Use Tax • Indianapolis Motor Speedway • Inheritance Repealed '13 • Diesel Inventory Tax (eff '17) • Motor Fuel • Motor Vehicle Rental Excise • Out Of State Use • Oversize/overweight MH • Petroleum Severance • PPD Sales On Gas. Repealed '14 • Rail; Commuter or Electric • Sales • Special Fuel • Terminal Operator • Tire Fee • Transporter • Utility Receipt Tax • Utility Services Use Tax • Wireless Prepaid Cards • Withholding	• Aeronautics Excise, Business • Aeronautics Excise, Individual • Aeronautics Registration • Alcohol Tax • Cigarette • Gaming Excise Tax • Other Tobacco Products • Pari-mutuel Admissions • Pari-mutuel Wagering • Racino Fees • Racino Wagering • Riverboat Admissions • Riverboat Wagering • Supplemental Wagering Tax (eff '18) • Type II Gaming Tax

Customer Interaction Statistics

	FY 2014	FY 2015	FY 2016	FY 2017 to Date
Telephone Calls	823,387	753,148	980,035	770,773
Email	49,404	53,015	55,639	75,363
Walk-In	11,716	22,789	15,334	15,379
Correspondence	41,073	50,574	63,608	91,391

Locations

DOR maintains its primary offices at the Indiana Government Center in downtown Indianapolis. The main office contains the following functions:

1. Commissioner's Office
2. Staff Functions (HR, IT, Legal, PR, Finance)
3. Taxpayer Services /Call Center/Taxpayer Advocate/Correspondence Processing
4. Audit and Compliance (Audit, Collections)

Returns Processing Operations are housed in the Reagan Building at Ameriplex Park in southwest Indianapolis. The Motor Carrier Services Division is also located in the Reagan Building. Returns Processing Operations include:

1. Returns Processing (Mail Opening, Imaging, Remittance Processing)
2. Taxpayer Services
3. Special Tax Operations [Special Processing, Taxpayer Risk Investigations Unit (Fraud Protection)]

DOR operates eleven District Offices located throughout the State. These facilities offer taxpayer assistance and call center overflow capacity. They also house a large portion of the in-state remote audit staff. While other states have focused on centralizing their operations, DOR has found that taxpayers and tax practitioners appreciate the local access to DOR and utilize these offices frequently. The Commissioner regularly visits these offices to receive input and exchange ideas with tax practitioners around the State. These offices are located in:

Merrillville	South Bend	Fort Wayne	Lafayette
Kokomo	Muncie	Terre Haute	Columbus
Bloomington	Clarksville	Evansville	

1.5 LETTER OF INTENT

Vendors that wish to reply to this RFP must submit an "Intent to Respond" form presented in Appendix K. The "Intent to Respond" form must be submitted in writing via email to lhooyer@idoa.in.gov no later **than 3:00 p.m. EST on July 21, 2017**. To receive access to the Bidders' Library, the "Intent to Respond" must be submitted with a signed DOR Confidentiality Agreement, provided in Attachment K. Any vendors who submit an "Intent to Respond" shall include the following phrase in the email subject line: "Intent to Respond to **RFP 17-082**, Revenue Modernization - Integrated Tax Systems and Services". The IDOA will use the information in the "Intent to Respond" form to coordinate and schedule presentations for qualified vendors.

1.6 RFP OUTLINE

The outline of this RFP document is described below:

Section	**Description**
Section 1 – General Information and Requested Products or Services	This section provides an overview of the RFP, general timelines for the process, and a summary of the products/services being solicited by the State/Agency via this RFP.
Section 2 – Proposal Preparation Instruction	This section provides instructions on the format and content of the RFP including a Letter of Transmittal, Business Proposal, Technical Proposal, Cost Proposal and Implementation Proposal as well as M/WBE, IVBE and Indiana Economic Impact Forms. It also explains the ability for qualified Respondents to respond with multiple Implementation Alternatives.
Section 3 – Proposal Evaluation	This section discusses the evaluation criteria to be used to evaluate Respondents' Implementation Alternatives.
Attachment A	M/WBE Participation Plan Form. A separate Attachment A, must be submitted with Attachments A1, C, D, E, F1, F2, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment A1	IVBE Participation Plan Form. A separate Attachment A1, must be submitted with Attachments A, C, D, E, F1, F2, F3, G1, G2, G3 and H

	for each Implementation Alternative.
Attachment B	The Draft Contract includes key language the State requires to be included in a final contract.
Attachment C	Indiana Economic Impact Form. A separate Attachment C, must be submitted with Attachments A, A1, D, E, F1, F2, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment D	Cost Proposal Template This attachment requests the complete costs for ITS procurement, implementation services and ongoing support services for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment D, must be submitted with attachments A, A1, C, E, F1, F2, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment E	Business Proposal Template This attachment requests the Business Information and Contract Revisions for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment E, must be submitted with attachments A, A1, C, D, F1, F2, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment F1	Technical Proposal - Technical and Service Level Requirements Template This attachment requests the Technical and Service Level Requirements for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment F1, must be submitted with attachments A, A1, C, D, E, F2, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment F2	Technical Proposal – Process Driven Functional Requirements Template This attachment requests the Process Driven Functional Requirements for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment F2, must be submitted with attachments A, A1, C, D, E, F1, F3, G1, G2, G3 and H for each Implementation Alternative.
Attachment F3	Technical Proposal – Project Related Requirements Template This attachment requests the Project Related Requirements for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment F3, must be submitted with attachments A, A1, C, D, E, F1, F2, G1, G2, G3 and H for each Implementation Alternative.
Attachment G1	Implementation Proposal – Strategy and Approach Template This attachment requests an implementation approach definition for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment G1, must be submitted with Attachments A, A1, C, D, E, F1, F2, F3, G2, G3 and H for each Implementation Alternative.

Attachment G2	Implementation Proposal - Project Plan Template This attachment requests an executable project plan for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment G2, must be submitted with Attachments A, A1, C, D, E, F1, F2, F3, G1, G3 and H for each Implementation Alternative.
Attachment G3	Implementation Proposal - Staffing Plan Template This attachment requests a full staff plan for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment G3, must be submitted with Attachments A, A1, C, D, E, F1, F2, F3,G1, G2 and H for each Implementation Alternative.
Attachment H	Mandatory Requirements Template This attachment requests the Mandatory Requirements for a specific Implementation Alternative and must support and be consistent with other attachments. A separate Attachment H, must be submitted with attachments A, A1, C, D, E, F, F2, F3, G1, G2 and G3 for each Implementation Alternative.
Attachment I	Question Submission Template
Attachment J	DOR Confidentiality Agreement
Attachment K	Intent to Respond Template
Attachment L	Technology Solutions Description
Attachment M	Technology Infrastructure Description
Attachment N	Business Function Description
Attachment O-AM	Account Maintenance Business Process Detail
Attachment O-CA	Collections Activities Business Process Detail
Attachment O-CS	Customer Service Business Process Detail
Attachment O-MC	Manage Case Activities Business Process Detail
Attachment O-PD	Process Disbursements Business Process Detail
Attachment O-PP	Process Payments Business Process Detail
Attachment O-PS	Process Submissions Business Process Detail
Attachment O-RA	Revenue Accounting and Distribution Business Process Detail
Attachment O-TR	Taxpayer Registration Business Process Detail
Attachment O-TS	Taxpayer Self Services Business Process Detail
Attachment P	Project Related Requirements Detail

1.7 QUESTION/INQUIRY PROCESS

Question/Inquiry Process

All questions/inquiries regarding this initial RFP must be submitted in writing by the deadline of **3:00 p.m. Eastern Time** on **July 12, 2017**. All questions/inquiries regarding the RFP Amendment to be released by July 20, 2017 must be submitted in writing by the deadline of **3:00 p.m. Eastern Time** on **July 24, 2017**. Questions/Inquiries may be submitted in Attachment I, Question Submission Template, via email to lhoover@idoa.in.gov and must be received by the time and date indicated above.

Following the question/inquiry due date, Procurement Division personnel will compile a list of the questions/inquiries submitted by all Respondents. The responses will be posted to the IDOA website according to the RFP timetable/milestones established in Section 1.25. The question/inquiry and answer link will become active after responses to all questions have been compiled. Only answers posted on the IDOA website will be considered official and valid by the State. No Respondent shall rely upon, take any action, or make any decision based upon any verbal communication with any State employee.

Inquiries are not to be directed to any staff member of DOR, or any other participating agency. Such action may disqualify Respondent from further consideration for a contract resulting from this RFP.

If it becomes necessary to revise any part of this RFP, or if additional information is necessary for a clearer interpretation of provisions of this RFP prior to the due date for proposals, an addendum will be posted on the IDOA website. If such addenda issuance is necessary, the Procurement Division may extend the due date and time of proposals to accommodate such additional information requirements, if required

1.8 DUE DATE FOR PROPOSALS

All proposals for each Implementation Alternative must be received at the address below by the Procurement Division no later than **3:00 p.m. Eastern Time** on **September 6, 2017**. Each Respondent must submit **one original CD-ROM (marked "Original"),** Two (2) complete copies **on CD-ROM and 2 paper copies** of the proposal, including the Transmittal Letter and other related documentation as required in this RFP. The **original** CD-ROM will be considered the official response in evaluating responses for scoring and protest resolution. **The Respondent's proposal response on this CD may be posted on the IDOA website, (http://www.in.gov/idoa/2462.htm) if recommended for selection.** Each copy of the proposal must follow the format indicated in Section Two of this document. Unnecessarily elaborate brochures or other presentations, beyond those necessary to present a complete and effective proposal, are not desired. All proposals must be addressed to:

Lottie Hooyer
Indiana Department of Administration
Procurement Division
402 West Washington Street, Room W468
Indianapolis, IN 46204

If you hand-deliver solicitation responses:
To facilitate weapons restrictions at Indiana Government Center North and Indiana Government Center South, as of **July 21, 2008**, the public must enter IGC buildings through a designated public entrance. The public entrance to Indiana Government Center South is located at 302 W. Washington St. (the eastern-most Washington St. entrance). This entrance will be equipped with metal detectors and screening devices

monitored by Indiana State Police Capitol Police. Passing through the public entrance may take some time. Please be sure to take this information into consideration if your company plans to submit a solicitation response in person.

If you ship or mail solicitation responses: United States Postal Express and Certified Mail are both delivered to the Government Center Central Mailroom, and not directly to the Procurement Division. It is the responsibility of the Respondent to make sure that solicitation responses are received by the Procurement Division at the Department of Administration's reception desk on or before the designated time and date. Late submissions will not be accepted. The Department of Administration, Procurement Division clock is the official time for all solicitation submissions.

Regardless of delivery method, all proposal packages must be **sealed** and clearly marked with the RFP number, due date, and time due. IDOA will not accept any unsealed bids. Any proposal received by the Department of Administration, Procurement Division after the due date and time will not be considered. Any late proposals will be returned, unopened, to the Respondent upon request. All rejected proposals not claimed within 30 days of the proposal due date will be destroyed.

The State accepts no obligations for costs incurred by Respondents in anticipation of being awarded a contract.

1.9 PRE-PROPOSAL CONFERENCE

A pre-proposal conference will be held on **July 10th, 2017 at 10:00AM** in Indiana Government Center South Conference Center Room 4 & 5. At this conference, potential Respondents may ask questions about the RFP and the RFP process. Respondents are reminded that no answers issued verbally at the conference are binding on the State and any information provided at the conference, unless it is later issued in writing, also is not binding on the State.

1.10 MODIFICATION OR WITHDRAWAL OF OFFERS

Modifications to responses to this RFP may only be made in the manner and format consistent with the submittal of the original response, acceptable to IDOA and clearly identified as a modification.

The Respondent's authorized representative may withdraw the proposal, in person, prior to the due date. Proper documentation and identification will be required before the Procurement Division will release the withdrawn proposal. The authorized representative will be required to sign a receipt for the withdrawn proposal.

Modification to, or withdrawal of, a proposal received by the Procurement Division after the exact hour and date specified for receipt of proposals will not be considered.

1.11 PRICING

Pricing on this RFP must be firm and remain open for a period of not less than 180 days from the proposal due date. Any attempt to manipulate the format of the document, attach caveats to pricing, or submit pricing that deviates from the current format will put your proposal at risk.

Please refer to the Cost Proposal sub-section under Section 2.5 and Attachment D – Cost Proposal Template for a detailed discussion of the proposal pricing format and requirements.

1.12 PROPOSAL CLARIFICATIONS AND DISCUSSIONS, AND CONTRACT DISCUSSIONS

The State reserves the right to request clarifications on proposals submitted to the State. The State also reserves the right to conduct proposal discussions, either oral or written, with Respondents. These discussions could include request for additional information, request for cost or technical proposal revision, etc. Additionally, in conducting discussions, the State may use information derived from proposals submitted by competing Respondents only if the identity of the Respondent providing the information is not disclosed to others. The State will provide equivalent information to all Respondents which have been chosen for discussions. Discussions, along with negotiations with responsible Respondents may be conducted for any appropriate purpose.

The Procurement Division will schedule all discussions. Any information gathered through oral discussions must be confirmed in writing.

A draft contract is provided in **Attachment B**. Any requested changes to the sample contract must be submitted with your response in the Contract Requests worksheet in the Business Proposal Template (Attachment E). The State reserves the right to reject any of these requested changes. It is the State's expectation that all material elements of the contract will be substantially finalized prior to contract award. Please refer to the timeline (milestones) in Section 1.25.

1.13 BEST AND FINAL OFFER

The State may request best and final proposals and Implementation Alternatives from those Respondents determined by the State to be reasonably viable for contract award. However, the State reserves the right to award a contract on the basis of initial proposals received. Therefore, each proposal should contain the Respondent's best terms from a price and technical standpoint.

Following evaluation of the best and final proposals and Implementation Alternatives, the State may select for final contract negotiations/execution the proposals and Implementation Alternatives that are most advantageous to the State, considering cost and the evaluation criteria in this RFP.

1.14 REFERENCE SITE VISITS

The State may request a site visit to a Respondent's working support center to aid in the evaluation of the Respondent's proposal.

1.15 TYPE AND TERM OF CONTRACT

The State intends to sign a contract with one Respondent to fulfill the requirements in this RFP. The contract will include implementation products and services as well as ongoing maintenance, support and upgrade services.

The term of the contract shall be for a period that includes the Implementation Timeline and a ten (10) year Maintenance, Support and Upgrade Timeline to follow full implementation.

1.16 CONFIDENTIAL INFORMATION

Respondents are advised that materials contained in proposals are subject to the Access to Public Records Act (APRA), IC 5-14-3 *et seq.*, and, after the contract award, the entire RFP file may be viewed and copied by any member of the public, including news agencies and competitors. Respondents claiming a statutory exception to the APRA must indicate so in the Transmittal Letter. Confidential Information must also be

clearly marked in a separate folder on any included CD-ROM. The Respondent must also specify which statutory exception of APRA that applies. The State reserves the right to make determinations of confidentiality. If the Respondent does not identify the statutory exception, the Procurement Division will not consider the submission confidential. If the State does not agree that the information designated is confidential under one of the disclosure exceptions to APRA, it may seek the opinion of the Public Access Counselor. Prices are not confidential information.

1.17 TAXES

Proposals should not include any tax from which the State is exempt.

1.18 PROCUREMENT DIVISION REGISTRATION

In order to receive an award, you must be registered as a bidder with the Department of Administration, Procurement Division. Therefore, to ensure there is no delay in the award, all Respondents are strongly encouraged to register prior to submission of their response. Respondents should go to www.in.gov/idoa/2464.htm .

1.19 SECRETARY OF STATE REGISTRATION

If awarded the contract, the Respondent will be required to register, and be in good standing, with the Secretary of State. The registration requirement is applicable to all limited liability partnerships, limited partnerships, corporations, S-corporations, nonprofit corporations and limited liability companies. Information concerning registration with the Secretary of State may be obtained by contacting:

Secretary of State of Indiana
Corporation Division
402 West Washington Street, E018
Indianapolis, IN 46204
(317) 232-6576
www.in.gov/sos

1.20 COMPLIANCE CERTIFICATION

Responses to this RFP serve as a representation that it has no current or outstanding criminal, civil, or enforcement actions initiated by the State, and it agrees that it will immediately notify the State of any such actions. The Respondent also certifies that neither it nor its principals are presently in arrears in payment of its taxes, permit fees or other statutory, regulatory or judicially required payments to the State. The Respondent agrees that the State may confirm, at any time, that no such liabilities exist, and, if such liabilities are discovered, that State may bar the Respondent from contracting with the State, cancel existing contracts, withhold payments to setoff such obligations, and withhold further payments or purchases until the entity is current in its payments on its liability to the State and has submitted proof of such payment to the State.

1.21 EQUAL OPPORTUNITY COMMITMENT

Pursuant to IC 4-13-16.5 and in accordance with 25 IAC 5, Executive Order 13-04 and IC 5-22-14-3.5, it has been determined that there is a reasonable expectation of minority, woman, and Indiana veteran business enterprises subcontracting opportunities on a contract awarded under this RFP. Therefore a contract goal of 8%for Minority Business Enterprises, 8% for Woman Business Enterprises, and 3% for Veteran Business Enterprises have been established and all Respondents will be expected to comply with the regulation set forth in 25 IAC 5, Executive Order 13-04 and IC 5-22-14-3.5.

Failure to address these requirements may impact the evaluation of your proposal.

1.22 MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR COMMITMENT

In accordance with 25 IAC 5-5, the Respondent is expected to submit with its proposal a Minority & Women's Business Enterprises RFP Subcontractor Commitment Form. The Form must show that there are, participating in the proposed contract, Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) listed in the Minority and Women's Business Enterprises Division (MWBED) directory of certified firms located at http://www.in.gov/idoa/2352.htm.

If participation is met through use of vendors who supply products and/or services directly to the Respondent, the Respondent must provide a description of products and/or services provided that are directly related to this proposal and the cost of direct supplies for this proposal. Respondents must complete the Participation Plan Form, Attachment A in its entirety. The amount entered in "**TOTAL BID AMOUNT**" should match the TOTAL BID AMOUNT reflected in the Cost Summary worksheet in Attachment D, Cost Proposal Template.

Failure to meet these goals will affect the evaluation of your Proposal. The Department reserves the right to verify all information included on the MWBE Participation Plan Form, Attachment A.

Respondents are encouraged to contact and work with MWBED at 317-232-3061 to design a subcontractor commitment to meet established goals as referenced in this solicitation.

Prime Contractors must ensure that the proposed subcontractors meet the following criteria:

- Must be listed on the IDOA Directory of Certified Firms, **on or before** the proposal due date
- Each firm may only serve as one classification – MBE, WBE, or IVBE (see section 1.22)
- A Prime Contractor who is an MBE or WBE must meet subcontractor goals by using other listed certified firms. Certified Prime Contractors cannot count their own workforce or companies to meet this requirement.
- **Must serve a Commercially Useful Function (CUF). The firm must serve a value-added purpose on the engagement, as confirmed by the State.**
- Must provide goods or service only in the industry area for which it is certified as listed in the directory at http://www.in.gov/idoa/2352.htm
- Must be used to provide the goods or services specific to the contract
- National Diversity Plans are generally not acceptable

MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR LETTER OF COMMITMENT (MWBE)

A signed letter(s), on company letterhead, from the MBE and/or WBE must accompany the MWBE Participation Plan Form, Attachment A. Each letter shall state and will serve as acknowledgement from the MBE and/or WBE of its subcontract amount, a description of products and/or services to be provided on this project, and approximate date the subcontractor will perform work on this contract. The State may deny evaluation points if the letter(s) is not attached, not on company letterhead, not signed and/or does not reference and match the subcontract amount, subcontract amount as a percentage of the "**TOTAL BID AMOUNT**" and the anticipated period that the Subcontractor will perform work for this solicitation.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's M/WBE Program. Questions involving the regulations governing the MWBE Participation Plan Form, Attachment A should be directed to: Minority and Women's Business Enterprises Division at (317) 232-3061 or http://www.in.gov/idoa/2352.htm.

1.23 INDIANA VETERANS BUSINESS ENTERPRISE SUBCONTRACTOR COMMITMENT

In accordance with Executive Order 13-04 and IC 5-22-14-3.5, it has been determined that there is a reasonable expectation of Indiana Veterans Business Enterprises subcontracting opportunities on a contract awarded under this RFP. The IVBE Participation Plan Form, Attachment A1 is to be submitted alongside the Respondent's proposal. The Form must show that they are participating in the proposed contract and IVBE firms that meet the requirements listed at the Veteran's Business Program website (http://www.in.gov/idoa/2862.htm).

If participation is met through use of vendors who supply products and/or services directly to the Respondent, the Respondent must provide a description of products and/or services provided that are directly related to this proposal and the cost of direct supplies for this proposal. Respondents must complete the Participation Plan Form, Attachment A1 in its entirety. The amount entered in "**TOTAL BID AMOUNT**" should match the TOTAL BID AMOUNT reflected in the Cost Summary worksheet in Attachment D, Cost Proposal Template.

Failure to address these goals may impact the evaluation of your Proposal. The Department reserves the right to verify all information included on the IVBE Participation Plan Form, Attachment A1.

Prime Contractors must ensure that the proposed IVBE subcontractors meet the following criteria:

- Must be listed on Federal Center for Veterans Business Enterprise (VA OSDBU) registry or listed on the IDOA Directory of Certified Firms, **on or before** the proposal due date
- Each firm may only serve as one classification – MBE, WBE (see Section 1.22) or IVBE
- A Prime Contractor who is an IVBE must meet subcontractor goals by using other listed certified firms. Certified Prime Contractors cannot count their own workforce or companies to meet this requirement.
- **Must serve a Commercially Useful Function (CUF). The firm must serve a value-added purpose on the engagement, as confirmed by the State.**
- Must provide goods or service only in the industry area for which it is certified as listed in the VA OSDBU or IDOA Certified Firm directories http://www.in.gov/idoa/2352.htm
- Must be used to provide the goods or services specific to the contract

INDIANA VETERAN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR LETTER OF COMMITMENT

A signed letter(s), on company letterhead, from the IVBE must accompany the Participation Plan Form, Attachment A1. Each letter shall state and will serve as acknowledgement from the IVBE of its subcontract amount, a description of products and/or services to be provided on this project, and approximate date the subcontractor will perform work on this contract. The State reserves the right to deny evaluation points if the letter(s) is not attached. The State may deny evaluation points if the letter(s) is not attached, not on company letterhead, not signed and/or does not reference and match the subcontract amount, subcontract amount as a percentage of the **"TOTAL BID AMOUNT"** and the anticipated period that the Subcontractor will perform work for this solicitation.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the policies and processes involving the State's IVBE Program. Questions involving the regulations governing the IVBE Participation Plan Form, Attachment A1should be directed to: indianaveteranspreference@idoa.in.gov.

1.24 AMERICANS WITH DISABILITIES ACT

The Respondent specifically agrees to comply with the provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.* and 47 U.S.C. 225).

1.25 SUMMARY OF MILESTONES

The following timeline is only an illustration of the RFP process. The dates associated with each step are not to be considered binding. Due to the unpredictable nature of the evaluation period, these dates are commonly subject to change. At the conclusion of the evaluation process, all Respondents will be informed of the evaluation team's findings.

Key RFP Dates

Activity	Date
The dates for the following activities are target dates only. These activities may be completed earlier or later than the date shown.	
RFP Issued	June 29, 2017
Pre-Proposal Conference	July 10, 2017
Deadline to Submit Written Questions – RFP	July 12, 2017
Response to Written Questions - RFP	July 17, 2017
RFP Amendment Issued	July 20, 2017
Letter of Intent to Respond Due	July 21, 2017
Deadline to Submit Written Questions - RFP Amendment	July 24, 2017
Response to Written Questions – RFP Amendment	July 31, 2017
Submission of Proposals	September 6, 2017
Initial Evaluation	Sept. 6, 2017 – October 10, 2017
Vendor Workshops/Clarifications/Oral Presentations/Contract Negotiations	Oct. 10, 2017 – Nov. 9, 2017
Proposal Revisions Due (If Applicable)	November 15, 2017
Final Evaluation, Negotiation, Scoring and Decision	Nov. 15, 2017 – Dec. 7, 2017
Approval and Vendor Notification	Dec. 7, 2017 – Dec. 20, 2017
Target Implementation Project Launch	January 2018

1.26 CONFLICT OF INTEREST

Any person, firm or entity that assisted with and/or participated in the preparation of this RFP document is prohibited from submitting a proposal to this specific RFP. For the purposes of this RFP "person" means a state officer, employee, special state appointee, or any individual or entity working with or advising the State or involved in the preparation of this RFP proposal. This prohibition would also apply to an entity who hires, within a one-year period prior to the publication of this RFP, a person that assisted with and/or participated in the preparation of this RFP.

SECTION TWO
PROPOSAL PREPARATION INSTRUCTIONS

2.1 GENERAL

To facilitate the timely evaluation of proposals, a standard format for proposal submission has been developed for qualified Respondents and is described in this section. Qualified Respondents are those who have successfully implemented all capabilities described in Attachment H. All qualified Respondents are required to format their proposals in a manner consistent with the guidelines described below:

- Each item must be addressed in the Respondent's proposal.
- The Transmittal Letter must be in the form of a letter. The business and technical proposals must be organized under the specific section titles as listed below.
- The electronic copies of the proposal submitted via CD-ROM should be organized to mirror the sections below and the attachments.
- Each submission Attachment (A, A1, C, D, E, F1, F2, F3, G1, G2, G3 and H) must be a separate stand-alone electronic file on the CD-ROM. Please do not submit your proposal as one large file. If the Qualified Respondent submits multiple Implementation Alternatives, all separate files for each Implementation Alternative should be labeled clearly to identify the appropriate Implementation Alternative.
- Whenever possible, please submit all attachments in their original format.
- Confidential Information must also be clearly marked in a separate folder/file on any included CD-ROM.

2.2 TRANSMITTAL LETTER

The Transmittal Letter must address the following topics except those specifically identified as "optional."

2.2.1 Agreement with Requirement listed in Section 1

The Respondent must explicitly acknowledge understanding of the general information presented in Section 1 and agreement with any requirements/conditions listed in Section 1.

2.2.2 Summary of Ability and Desire to Supply the Required Products or Services

The Transmittal Letter must briefly summarize the Respondent's ability to supply the requested products and/or services that meet the requirements defined in this RFP. The letter must also contain a statement indicating the Respondent's willingness to provide the requested products and/or services subject to the terms and conditions set forth in the RFP including, but not limited to, the State's mandatory contract clauses.

2.2.3 Signature of Authorized Representative

A person authorized to commit the Respondent to its representations and who can certify that the information offered in the proposal meets all general conditions including the information requested in Section 2.3.1.4, must sign the Transmittal Letter. **In the Transmittal Letter, please indicate the principal contact for the proposal along with an address, telephone and fax number as well as an e-mail address, if that contact is different than the individual authorized for signature.**

2.2.4 Respondent Notification

Unless otherwise indicated in the Transmittal Letter, Respondents will be notified via e-mail.

It is the Respondent's obligation to notify the Procurement Division of any changes in any address that may have occurred since the origination of this solicitation. The Procurement Division will not be held responsible for incorrect vendor/contractor addresses.

2.2.5 Confidential Information

Respondents are advised that materials contained in proposals are subject to the Access to Public Records Act (APRA), IC 5-14-3 *et seq.* (see section 1.16).

Provide the following information:

- List all documents where claiming a statutory exemption to the APRA;
- Specify which statutory exception of APRA that applies for each document;
- Provide a description explaining the manner in which the statutory exception to the APRA applies for each document.

2.2.6 Other Information

This item is optional. Any other information the Respondent may wish to briefly summarize will be acceptable.

2.3 BUSINESS PROPOSAL

The Business Proposal must address the following topics except those specifically identified as "optional." **The Business Proposal Template includes 2 worksheets in Attachment E named Business Information and Contract Revisions.**

2.3.1 Business Information

2.3.1.1 General

This section of the business proposal may be used to introduce or summarize any information the Respondent deems relevant or important to the State's successful acquisition of the products and/or services requested in this RFP.

2.3.1.2 Respondent's Company Structure

The legal form of the Respondent's business organization, the state in which formed (accompanied by a certificate of authority), the types of business ventures in which the organization is involved, and a chart of the organization are to be included in this section. If the organization includes more than one product division, the division responsible for the development and marketing of the requested products and/or services in the United States must be described in more detail than other components of the organization.

2.3.1.3 Company Financial Information

This section must include the Respondent's financial statement, including an income statement and balance sheet, for each of the two most recently completed fiscal years. The financial statements must demonstrate the Respondent's financial stability. If the financial statements being provided by the Respondent are those of a parent or holding company, additional financial information should be provided for the entity/organization directly responding to this RFP.

2.3.1.4 Integrity of Company Structure and Financial Reporting

This section must include a statement indicating that the CEO and/or CFO has taken personal responsibility for the thoroughness and correctness of any/all financial information supplied with this proposal. The particular areas of interest to the State in considering corporate responsibility include the following items: separation of audit functions from corporate boards and board members, if any, the manner in which the organization assures board integrity, and the separation of audit functions and consulting services. The State will consider the information offered in this section to determine the responsibility of the Respondent under IC 5-22-16-1(d).

The Sarbanes Oxley Act of 2002, H.R. 3763, is NOT directly applicable to this procurement; however, its goals and objectives may be used as a guide in the determination of corporate responsibility for financial reports.

2.3.1.5 Contract Terms/Clauses

A sample contract that the state expects to execute with the successful Respondent(s) is provided in **Attachment B**. This contract contains both mandatory and non-mandatory clauses. Mandatory clauses are listed below and are non-negotiable. Other clauses are highly desirable. It is the State's expectation that the final contract will be substantially similar to the sample contract provided in **Attachment B**.

In your Transmittal Letter please indicate acceptance of these mandatory contract terms (see section 2.2.2). In this section please review the rest of the contract and indicate your acceptance of the non-mandatory contract clauses. If a non-mandatory clause is not acceptable as worded, suggest specific alternative wording to address issues raised by the specific clause. If you require additional contract terms please include them in this section. To reiterate it's the State's strong desire to not deviate from the contract provided in the attachment and as such the State reserves the right to reject any and all of these requested changes.

The mandatory contract terms are as follows:

- Duties of Contractor, Rate of Pay, and Term of Contract
- Authority to Bind Contractor
- Compliance with Laws
- Drug-Free Workplace Provision and Certification
- Employment Eligibility
- Funding Cancellation

- Governing Laws
- Indemnification
- Information Technology
- Non-Discrimination Clause
- Payments
- Penalties/Interest/Attorney's Fees
- Termination for Convenience
- Non-Collusion and Acceptance

Any or all portions of this RFP and any or all portions of the Respondents response may be incorporated as part of the final contract

2.3.1.6 References

The Respondent must include a list of at least three (3) clients for whom the Respondent has provided products and/or services that are the same or similar to those products or services requested in this RFP. Information provided should include the name, address, and telephone number of the client facility and the name, title, and phone/fax numbers of a person who may be contacted for further information. Additionally, dates for when the product was delivered or the service put in place must be indicated.

The Respondent must also include a list of clients within the last five (5) years for whom the Respondent provided products and/or services that are the same or similar to those products or services requested in this RFP but the contract was terminated for cause or for convenience. Information provided should include the name, address, and telephone number of the client facility and the name, title, phone/fax numbers of a person who may be contacted for further information, services provided to the reference, and the time period that the services were provided.

Note that the State reserves the right to check the references of ANY clients for whom the Respondent has provided products or services that are the same or similar to those products or services requested in this RFP. This includes any other secondary references in addition to the list of references for which the Respondent will provide information in this RFP.

2.3.1.7 Registration to do Business

Secretary of State
If awarded the contract, the Respondent will be required to be registered, and be in good standing, with the Secretary of State. The registration requirement is applicable to all limited liability partnerships, limited partnerships, corporations, S-corporations, nonprofit corporations and limited liability companies. The Respondent must indicate the status of registration, if applicable, in this section of the proposal.

Department of Administration, Procurement Division
Additionally, Respondents must be registered with the IDOA. This can be accomplished on-line at http://www.in.gov/idoa/2464.htm.

The IDOA Procurement Division maintains two databases of vendor information. The Bidder registration database is set up for vendors to register if you are interested in selling a product or service to the State of Indiana. Respondents may register on-line at no cost to become a Bidder with the State of Indiana. To complete the on-line Bidder registration, go to http://www.in.gov/idoa/2464.htm. The Bidder registration offers email notification of upcoming solicitation opportunities, corresponding to the Bidder's area(s) of interest, selected during the registration process. Respondents do need to be registered to bid on and receive email notifications. Completion of the Bidder registration will result in your name being added to the Bidder's Database, for email notification. The Bidder registration requires some general business information, an indication of the types of goods and services you can offer the State of Indiana, and locations(s) within the state that you can supply or service. There is no fee to be placed in Procurement Division's Bidder Database. To receive an award, you must be registered as a bidder. Problems or questions concerning the registration process or the registration form can be e-mailed to Amey Redding, Vendor Registration Coordinator, aredding@idoa.in.gov, or you may reach her by phone at (317) 234-3542.

2.3.1.8 Authorizing Document

Respondent personnel signing the Transmittal Letter of the proposal must be legally authorized by the organization to commit the organization contractually. This section shall contain proof of such authority. A copy of corporate bylaws or a corporate resolution adopted by the board of directors indicating this authority will fulfill this requirement.

2.3.1.9 Subcontractors

The Respondent is responsible for the performance of any obligations that may result from this RFP, and shall not be relieved by the non-performance of any subcontractor. Any Respondent's proposal must identify all subcontractors and describe the contractual relationship between the Respondent and each subcontractor. Either a copy of the executed subcontract or a letter of agreement over the official signature of the firms involved must accompany each proposal.

Any subcontracts entered into by the Respondent must be in compliance with all State statutes, and will be subject to the provisions thereof. For each portion of the proposed products or services to be provided by a subcontractor, the technical proposal must include the identification of the functions to be provided by the subcontractor and the subcontractor's related qualifications and experience.

The combined qualifications and experience of the Respondent and any or all subcontractors will be considered in the State's evaluation. The Respondent must furnish information to the State as to the amount of the subcontract, the qualifications of the subcontractor for guaranteeing performance, and any other data that may be required by the State. All subcontracts held by the Respondent must be made available upon request for inspection and examination by appropriate State officials, and such relationships must meet with the approval of the State.

The Respondent must list any subcontractor's name, address and the state in which formed that are proposed to be used in providing the required products or services.

The subcontractor's responsibilities under the proposal, anticipated dollar amount for subcontract, the subcontractor's form of organization, and an indication from the subcontractor of a willingness to carry out these responsibilities are to be included for each subcontractor. This assurance in no way relieves the Respondent of any responsibilities in responding to this RFP or in completing the commitments documented in the proposal. The Respondent must indicate which, if any, subcontractors qualify as a Minority or Women Owned Business under IC 4-13-16.5-1. See Section 1.22 and **Attachment A** for Minority and Women Business information.

2.3.1.10 Evidence of Financial Responsibility

This section will indicate the ability to provide the mandatory evidence of financial responsibility. See Section 1.26 for details.

Notwithstanding any other provisions relating to the beginning of the term, any contract will not become effective until the evidence of financial responsibility is delivered in the correct form and amount to the address indicated in Section 1.26.

2.3.1.11 General Information

Each Respondent must enter your company's general information including contact information.

2.3.1.12 Experience Serving State Governments

Each Respondent is asked to please provide a brief description of your company's experience in serving state governments and/or quasi-governmental accounts.

2.3.1.13 Experience Serving Similar Clients

Each Respondent is asked to please describe your company's experience in serving clients of a similar size to the State that also had a similar scope. Please provide specific clients and detailed examples.

2.3.1.14 Indiana Preferences

Pursuant to IC 5-22-15-7, Respondent may claim only one (1) preference. For the purposes of this RFP, this limitation to claiming one (1) preference applies to Respondent's ability to claim eligibility for Buy Indiana points. **Respondent must clearly indicate which preference(s) they intend to claim. Additionally, the Respondent's Buy Indiana status must be finalized when the RFP response is submitted to the State.**

Buy Indiana
Refer to Section 2.9 for additional information.

2.3.2 Contract Revisions

DOR intends to achieve a near final contract as part of the ITS evaluation and selection process. The Draft Contract (Attachment B) provides proposed language for most aspects of the contract.

The Contract Revision worksheet in the Business Proposal Template (Attachment E) provides the structure for qualified Respondents to recommend contract language changes. The State reserves the right to reject any of these requested changes. It is the State's expectation that all material elements of the contract will be substantially finalized prior to contract award.

2.4 TECHNICAL PROPOSAL

The Technical Proposal Template includes Attachment F1 - Technical and Service Level Requirements Template, Attachment F2 - Process Driven Functional Requirements Template and F3 – Project Related Requirements Template. These attachments contain multiple worksheets which must be completed in compliance with the instructions in this Section and the attachments.

2.4.1 Attachment F1 - Technical and Service Level Requirements Template

Attachment F1 provides technical and service level standards and requirements that are considered to be either vitally important or desired to support the DOR capabilities for the future. This attachment includes several worksheets for various requirement categories. The Respondent must answer each of the questions in a manner consistent with the instructions in **Attachment F1**.

DOR is open to most application and system architectures. However, any implementation will have to conform and comply with all DOR and IOT Security Standards. In addition, any implementation in the IOT data centers will have to conform to IOT's Implementation Standards for the Protected Zone (PZ). Should the vendor opt to implement with hosted infrastructure outside of IOT, this infrastructure must comply with the Federal Risk and Assessment Management Program (FedRAMP) requirements and with DOR's Security Requirements.

DOR's security implementation is based on a strict adherence to the Federal Information Security Management Act (FISMA) of 2002. FISMA requires that information systems be rated along the dimensions of Confidentiality, Availability, and Integrity to generate a system impact category. The ITS will be categorized as a **moderate-impact system** under Federal Information Processing Standards Publication 200 (FIPS 200). FISMA's security requirements are defined by the National Institute of Science and Technology (NIST) in their Special Publication 800-53 (currently Revision 4). Generally, DOR will insist that all controls suggested for a moderate-impact system be implemented.

DOR receives data from the IRS and is thus subject to the requirements of IRS Publication 1075 (currently issued September 2016) which uses NIST 800-53 to define its security requirements. DOR and IOT are subject to a triennial IRS Safeguard audit. The ITS is a primary focus of the audit.

DOR utilizes the US Defense Information Security Agency (DISA) Specific Technical Implementation Guides (STIGs) as a practical way to evaluate compliance with the NIST security controls. STIGs are defined for specific technologies used in an application and for the design, development, operation, and maintenance of the application itself.

DISA also defines Severity Categorization Codes for identifying the risks associated with various security situations. A vulnerability in a specific situation is called a finding and is classified by category. These categories (CAT) are:

CAT I – Any vulnerability, the exploitation of which will directly and immediately result in loss of Confidentiality, Availability, or Integrity

CAT II – Any vulnerability, the exploitation of which has a potential to result in loss of Confidentiality, Availability, or Integrity

CAT III – Any vulnerability, the existence of which degrades measures to protect against loss of Confidentiality, Availability, or Integrity

DOR reserves all rights as to the interpretation of any security control described in NIST 800-53 and will not negotiate on the meaning of any control. DOR will negotiate the assumption of risk and the time required to remediate any adverse finding revealed in our assessments of a vendor's system.

The requirements for implementation in the PZ are described above. Other IOT standards are posted here: http://iot.in.gov/architecture/.

Service levels for solution and infrastructure services are extremely important. DOR expects strong, clear industry leading service levels in order to transition to much higher levels of service than are currently being achieved. Service levels will be a key evaluation criteria during the RFP process. We will be seeking to clearly understand any trade off of cost versus performance.

Additional Information concerning DOR's technology solutions and infrastructure footprint is included in Attachments L – Technology Solutions Description and M – Technology Infrastructure Description respectively.

2.4.2 Attachment F2 – Process Driven Functional Requirements Template

Attachment F2 provides functional requirements by major process area that are considered to be either important, needed or desired to support the DOR capabilities for the future. The Respondent must answer each of the questions in a manner consistent with the instructions in **Attachment F2**.

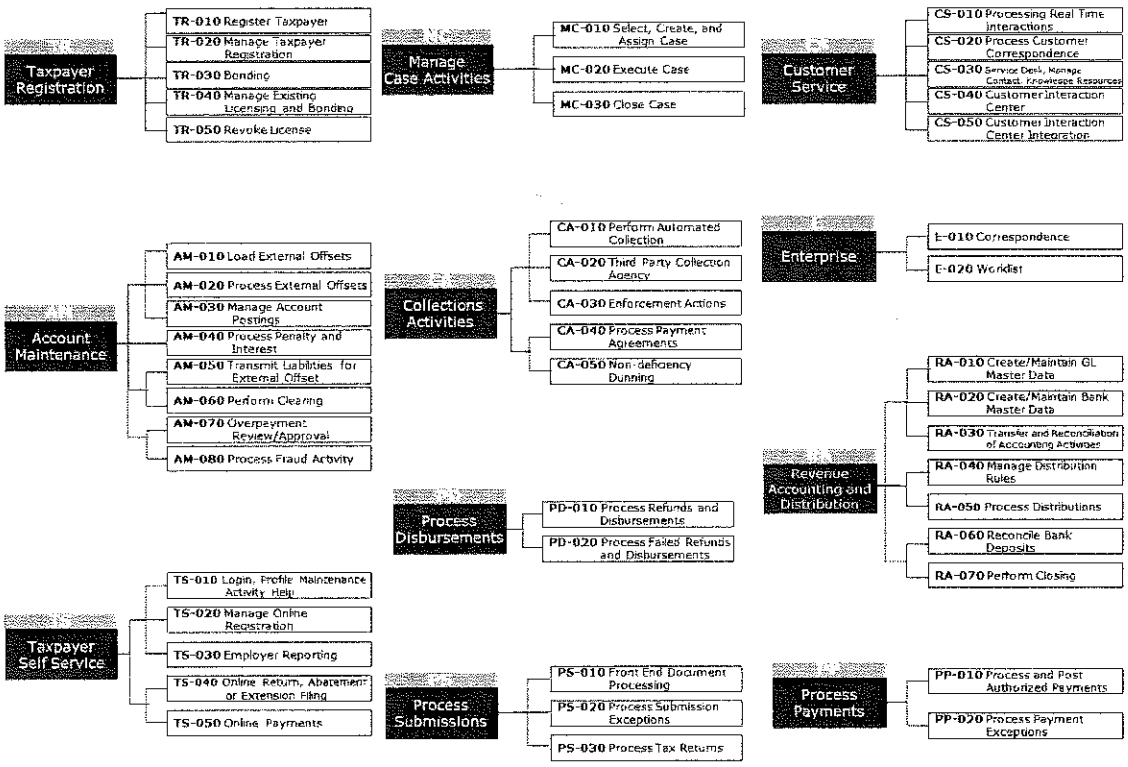
Attachment F2 is an Excel workbook with the following worksheets:

- Instruction
- Process Diagram
- FRIC – Complexity Definitions
- FRIC – Forms
- FRIC – Reports
- FRIC – Interface
- FRIC - Conversion
- Taxpayer Registration
- Correspondence
- Account Maintenance
- Revenue Accounting and Distribution

- Taxpayer Self Service
- Customer Service
- Collections Activities
- Process Distributions
- Process Payments
- Manage Case Activities
- Process Submissions
- Worklist

DOR is following a process driven approach toward defining requirements. The agency is documenting enterprise processes based on known leading practices, industry standards, and Indiana specific legislative and policy mandates. This documentation includes future state process descriptions, sub process business models, task level descriptions, and detailed functional requirements. The intent of this effort is to define the requirements needed to realize DOR's Vision and deliver our Mission. Along with the requirements, this effort will provide a list of known Forms (correspondence) and Reports that may be required to support the implementation of an ITS.

The chart below provides a view of the current baseline processes and sub-processes included within the scope of this RFP.



Additional Information concerning DOR's business functions and processes is included in Attachments N and O.

2.4.3 Technical Proposal – Project Related Requirements Template

The Technical Proposal – Project Related Requirements Template is Attachment F3. This template is a spreadsheet that includes worksheets to capture responses to project related methodology and service requirements, including project management, testing, training, conversion, ongoing support

and organizational change management. An Attachment F3 must be provided for each Implementation Alternative as defined in Section 1.2, and be consistent and supportive of all other attachments for the Implementation Alternative.

2.5 COST PROPOSAL TEMPLATE

The Cost Proposal Template is Attachment D. This template is a spreadsheet that includes worksheets to capture all pricing and descriptions for Vendor, Vendor-Partner and Third-Party products and services required to procure, implement, maintain and support the ITS for DOR. The template is not intended to capture cost required to implement or support hardware or infrastructure products and services, including hardware, hardware installation, operating systems, database installation, penetration solutions and services, network equipment and disaster recovery.

The Cost Proposal Template includes an instruction worksheet, a summary cost example worksheet and a number of other worksheets to capture Respondent cost information. A Cost Proposal Template must be provided for each Implementation Alternative as defined in Section 1.2, and be consistent and supportive of all other attachments for the Implementation Alternative.

The Cost Proposal Template must be submitted in the original format with additions made only in accordance with the instructions worksheet. Any attempt to manipulate the format of the Cost Proposal Template document, attach caveats to pricing, or submit pricing that deviates from the current format will put your proposal at risk.

Cost Template Narrative

The Respondent should provide a brief narrative in support of each Cost Template summary line item in the appropriate worksheets for each cost category (e.g., Solution Products And Services). The narrative should be focused on clarifying how the proposed costs correspond directly to the Respondent's Implementation Alternative Proposal. For example, evaluators will expect detailed explanation of *each Solution Product And Service* to satisfy the required responses in the Proposal.

Cost Assumptions, Conditions and Constraints

The Respondent should list and describe as part of its Cost Proposal Assumptions worksheet in the Cost Proposal Template any special cost assumptions, conditions, and/or constraints relative to, or which impact, the prices presented in the Cost Proposal Template. It is of particular importance to describe any assumptions made by the Respondent in the development of the Respondent's Proposal that have a material impact on price. It is in the best interest of the Respondent to make explicit the assumptions, conditions, and/or constraints that underlie the values presented on the Cost Proposal Template. Assumptions, conditions or constraints that conflict with the required responses are not acceptable.

2.6 IMPLEMENTATION PROPOSAL

The Implementation Proposal includes Attachment G1 (Implementation Proposal - Strategy and Approach Template**), Attachment G2 (Implementation Proposal - Project Plan Template) and Attachment G3 (Implementation Proposal - Staffing Plan Template). All attachments must be completed following the instructions in this section and within the attachments.**

DOR requests sufficient information to understand the vendor's ability to provide an ITS solution and implementation services for all DOR processes. It is DOR's intent to understand a vendor's ability to provide Implementation Alternatives that can support our strategy, drive one-time and recurring cost efficiency and maintain a responsible risk level. We understand there are many different possible implementation approaches including planning for more or fewer phases, implementing functionally or by tax type, or retaining DOR current technology investments that can be integrated tightly with the proposed ITS.

We will accept up to two (2) Implementation Alternatives from a qualified Respondent.

2.6.1 **Implementation Proposal** - Strategy and Approach Template

The Implementation Proposal – Strategy and Approach Template is Attachment G1. This template is a word document with instructions for documenting the strategy and unique aspects of the implementation approach. An Implementation Proposal – Strategy and Approach Template must be provided for each Implementation Alternative as defined in Section 1.2, and be consistent and supportive of all other attachments for the Implementation Alternative.

2.6.2 **Implementation Proposal - Project Plan Template**

The Implementation Proposal – Project Plan Template is Attachment G2. This template is a blank Microsoft Project plan provided as a sample, however this sample is not representative of the level of detail DOR expects to obtain from the Respondent. The project schedule should include a realistic level of detail for any milestone, key task and deliverable required of that phase by month. In addition, all major phases for implementation must be included (Individual, Corporate and Special Taxes). An Implementation Proposal – Project Plan Template must be provided for each Implementation Alternative as defined in Section 1.2, and be consistent and supportive of all other attachments for the Implementation Alternative.

2.6.3 **Implementation Proposal - Staffing Plan Template**

The Implementation Proposal – Staffing Plan Template is Attachment G3. This template is a spreadsheet that includes worksheets to capture all staffing allocations for recommended DOR staffing as well as proposed vendor and third-party staffing required to procure, implement, maintain and support the ITS for DOR. An Implementation Proposal – Staffing Plan Template must be provided for each Implementation Alternative as defined in Section 1.2, and be consistent and supportive of all other attachments for the Implementation Alternative.

2.7 MANDATORY REQUIREMENTS TEMPLATE

The Mandatory Requirements Template is Attachment H. This spreadsheet lists the mandatory requirements that must be met in order for the proposed Primary Implementer (Respondent) and proposed ITS to be considered qualified. These requirements will be graded on a pass/fail scale as described in Sections 3.1.1 and 3.2.

2.8 INDIANA ECONOMIC IMPACT

All companies desiring to do business with state agencies must complete an "Indiana Economic Impact" form (Attachment C) for each and every Implementation Alternative as defined in Section 1.2. The collection and recognition of the information collected with the Indiana Economic Impact form places a strong emphasis on the economic impact a project will have on Indiana and its residents regardless of where a business is located. The collection of this information does not restrict any company or firm from doing business with the state. The amount entered in Line 16 "Total amount of this proposal, bid, or current contract" should match the amount entered in the TOTAL BID AMOUNT cell in the Cost Summary worksheet in Attachment D, Cost Proposal Template.

2.9 BUY INDIANA INITIATIVE/INDIANA COMPANY

It is the Respondent's responsibility to confirm its Buy Indiana status for this portion of the process. If a Respondent has previously registered its business with IDOA, go to http://www.in.gov/idoa/2464.htm and click on the link to update this registration. Click the tab titled Buy Indiana. Select the appropriate category for your business. Respondents may only select one category. Certify this selection by clicking the check box next to the certification paragraph. Once this is complete, save your selection and exit your account.

Respondents that have not previously registered with IDOA must go to http://www.in.gov/idoa/2464.htm and click on the link to register. During the registration process, follow the steps outlined in the paragraph above to certify your business' status. The registration process should be complete at the time of proposal submission.

Respondent must clearly indicate which preference(s) they intend to claim in the Business Proposal, Attachment E. Additionally, the Respondent's Buy Indiana status must be finalized when the RFP response is submitted to the State.

Defining an Indiana Business:

"Indiana business" refers to any of the following:

(1) A business whose principal place of business is located in Indiana.
(2) A business that pays a majority of its payroll (in dollar volume) to residents of Indiana.
(3) A business that employs Indiana residents as a majority of its employees.

Respondents claiming this status must indicate which of the provisions above qualifies them as an Indiana business. They must also fully complete the Indiana Economic Impact Form (**Attachment C**) and include it with their response. This form must be provided for each Implementation Alternative as defined in Section 1.2.

The following is the policy concerning items 4 & 5 described below. Appropriate documentation must be provided with your proposal response supporting either claim made below:

(4) A business that makes significant capital investments in Indiana.
(5) A business that has a substantial positive economic impact on Indiana.

Substantial Capital Investment:

Any company that can demonstrate a minimum capital investment of $5 million or more in plant and/or equipment or annual lease payments of $2.5 million or more shall qualify as an Indiana

business under category #4. If an out of state company does not meet one of these criteria, it can submit documentation/justification to the State for review for inclusion under this category.

Substantial Indiana Economic Impact:
Any company that is in the top 500 companies (adjusted) for one of the following categories: number of employees (DWD), unemployment taxes (DWD), payroll withholding taxes (DOR), or Corporate Income Taxes (DOR); it shall qualify as an Indiana business under category #5. If a Respondent needs assistance in determining if its business qualifies under this criterion, please send an email inquiry to buyindianainvest@idoa.in.gov and you will receive a response within forty-eight (48) hours. If an out of state company does not meet one of these criteria, it can submit documentation/justification to the State for review for inclusion under this category.

SECTION THREE
PROPOSAL EVALUATION

3.1 PROPOSAL EVALUATION PROCEDURE

The State has selected a group of personnel to act as a proposal evaluation team. Subgroups of this team, consisting of one or more team members, will be responsible for evaluating proposals with regard to compliance with RFP requirements. All evaluation personnel will use the evaluation criteria stated in Section 3.2. The Commissioner of IDOA or their designee will, in the exercise of their sole discretion, determine which proposals offer the best means of servicing the interests of the State. The exercise of this discretion will be final.

DOR is interested in evaluating alternative implementation approaches that provide a variety of benefit opportunities, timelines and costs that maintain a low risk profile. In order to uncover the available implementation approaches, DOR will allow qualified Respondents to provide up to two (2) Implementation Alternatives as defined in Section 1.2.

The procedure for evaluating each Implementation Alternative against the evaluation criteria will be as follows:

3.1.1 Each proposal will be evaluated for adherence to Mandatory Requirements on a pass/fail basis. Proposals that are incomplete or otherwise do not conform to proposal submission requirements may be eliminated from consideration.

3.1.2 Each proposal will be evaluated on the basis of the categories included in Section 3.2. A point score has been established for each category.

3.1.3 If technical proposals are close to equal, greater weight may be given to the Cost Proposals.

3.1.4 Based on the results of this evaluation, the qualifying proposal determined to be the most advantageous to the State, taking into account all of the evaluation factors, may be selected by IDOA and DOR for further action, such as final contract negotiations. If, however, IDOA and DOR decide that no proposal is sufficiently advantageous to the State, the State may take whatever further action is deemed necessary to fulfill its needs. If, for any reason, a proposal is selected and it is not possible to consummate a contract with the Respondent, IDOA may begin contract preparation with the next qualified Respondent or determine that no such alternate proposal exists.

3.2 EVALUATION CRITERIA

Proposals will be evaluated based upon the proven ability of the Respondent to satisfy the requirements of the RFP in a cost-effective manner. Each of the evaluation criteria categories is described below with a brief explanation of the basis for evaluation in that category. The points associated with each category are indicated following the category name (total maximum points = 103). For further information, please reference below. If any one or more of the listed criteria on which the responses to this RFP will be evaluated are found to be inconsistent or incompatible with

applicable federal laws, regulations or policies, the specific criterion or criteria will be disregarded and the responses will be evaluated and scored without taking into account such criterion or criteria.

Summary of Evaluation Criteria:

Criteria	Points
1. Adherence to Mandatory Requirements	Pass/Fail
2. Management Assessment/Quality (Business Proposal, Technical Proposal, Implementation Proposal, Oral Presentations and Demonstrations, Contract Negotiations)	**55 available points**
3. Cost (Cost Proposal)	**20 available points**
4. Indiana Economic Impact	5
5. Buy Indiana	5
6. Minority Business Enterprise Subcontractor Commitment	5 (1 bonus point is available, see Section 3.2.6)
7. Women Business Enterprise Subcontractor Commitment	5 (1 bonus point is available, see Section 3.2.6)
8. Indiana Veteran Business Enterprise (IVBE) Subcontractor Commitment	5 (1 bonus point is available, see Section 3.2.7)
Total	**100 (103 if bonus awarded)**

All proposals will be evaluated using the following approach.

Step 1

In this step proposals will be evaluated only against Criteria 1 to ensure that they adhere to Mandatory Requirements. Any proposals not meeting the Mandatory Requirements in Attachment H will be disqualified.

Step 2

The proposals that meet the Mandatory Requirements will then be scored based on Criteria 2 and 3 ONLY. This scoring will have a maximum possible score of 75. All proposals will be ranked on the basis of their combined scores for Criteria 2 and 3 ONLY. This ranking will be used to create a "short list". Any proposal not making the "short list" will not be considered for any further evaluation.

Step 2 may include one or more rounds of proposal discussions, oral presentations, clarifications, demonstrations, etc. focused on cost and other proposal elements. Step 2 may include a second "short list".

Step 3

The short-listed proposals will then be evaluated based on all the entire evaluation criteria outlined in the table above.

If the State conducts additional rounds of discussions and a best and final proposal and Implementation Alternative round which lead to changes in either the technical or cost proposal for the short listed Respondents, their scores will be recomputed.

The section below describes the different evaluation criteria.

3.2.1 Adherence to Mandatory Requirements – Pass/Fail

Respondents passing this category move to Phase 2 and proposal is evaluated for Management Assessment/Quality and Cost Proposal.

3.2.2 Management Assessment/Quality (Business Proposal, Technical Proposal & Implementation Proposal)– **55** available points

- Business, Technical and Implementation Proposals will be will be evaluated against our goals to have:
  - a proven ITS that will substantially meet DOR's requirements
  - a qualified, experienced and skilled implementation partner
  - an aggressive, efficient, executable implementation approach, staffing and plan

3.2.3 Cost Proposal – **20** available points

Scores for this category will be as follows:

- Cost scores will then be normalized to one another, based on the lowest cost proposal evaluated. The lowest cost proposal receives a total of **20** points. The normalization formula is as follows:
  - *Respondent's Cost Score = (Lowest Cost Proposal / Total Cost of Proposal) X **20***

3.2.4 Indiana Economic Impact – 5 points

See Section 2.8 for additional information.

The total number of full time equivalent (FTE – please see Section 1.2 for a definition of FTE's) Indiana resident employees for the Respondent's proposal, to execute the scope of work proposed in this RFP, (prime contractor and subcontractors) will be used to evaluate the Respondent's Indiana Economic Impact. Points will be awarded based on a graduated scale. The Respondent with the most Indiana FTEs will be awarded 5 points. Points will then be awarded to the remaining Respondents proportionately. Please see Attachment C, Indiana Economic Impact Form, for more detailed instructions.

3.2.5 Buy Indiana Initiative – 5 points

Respondents qualifying as an Indiana Company as defined in Section 2.9 will receive 5 points in this category.

3.2.6 Minority (5 points) & Women's Business (5 points) Subcontractor Commitment - 10 points

The following formula will be used to determine points to be awarded based on the MBE and WBE goals listed in Section 1.22 of this RFP. Scoring is conducted based on an assigned 10-point, plus possible 2 bonus-points, scale (MBE: Possible 5 points + 1 bonus point, WBE: Possible 5 points + 1 bonus Point). Points are assigned for respective MBE participation and WBE participation based upon the BAFO meeting or exceeding the established goals.

If the Respondent's commitment percentage is less than the established MBE or WBE goal, the maximum points achieved will be awarded according to the following schedule:

%	1%	2%	3%	4%	5%	6%	7%	8%
Pts.	.625	1.25	1.875	2.5	3.125	3.75	4.375	5.0

NOTE: Fractional percentages will be rounded up or down to the nearest whole percentage. (e.g. 7.49% will be rounded down to 7% = 4.375 pts., 7.50% will be rounded up to 8% = 5.00 pts.)

If the Respondent's commitment percentage is rounded down to 0% for MBE or WBE participation the Respondent will receive 0 points.

If the Respondent's commitment percentage is 0% for MBE or WBE participation, a deduction of 1 point will be discounted on the respective MBE or WBE score.

The Respondent with the greatest applicable CUF participation which exceeds the stated goal for the respective MBE or WBE category will be awarded 6 points (5 points plus 1 bonus point). In cases where there is a tie for the greatest applicable CUF participation and both firms exceed the goal for the respective MBE/WBE category both firms will receive 6 points.

3.2.7 Indiana Veteran Business Enterprise Subcontractor Commitment - (5 points).

The following formula will be used to determine points to be awarded based on the IVBE goal listed in Section 1.23 of this RFP. Scoring is conducted based on an assigned 5-point, plus possible 1 bonus-point, scale. Points are assigned for IVBE participation based upon the BAFO meeting or exceeding the established goals.

If the Respondent's commitment percentage is less than the established IVBE goal, the maximum points achieved will be awarded according to the following schedule:

%	0%	0.6%	1.2%	1.8%	2.4%	3%
Pts.	-1	1	2	3	4	5

NOTE: Fractional points will be awarded based upon a graduated scale between whole points. (e.g. a 0.3% commitment will receive .5 points and a 1.5% commitment will receive 2.5 points)

If the Respondent's commitment percentage is 0% for IVBE participation, a deduction of 1 point will be assessed.

The Respondent with the greatest applicable CUF participation which exceeds the stated goal for the IVBE category will be awarded 6 points (5 points plus 1 bonus point). In cases where there is a tie for the greatest applicable CUF participation and both firms exceed the goal for the IVBE category both firms will receive 6 points.

3.2.8 Qualified State Agency Preference Scoring

When applicable, pursuant to Indiana Code 5-22-13, a qualified state agency submitting a response to this RFP will be awarded preference points for Minority, Women's, and Indiana Veteran Business Enterprise

equal the Respondent awarded the highest combined points awarded for such preferences in the scoring of this RFP.

The Commissioner of IDOA or their designee will, in the exercise of their sole discretion, determine which proposal(s) offer the best means of servicing the interests of the State. The exercise of this discretion will be final.

ATTACHMENT A
MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR COMMITMENT FORM

In accordance with 25 IAC 5-5, the respondent is expected to submit with its proposal a MWBE Subcontractor Commitment Form. The Form must show that there are, participating in the proposed contract, Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) listed in the Minority and Women's Business Enterprises Division (MWBED) directory of certified firms located at http://www.in.gov/idoa/2352.htm.

If participation is met through use of vendors who supply products and/or services directly to the Respondent, the Respondent must provide a description of products and/or services provided that are directly related to this proposal and the cost of direct supplies for this proposal. Respondents must complete the Subcontractor Commitment Form in its entirety.

Failure to meet these goals will affect the evaluation of your Proposal. The Department reserves the right to verify all information included on the MWBE Subcontractor Commitment Form.

Respondents are encouraged to contact and work with MWBED at 317-232-3061 to design a subcontractor commitment to meet established goals as referenced in this solicitation.

Prime Contractors must ensure that the proposed subcontractors meet the following criteria:

- Must be listed on the IDOA Directory of Certified Firms, on or before the proposal due date
- Each firm may only serve as one classification – MBE, WBE, or IVBE (see section 1.22)
- A Prime Contractor who is an MBE or WBE must meet subcontractor goals by using other listed certified firms. Certified Prime Contractors cannot count their own workforce or companies to meet this requirement.
- **Must serve a Commercially Useful Function (CUF). The firm must serve a value-added purpose on the engagement, as confirmed by the State.**
- Must provide goods or service only in the industry area for which it is certified as listed in the directory at http://www.in.gov/idoa/2352.htm
- Must be used to provide the goods or services specific to the contract
- National Diversity Plans are generally not acceptable

MINORITY & WOMEN'S BUSINESS ENTERPRISES RFP SUBCONTRACTOR LETTER OF COMMITMENT

A signed letter(s), on company letterhead, from the MBE and/or WBE must accompany the MWBE Subcontractor Commitment Form. Each letter shall state and will serve as acknowledgement from the MBE and/or WBE of its subcontract amount as a percentage of the total cost, a description of products and/or services to be provided on this project, and approximate date the subcontractor will perform work on this contract. The State reserves the right to deny evaluation points if the letter(s) is not attached. The State may deny evaluation points if the letter(s) is not attached, not on company letterhead, not signed and/or does not reference and match the subcontract amount, subcontract amount as a percentage of the "TOTAL BID AMOUNT" and the anticipated period that the Subcontractor will perform work for this solicitation.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's M/WBE Program. Questions involving the regulations governing the MWBE Subcontractor Commitment Form should be directed to: Minority and Women's Business Enterprises Division at (317) 232-3061 or http://www.in.gov/idoa/2352.htm.

STATE OF INDIANA MBE/WBE SUBCONTRACTOR COMMITMENT FORM

RFP# _____

DUE DATE: _____

TOTAL BID AMOUNT: _____

☐ MBE Firm ☐ WBE Firm		
Company Name:		**Contact Person:**
Address:		**E-mail:**
		Telephone Number: ( ) / **Fax Number:** ( )
Sub-Contract Amount:		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>**
Sub-Contract Percentage of Total Bid:		
Provide approximate dates when Sub-Contractor will perform on this project:		

☐ MBE Firm ☐ WBE Firm		
Company Name:		**Contact Person:**
Address:		**E-mail:**
		Telephone Number: ( ) / **Fax Number:** ( )
Sub-Contract Amount:		**Describe service/product to be provided and <u>how this is a Commercially Useful Function of the Contract:</u>**
Sub-Contract Percentage of Total Bid:		
Provide approximate dates when Sub-Contractor will perform on this project:		

Respondent Firm	Telephone Number
Address	Fax Number
City/State/Zip Code	Email Address
Representative	Authorizing Signature
Date	Printed Name and Title

☐ Please check if additional forms are attached.
Page _____ of _____

FORM MUST BE COMPLETED IN ITS ENTIRETY WITH COMPLETED LETTERS OF COMMITMENT.

Instructions

1. Complete lines 1 - 15 with the information requested about the company in the Attachment C worksheet.
All companies desiring to do business with state agencies must complete an "Indiana Economic Impact" form (Attachment C). The collection and recognition of the information collected with the Indiana Economic Impact form places a strong emphasis on the economic impact a project will have on Indiana and its residents regardless of where a business is located. The collection of this information does not restrict any company or firm from doing business with the state.

2. Line 16: Enter total amount of this proposal, bid, or current contract.
This figure is the respondent's total cost proposal to the the state (as sumitted in Attachment D, Cost Proposal Template). Additionally, this total shall be utilized when completing your Attachment A, MWBE Subcontractor Commitment Form.

3. Lines 18 and 21 measure the full-time equivalent (FTE) count of Indiana residents; this number will be auto-populated on Attachment C worksheet. Respondents shall populate the yellow-shaded cells in the FTE Details worksheet.
The state defines FTE as a measurement of an employee's productivity on a specific project or contract. An FTE of 1 would mean that there is one worker fully engaged on a project. If there are two employees each spending 1/2 of their working time on a project that would also equal 1 FTE.

Please populate the yellow-shaded cells in the FTE Details worksheet.
Respondents shall provide a job title for each of the FTE's proposed for The State of Indiana contract as well as the number of FTE that job title contributes to the total.

PROJECT MANAGER - 1 FTE

Please keep in mind that the only FTE's that should be included in this count are Indiana employees working on this contract ONLY. If there are 10 employees working on this contract but they are splitting their time with numerous other contracts as well, then these employees cannot be counted as 1 FTE. Instead, these employees should be counted as a fraction of an FTE. For example: 10 employees working on 4 contracts (1 of them being the State of Indiana contract) - each of the 10 employees would only count as 1/4 of an FTE or .25. Therefore, the total number of FTE's for this scenario would be 2.5.

INDIANA ECONOMIC IMPACT - PROPOSALS AND CONTRACTS
State Form 51778 (R4 / 1-06)
DEPARTMENT OF ADMINISTRATION
Approved by State Board of Accounts, 2006

This information is required by the Indiana Department of Administration for all contractors, vendors/suppliers to the State of Indiana (complete all 22 items).

1	Legal Name of firm:	
2	Address/City/State/Zip Code:	
3	Telephone #/Fax #/Website:	
4	Federal Tax Identification Number:	
5	State/Country of domicile/incorporation:	
6	Location of firm's headquarters or principal place of business:	
7	Name of parent company or holding company (if applicable):	
8	State/Country of domicile/incorporation of company listed in #7:	
9	Address of company listed in #7:	
10	IN Department of Workforce Development (DWD) account number:	
11	IN Department of Revenue (DOR) account number:	
12	Number of Indiana resident employees per most recently completed IRS Form W-2 distribution:	
13	Total number of employees per most recently completed IRS Form W-2 distribution:	
14	Total amount of payroll paid to Indiana resident employees per most recently completed IRS Form W-2 distribution:	
15	Total amount of payroll paid to all employees per the most recently completed IRS Form W-2 distribution:	
16	Total amount of this proposal, bid, or current contract:	$ 5,100,000.00

ACCOUNTING OF INDIANA RESIDENT EMPLOYEES

17	Prime Contractor Company Name:	(Enter Company Name Here)
18	Number of Full Time Equivalent (FTE) employees that are Indiana residents specifically for this proposal or contract:	0.00

19	Subcontractor Company Name:	(Enter Company Name Here)	(Enter Company Name Here)	(Enter Company Name Here)	(Enter Company Name Here)	(Enter Company Name Here)	(Enter Company Name Here)
20(A)	Address						
20(B)	Contact Person						
20(C)	Telephone Number						
20(D)	Tax ID Number						
21	Number of Full Time Equivalent (FTE) employees that are Indiana residents specifically for this proposal or contract:	0.00	0.00	0.00	0.00	0.00	0.00

22	Affirmation by authorized official: I affirm under penalties of perjury that the foregoing representations are true to be the best of my knowledge and belief:	
	Signature:	
	Name of auththorized official:	
	Title:	
	Date:	

FTE DETAILS

Job Titles and Contributing FTE

- ***Populate the blue-shaded cells; with all applicable job titles and the total FTE count.***
- ***Respondents may insert additional rows to account for all job titles attributing to the total FTE count.***

Please keep in mind that the only FTE's that should be included in this count are Indiana employees working on this contract ONLY. If there are 10 employees working on this contract but they are splitting their time with numerous other contracts as well, then these employees cannot be counted as 1 FTE. Instead, these employees should be counted as a fraction of an FTE. For example: The project length of the contract is 24 months. There are 10 employees working on the contract over the 24 month contract period. 5 employees are working solely on the project for 24 months. 3 employees are working equal time on 2 projects for 24 months. 2 employees are working solely on the project for 6 months.

The FTEs would be calculated as follows:

5 employees x 24 months (24 months working solely on this project) x 1 (time spent solely on this project) = 120 months / 24 months (length of contract) = 5 FTEs

3 employees x 24 months x .5 (splitting time equally between 2 projects) = 36 months / 24 months = 1.5 FTEs

2 employees x 6 months (6 months dedicated solely to this project) x 1 (time spent solely on this project) = 12 months / 24 months = .5 FTEs

Column Title Definitions:

Number of Employees *= Number of employees working on this State contract.*

Duration (In Months) *= Amount of time that the employee(s) will spend on the State contract.*

Time Spent (Percentage) *= Percentage of time the employee(s) will be working on the contract.*

Duration of Initial Contract Term *(In Months)*	48	*Number based on initial contract term

(Enter Company Name Here)				
EMPLOYEE JOB TITLE	**Number of Employees**	**Duration *(In Months)***	**Time Spent (Percentage)**	**NUMBER OF FTE**
Example: Project Managers	*5*	*24*	*100%*	*2.50*
Example: Project Coordinators	*3*	*24*	*50%*	*0.75*
Example: Project Directors	*2*	*6*	*100%*	*0.25*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				**0.00**

(Enter Company Name Here)				
JOB TITLE	**Number of Employees**	**Duration *(In Months)***	**Time Spent (Percentage)**	**NUMBER OF FTE**
Example: Developer	*1*	*6*	*50%*	*0.06*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				**0.00**

(Enter Company Name Here)				
JOB TITLE	**Number of Employees**	**Duration *(In Months)***	**Time Spent (Percentage)**	**NUMBER OF FTE**
Example: Developer	*2*	*3*	*90%*	*0.30*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				**0.00**

(Enter Company Name Here)				
JOB TITLE	**Number of Employees**	**Duration *(In Months)***	**Time Spent (Percentage)**	**NUMBER OF FTE**
Example: Developer	*2*	*3*	*100%*	*0.13*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				**0.00**

(Enter Company Name Here)				
JOB TITLE	**Number of Employees**	**Duration *(In Months)***	**Time Spent (Percentage)**	**NUMBER OF FTE**
Example: Developer	*2*	*6*	*25%*	*0.06*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

TOTAL FTE COUNT				0.00

(Enter Company Name Here)				
JOB TITLE	Number of Employees	Duration *(in Months)*	Time Spent (Percentage)	NUMBER OF FTE
Example: Developer	*2*	*6*	*100%*	*0.25*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				0.00

(Enter Company Name Here)				
JOB TITLE	Number of Employees	Duration *(in Months)*	Time Spent (Percentage)	NUMBER OF FTE
Example: Developer	*2*	*6*	*100%*	*0.25*
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
TOTAL FTE COUNT				0.00

Business Proposal
RFP 17 - 082, Attachment E - Business Proposal Template
Instructions for this Workbook

Instructions

Tab Name	Instructions
Business Information	Please fill in the cells shaded blue and indicate if any attachments are inc each item. Some items require a yes/no answer and an explanation if th Description or Attachment Reference - if more than 300 words, include a
Contract Revisions	If specific language is not acceptable as worded, please add a row to the worksheet including the current language, proposed language and full ex revision in the blue shaded cells provided. Description or Attachment Reference - if "Explanation / Reason for Propc Language" requires more than 300 words, include attachment

Rows can be added to the Contract Revisions spreadsheet to support more revision items.

Summary Proposal Template - Summary Information

Respondent Name:	
	Please Complete Blue Shaded Regions
	Description of Attachment Reference

2.3.1.1 GENERAL (OPTIONAL)	Enter your response below. Please indicate if attachments are included.
The Respondent may use this optional section of the business proposal to emphasize or summarize any information the Respondent deems relevant or important to the State's successful acquisition of the products and/or services requested in this RFP.	

2.3.1.2 RESPONDENT'S COMPANY STRUCTURE	Enter your response below. Please indicate if attachments are included.
The legal form of the Respondent's business organization, the state in which formed (incorporated by a certificate of authority), the types of business ventures in which the organization is involved, and a chart of the organization are to be outlined in this section. If the organization includes more than one product division, the division responsible for the development and marketing of the proposed products and/or services of the Indiana State must be described in more detail than other components of the organization.	

2.3.1.3 COMPANY FINANCIAL INFORMATION	Enter your response below. Please indicate if attachments are included.
This section must include the Respondent's audited or reviewed financial statements, including an income statement and balance sheet, for each of the two most recently completed fiscal years. The financial statements must demonstrate the Respondent's financial stability. If the financial statements being provided by the Respondent are those of a parent or holding company, additional financial information should be provided for the entity/organization signed by/reporting to the ERP. See Attachment J (Summary of Maintenance Requirements) for details on how the State will assess financial stability.	

2.3.1.4 INTEGRITY OF COMPANY STRUCTURE AND FINANCIAL REPORTING	Enter your response below. Please indicate if attachments are included.
This section must include a statement indicating that the CEO and/or CFO has taken personal responsibility for the thoroughness and correctness of any and all financial information supplied with the proposal. The particular area of interest to the State in consideration of item 1) is responsibility include the following items: separation of audit functions from corporate boards and board members, if any; the mandate to which the Sarbanes-Oxley board integrity, and the separation of audit functions and consulting services. The State of Indiana will consider the information offered in this section to determine the responsibility of the Respondent per IC 5-22-16-1(d). The Sarbanes-Oxley Act of 2002, H.R. 3763, is NOT directly applicable to this procurement; however, its goals and objectives may be used as a guide in the determination of corporate responsibility for financial reports.	

2.3.1.5 CONTRACT TERMS/CLAUSES

The contract resulting from this RFP will contain both mandatory and non-mandatory clauses. Mandatory clauses are non-negotiable while non-mandatory clauses are highly negotiable. Attachment I contains a sample contract that will be similar to the one resulting from this RFP. Please indicate your acceptance of the following mandatory/non-mandatory clauses within the sample contract. If specific language is not acceptable as written, please add a row to the Contract Revisions worksheet in the workbook including the current language, proposed language and full explanation for the requested revision in the spaces provided. To reiterate, if the State's strong desire is not deviate from the contract provided in the attachment and as such the State reserves the right to reject any and all of these requested changes. Failure to include a clear, specific, unequivocal agreement to these clauses may result in disqualification of the proposal from further evaluation.

Mandatory Clause	Acceptance? (Yes / No)	If No, Explanation
Authority to Bind Contractor		
Duties of Contractor; Rate of Pay, and Term of Contract		
Compliance with Laws		
Drug-Free Workplace Provision and Certification		
Employment Eligibility Verification		
Funding Cancellation		
Governing Laws		
Indemnification		
Information Technology		
Non-Collusion and Acceptance		
Payments		
Penalties/Interest/Attorney's Fees		
Termination for Convenience		
Termination and Assignment		

Additional Contract Considerations	Enter your response below. Please indicate if attachments are included.
Please note: *The State will only review or negotiate changes to contract clauses clearly identified in the transmittal letter. If there are no contract clauses identified, Respondent is presumed to have accepted the clauses as they are currently written.*	

2.3.1.6 REFERENCES

The Respondent must include a list of at least three (3) clients for whom the Respondent has provided products and/or services that are the same or similar to those products and/or services requested in this RFP. Any state government for whom the Respondent has provided these products and services should be included; also to be included should be clients with locations near Indianapolis, as site visits may be arranged.

Reference One	Enter your response below.
Legal Name of Company or Governmental Entity	
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	

Reference Two	Enter your response below.
Legal Name of Company or Governmental Entity	
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	

Reference Three	Enter your response below.
Legal Name of Company or Governmental Entity	
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided to this reference	

Please identify all references for the past five (5) years for whom your company has provided the same or similar services as those requested in this RFP, but the contract was terminated for cause or for convenience.

Reference One	Enter your response below.
Legal Name of Company or Governmental Entity	
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Time period in which services were provided	
Please describe the service provided in this reference	
Provide reason(s) for loss or termination	

Reference Two	Enter your response below.
Legal Name of Company or Governmental Entity	
Industry of Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	

E-mail Address	
Term period in which services were provided	
Please describe the service provided to you (if known)	
Provide name(s) for hire or termination	

Reference Three	Enter your response below
Legal Name of Consumer or Governmental Entity	
Individual's Company	
Mailing Address	
Telephone Number	
Contact Name	
Title	
Telephone/Fax Number	
E-mail Address	
Term period in which services were provided	
Please describe the service provided to this reference	
Provide name(s) for hire or termination	

Corporate Litigation	Enter your response below. Please indicate if attachments are included.
Does your company have any pending litigation involving a contract dispute?	

2.3.1.7 REGISTRATION TO DO BUSINESS

	Registered? (Yes / No)	If No, Explanation
Respondents providing the products and/or services required by this RFP must be registered and in good standing with the Indiana Secretary of State. The requirement is applicable to all limited liability partnerships, limited partnerships, corporations, b-corporations, nonprofit corporations, and limited liability companies. Please indicate the status of registration.		

	Registered? (Yes/No)	If No, Explanation
Respondents must be registered with the Indiana Department of Administration (IDOA) on the bidder registration database and below to receive an award. This can be accomplished for no fee online at http://www.in.gov/idoa/2456.htm. Please indicate the status of registration.		

2.3.1.8 AUTHORIZING DOCUMENT

	Enter your response below. Please indicate if attachments are included.
Respondent personnel signing the Transmittal Letter of this proposal must be legally authorized by the organization to commit the organization contractually. This section shall contain proof of such authority. A copy of corporate bylaws or a board resolution adopted by the board of directors indicating this authority will fulfill the requirement.	

2.3.1.9 SUBCONTRACTORS

The Respondent is responsible for the performance of any obligations that may result from this RFP, and shall not be relieved by the non-performance of any subcontractor. Any Respondent's proposal must identify all subcontractors and describe the contractual relationship between the Respondent and each subcontractor. Either a copy of the executed subcontract or a letter of agreement over the official signature of the firms involved must accompany each proposal.

Any subcontracts entered into by the Respondent must be in compliance with all State statutes, and will be subject to the provisions therein. For each portion of the proposed products or services to be provided by a subcontractor, the technical proposal must include the identification of the functions to be provided by the subcontractor and the subcontractor's related qualifications and experience. The use of subcontractors in the areas of Application Development and Web Design and Advertising is not permitted under this contract.

The combined qualifications and experience of the Respondent and any or all subcontractors will be considered in the State's evaluation. The Respondent must furnish information to the State as to the amount of the subcontract, the qualifications of the subcontractor for guaranteeing performance, and any other data that may be required by the State. All subcontracts held by the Respondent must be made available upon request for inspection and examination by appropriate State officials, and such relationships must meet with the approval of the State.

The Respondent must furnish the following information for their use of subcontractors:

	Enter your response below. Please indicate if attachments are included.					
	Subcontractor 1 Name:	Subcontractor 2 Name:	Subcontractor 3 Name:	Subcontractor 4 Name:	Subcontractor 5 Name:	Subcontractor 6 Name:
A) Each subcontractor's name, address, and type of work/services they are proposed to be used on providing the requested products and services.						
B) Each subcontractor's level (1-3) of removal/tiers under the proposal						
C) The anticipated dollar amount for each subcontract						
D) Each subcontractor's form of incorporation						
E) Justification from each subcontractor of a willingness to carry out their responsibilities. The assurance in no way relieves the Respondent of any responsibilities in responding to the RFP or any resultant the contract and its documents in this proposal.						
F) The qualifications of each subcontractor for maintenance/performance						
G) Whether any subcontractors qualify as a Minority or Women Owned Business under IC 4-13-16.5						
H) See Section 3.21 and Attachment A for Minority and Women business information.						
I) Identification of the functions to be provided by the subcontractor and the subcontractor's related qualifications and experience in the technical proposal for each portion of the proposed products or services to be provided by the subcontractor						
J) Any other data that may be required by the State						

2.3.1.10 EVIDENCE OF FINANCIAL RESPONSIBILITY

The bidder will indicate the ability to provide the most satisfactory evidence of financial responsibility. See Section 1.26 for details. Notwithstanding any other provisions relating to the beginning of the term, any contract will not become effective until the evidence of financial responsibility is delivered in the correct form and amount to the entity designated in Section 1.26.	

2.3.1.11 GENERAL INFORMATION

Business Information	Enter your response below
Legal Name of Company	
Federal Identification Number (FEI)	
Contact Name	
Contact Title	
Contact E-mail Address	
Company Mailing Address	
Company City, State, Zip	
Company Telephone Number	
Company Fax Number	
Company Website Address	
Number of Employees (domestic)	
Years of Experience	
Number of U.S. Offices	
Year Indiana Office Established (if applicable)	
Parent Company (if applicable)	
Revenues ($Mil) - most recent	
Revenues ($Mil) - previous year	
% Of Revenue from Indiana customers	

Please provide a short of your last two external audit or review reports with a phone contact

	Yes / No	If No, Explanation
Does your company have a formal disaster recovery plan? If no, please provide an explanation of any alternative solution your company has to offer. If yes, please note and include as an attachment.		

	Enter your response below. Please indicate if attachments are included.
What is your company's technology and process for ensuring any state information that is maintained by your company?	

2.3.1.12 EXPERIENCE SERVING STATE GOVERNMENTS

	Enter your response below. Please indicate if attachments are included.
Please provide a brief description of your company's experience in serving thirty governments and the issues presented as a result. Describe each state or jurisdiction in which Respondent does business or holds contracts to provide goods or services and the nature of each such business or contract.	

2.3.1.13 EXPERIENCE SERVING SIMILAR CLIENTS

	Enter your response below. Please indicate if attachments are included.
Please describe your company's experience in serving clients of a similar size to the State that also had a similar scope. Please provide specific clients and detailed examples.	

2.3.1.14 INDIANA PREFERENCES

	Enter your response below. Please indicate if attachments are included.
Pursuant to IC 5-22-15-7, Respondent may claim only one (1) preference. For the purposes of this RFP, the Respondent may claim only one (1) preference applicable to Respondent's ability to claim eligibility for Buy Indiana points. Respondent must clearly indicate which preference(s) they intend to claim. Additionally, the Respondent's Buy Indiana status must be in place before the RFP response is submitted to the State. Buy Indiana Refer to Section 3.2 for additional information	

Business Proposal Template - Contract Revisions

Respondent Name:	
	Please Complete Bl
	Description or Attac

	Current Contract Language (include contract location/section)	Proposed New Contract Language Replacing Current
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

ue Shaded Regions
chment Reference -

Contract Language	Explanation / Reason for Proposed New Contact Language

Attachment G1 – Implementation Proposal – Approach Definition Template

Instructions:

Instructions to be added.

	Duration	Start	Finish	Predecessors	Resource Names
t G2 has been provided as a sample,					
ıis mple is not representative of the					
:a. OR expects to obtain from the					
: schedule should include a realistic level					
r any milestone, key task and					
required of that phase by month. In					
ll major phases for implementation					
:luded (IND, COR, Special Taxes).					
	194 days?	Tue 1/2/18	Fri 9/28/18		
	23 days	Tue 1/2/18	Thu 2/1/18		
Vendor project team	1 day	Tue 1/2/18	Tue 1/2/18		
DOR project team					
y DOR stakeholders					
ete Project Management Plan					
Change Management Plan					
Roles/Responsibilities (RACI) document					
Communication plan					
ıle & prepare for project kick-off meeting					
e order to implement taxes					
ct project kick-off meeting					
quirements	21 days	Thu 2/1/18	Thu 3/1/18		
ct design & requirement sions					
ient design & requirements				16	
	21 days	Thu 2/1/18	Thu 3/1/18		
design & infrastructure requirements docur				17	
ve design & infrastructure requirements docu				19	
hardware based on design document				20	
configuration requirements					
ve configuration requirements				22	
ın	65 days	Tue 1/2/18	Sun 4/1/18		
Data Conversion Approach plan					
ve Data Conversion Approach plan				25	
ct conversion design & requirement sions					
ient conversion design & requirements				27	

	Duration	Start	Finish	Predecessors	Resource Names
re conversion design & requirements				28	
	196 days	Mon 4/2/18	Mon 12/31/18		
p end-user training plan					
re end-user training plan				31	
dedicated training environment					
internal training materials					
internal training materials				34	
re internal training materials				35	
external training materials					
external training materials				37	
re external training materials				38	
hase 1 Implementation - Tax Type (IND, COR,	86 days	Tue 1/2/18	Tue 5/1/18		
e hardware order				21	
hardware				41	
firewall rules				42	
ient development & configuration requireme					
ient security requirements					
initiation and Setup - Setup of the base to accommodate the implementation					
elop user test plans					
elop user test scripts					
rove user test plans				48	
rove user test scripts				49	
dor Certification testing					
ems integration test					
r Acceptance Testing				53	
e Training Plan	1 day	Thu 6/1/17	Thu 6/1/17		
nical Training - Training for DOR technical re					
ness Training - Training for the DOR functiona					
/ Rollout - Cutover to production	1 day?	Tue 1/2/18	Tue 1/2/18		
dor Certification					
a Conversion					

	Duration	Start	Finish	Predecessors	Resource Names
urns processing					
or earned					
hase 2 implementation - Tax Type x					
hase 3 implementation					
hase 4 implementation - Tax Type x					

Implementation Proposal
RFP 17-082 Attachment G3 - Staffing Plan Template
Instructions for this Workbook

Staffing Plan Template Instructions

Staffing estimates must include all hours expected from all sources including the Vendor, DOR, Vendor-Partners and Third-Parties.

This Staffing Plan Template must include all hours for non-infrastructure and non-hardware related activities required to fully implement the solution represented in the proposal.

Additional information can be provided beyond what is included in the Staffing Plan Template. The additional information must be referenced and described in "Additional Information" worksheets.

All information in this Staffing Plan Template should be consistent with the strategy and approach described in the proposal including Attachments D, G1 and G2.

DOR reserves the right to contact Vendors on staffing information for clarification at any time throughout the selection process and negotiation process.

Do NOT use "To Be Determined" or similar annotations in the Staffing Plan Template worksheets. DOR is asking for staffing hours and roles, within activities, within resource teams with the understanding that assumptions may apply. Such assumptions should be stated in the "Assumptions" worksheet.

All worksheets in the Staffing Plan Template should be thoroughly and accurately completed.

Staffing Plan Template Formatting Information

The light blue shaded cells indicate information Vendors are expected to provide (i.e. Staffing Summary Worksheet, Cell A6).

All red text shown in light blue shaded cells represent SAMPLES and/or EXAMPLES (i.e. Staffing Summary Worksheet, Cell A6). The provided red text samples and examples should be replaced or removed in the submitted Cost Proposal.

Where needed, major column and row headings in each worksheet have comments defining the required information.

The description cells in the "Additional Information" and "Assumptions" worksheets should be limited to 300 words.

Staffing information must be in hours, rounded to the nearest whole hour.

We have included some formulas, however, it is the Vendor's responsibility to ensure the accuracy of all cells.

As a guideline, there should be no less than six Major Activities for each phase.

Vendor, Vendor-Partner and Third Party Definitions and Instructions

Where staffing estimates refer to Vendor vs Vendor-Partner vs Third-Party:

Vendor staffing is defined as:

Staffing for Vendor resources that are solely the responsibility of the Vendor, are fully managed by the Vendor, are committed in the Vendor proposal and will be contracted through the Vendor.

Vendor-Partner staffing is defined as:

Staffing for Vendor-Partner resources that are solely the responsibility of the Vendor, are fully managed by the Vendor, are committed in the Vendor proposal and will be contracted through the Vendor. All partners providing resources, including Women, Minority and Veteran Owned business partners, must be considered Vendor-Partners.

Third-Party staffing is defined as:

Staffing for Third-Party resources that are not the responsibility of the Vendor, may NOT be fully managed by the Vendor, are included in the Vendor proposal as estimates only and will be contracted by DOR directly with the Third-Party.

All staffing in this Staffing Plan Template for Vendors , Vendor-Partners or Third-Parties must be included in their respective spreadsheets.

All Vendor-Partners and Third-Parties must be thoroughly defined in this Staffing Plan Template and must be included in the appropriate section of the Business Proposal.

DOR strongly prefers to have very few, if any, Third-Party products or services!

Brief Staffing Plan Template Worksheet Descriptions

Staffing Summary - A phase-by-phase, month-by-month summary of staffing, for each resource team, required to fully implement the proposed ITS solution. The implementation phases must be consistent with those described throughout your proposal including Attachments D, G1 and G3.
DOR Staffing - A monthly detail of required Department of Revenue staffing by phase, by activity and by role.
Vendor Staffing - A monthly detail of required Vendor staffing by phase, by activity and by role.
Vendor-Partner Staffing - A monthly detail of required Vendor-Partner staffing by phase, by Vendor-Partner, by activity and by role.
Third-Party Staffing - A monthly detail of required Third-Party staffing by phase, by Third-Party, by activity and by role.
Additional Information - A brief description and reference to additional staffing related information.
Assumptions - A brief description of the assumptions for the information in this Staffing Proposal.

Rules and Guidelines For Activities

The following are Activities that must be included in a phase if appropriate for that phase. Additional Activities can be included by the Respondent.

- Executive Oversight and Governance - Executive support for project oversight and governance activities
- Project and Change Management - Project and change management to ensure the project stays on target, on time and on budget
- Organizational Change Management Support - Support for a reasonable OCM effort for a state revenue function similar to DOR
- IV&V Support - Support for a reasonable IV&V effort for a state revenue function similar to DOR
- System Initiation and Setup - Setup of the base system to accommodate the implementation process
- Project Planning & Design - Planning and design required at project launch and potentially for each phase in order to define the scope, design and plan
- Configuration - Setup of system configurations to the base system that are required to meet DOR requirements
- Customization - Development of technology enhancements or extensions required to meet DOR requirements that cannot be configured in the base system
- Integration and Interfacing - Development of integration and interfaces
- Testing - Includes all aspects of testing including unit, business, performance, conversion and security testing.
- Technical Training - Training for DOR technical resources
- Business Training - Training for the DOR functional business areas
- Data Conversion - Includes data preparation, cleansing and conversion. A separate conversion activity should be included for each test conversion run.
- Infrastructure Installation and Support - Installation and maintenance of the technical infrastructure including servers, networks, storage and security.
- Go-Live / Rollout - Cutover to production

Vendors should also include any other major activity that requires more than 40 hours per month of resource dedication.

Vendors may include an Activity labeled "Other" in each phase, however, the total hours in the "Other" Activity cannot be more than 2% of the total hours in any month for that phase.

Rules and Guidelines For Roles

The following are the required roles to be assigned for Vendor, Vendor-Partner and Third-Party staffing. Additional Roles can be included by the Respondent.

- Executive Leadership - Executive leadership required for oversight, governance and other activities
- Tax Project Leader - Project Managers with more than 5 years of project leadership experience and full Vendor tax system implementation experience
- Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) previous full Vendor tax system implementation experience
- Project Manager - Project Managers with less than 5 years of project management experience and no previous full Vendor tax system implementation experience
- Tax Technology Architect - Technology Professionals with more than 5 years of Vendor tax technology experience with the Vendor tax system and full Vendor tax system implementation experience
- Technology Resource - Technology Professionals with less than 5 years of Vendor tax system technology experience
- Tax Configuration Expert - Configuration Professionals with more than 5 years of Vendor tax system configuration experience
- Configuration Resource - Configuration Professionals with less than 5 years of Vendor tax system configuration experience
- Sr. Tax Test Lead - Testing Professionals with more than 5 years of Vendor tax system testing experience
- Tester - Testing Professionals with less than 5 years of Vendor tax system testing experience
- Sr. Tax Training Lead - Training Professionals with more than 5 years of Vendor tax system training experience
- Trainer - Training Professionals with less than 5 years of Vendor tax system training experience

The following are the required roles to be assigned for DOR staffing. Additional Roles can be included by the Respondent.

- Executive Leadership - Executive leadership required for oversight, governance and other activities
- Tax Project Leader - Project Managers with more than 5 years of DOR project management experience
- Sr. Project Manager - Project Managers with either a) more than 5 years of project management experience or b) more than 5 years of DOR tax system project management experience
- Project Manager - Project Managers with less than 5 years of project management experience and less than 5 years of previous full DOR tax system project management experience
- Tax Technology Architect - Technology Professionals with more than 5 years of DOR tax technology experience
- Technology Resource - Technology Professionals with less than 5 years of DOR technology implementation experience
- Business Expert - DOR professionals who have broad understanding of DOR business processes across all tax types
- Correspondence Design Experts - DOR professionals who have the ability to create clear, effective, professional business documents, especially tax payer correspondence that is in accordance with DOR policy
- Sr. Business Analysts - DOR professionals with more than 8 years of DOR business analyst experience and required skills to configure business rules
- Configuration Specialists - DOR professionals who have a advanced understanding of DOR process and business rules that would enable them to lead configuration activities.
- SME - DOR business specialists across all ten business processes
- Sr. Tax Test Lead - DOR professionals with more than 8 years of DOR tax experience
- Tax Tester - Professional testers with less than 8 years of DOR tax experience
- Tax Training Lead - DOR professionals with more than 8 years of DOR tax experience
- Trainer - Professional trainers with less than 8 years of DOR tax experience

Vendors should also include any other major role that is necessary for DOR to understand the staffing requirements and expectations by role

Attachment G3

Estimated Total Project Implementation Staffing

Date For Month 1 =

Resource Team Hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DOR Hours																												
Phase 1																												
Phase 2																												
Phase 3																												
Phase 4																												
Phase 5																												
Vendor Hours																												
Phase 1																												
Phase 2																												
Phase 3																												
Phase 4																												
Phase 5																												
Vendor-Partner Hours																												
Phase 1																												
Phase 2																												
Phase 3																												
Phase 4																												
Phase 5																												
Third-Party Hours																												
Phase 1																												
Phase 2																												
Phase 3																												
Phase 4																												
Phase 5																												
Total Hours																												
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated DOR Implementation Staffing Levels

	Payment Trigger ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
PHASE 1 Activities & Roles															
Major Activity 1	PS -1														
Role 1															
Role 2															
Role 3															
Major Activity 2	PS -2														
Role 1															
Role 2															
Role 3															
Major Activity 3	PS - 2														
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 1 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 2 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 3 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 3 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 4 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															

Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 5 Hours		0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
Phase 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5		0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated Vendor Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
PHASE 1 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 1 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 3 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															

Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Major Activity 4															
Role 1															
Role 2															
Role 3															
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated Vendor-Partner Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
PHASE 1 Activities & Roles															
Vendor Partner A (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Vendor Partner B (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Vendor Partner ? (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 3 Activities & Roles															
Vendor Partner A (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Vendor Partner B (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles															
Vendor Partner A (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Vendor Partner B (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															

Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles															
Vendor Partner A (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Vendor Partner B (Vendor-Partner Name)															
Major Activity 1															
Role 1															
Role 2															
Role 3															
Major Activity 2															
Role 1															
Role 2															
Role 3															
Major Activity 3															
Role 1															
Role 2															
Role 3															
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partner A (Vendor-Partner Name)															
Vendor Partner B (Vendor-Partner Name)															
Vendor Partner ? (Vendor-Partner Name)															
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partner A (Vendor-Partner Name)															
Vendor Partner B (Vendor-Partner Name)															
Vendor Partner ? (Vendor-Partner Name)															
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partner A (Vendor-Partner Name)															
Vendor Partner B (Vendor-Partner Name)															
Vendor Partner ? (Vendor-Partner Name)															
Phase 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partner A (Vendor-Partner Name)															
Vendor Partner B (Vendor-Partner Name)															
Vendor Partner ? (Vendor-Partner Name)															
Phase 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor Partner A (Vendor-Partner Name)															
Vendor Partner B (Vendor-Partner Name)															
Vendor Partner ? (Vendor-Partner Name)															

Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment G3

Estimated Third-Party Implementation Staffing Levels

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
PHASE 1 Activities & Roles									
Third Party A (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Third Party B (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Third Party ? (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Total Phase 2 Hours	0	0	0	0	0	0	0	0	0
PHASE 3 Activities & Roles									
Third Party A (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Third Party B (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									

Role 3									
Total Phase 3 Hours	0	0	0	0	0	0	0	0	0
PHASE 4 Activities & Roles									
Third Party A (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Third Party B (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Total Phase 4 Hours	0	0	0	0	0	0	0	0	0
PHASE 5 Activities & Roles									
Third Party A (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Third Party B (Vendor-Partner Name)									
Major Activity 1									
Role 1									
Role 2									
Role 3									
Major Activity 2									
Role 1									
Role 2									
Role 3									
Major Activity 3									
Role 1									
Role 2									
Role 3									
Total Phase 5 Hours	0	0	0	0	0	0	0	0	0

Totals By Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
Phase 1	0	0	0	0	0	0	0	0	0
Third Party A (Vendor-Partner Name)									

Third Party B (Vendor-Partner Name)									
Third Party ? (Vendor-Partner Name)									
Phase 2	0	0	0	0	0	0	0	0	0
Third Party A (Vendor-Partner Name)									
Third Party B (Vendor-Partner Name)									
Third Party ? (Vendor-Partner Name)									
Phase 3	0	0	0	0	0	0	0	0	0
Third Party A (Vendor-Partner Name)									
Third Party B (Vendor-Partner Name)									
Third Party ? (Vendor-Partner Name)									
Phase 4	0	0	0	0	0	0	0	0	0
Third Party A (Vendor-Partner Name)									
Third Party B (Vendor-Partner Name)									
Third Party ? (Vendor-Partner Name)									
Phase 5	0	0	0	0	0	0	0	0	0
Third Party A (Vendor-Partner Name)									
Third Party B (Vendor-Partner Name)									
Third Party ? (Vendor-Partner Name)									

Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Month 44	Month 45	Month 46	Month 47	Month 48	Month 49	Month 50	Month 51	Month 52	Month 53	Month 54	Month 55	Month 56	Month 57	Month 58	Month 59	Month 60
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Additional Information Description	ID
	STAI - 1
	STAI - 2
	STAI - 3
	STAI - 4
	STAI - 5
	STAI - 6
	STAI - 7
	STAI - 8
	STAI - 9
	STAI - 10

Assumption Description	ID
	STA -1
	STA -2
	STA -3
	STA -4
	STA -5
	STA -6
	STA -7
	STA -8
	STA -9
	STA -10

State of Indiana RFP 17-082, Modernization Systems and Services

Attachment I - Question Submission Template

Due Date For RFP: July 12, 2017, 3:00 p.m. EST
Due Date For RFP Amendment: July 24, 2017, 3:00 p.m. EST

Respondent Name:

Please Complete

Question No.	*RFP Section and Sub-Section or Appendix and Tab Name	Page	Topic	Specific
1				
2	Please make a selection			
3	Please make a selection			
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State of Indiana RFP 17-082, Modernization Systems and Services

Attachment I - Question Submission Template

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Due Date For RFP Amendment: July 24, 2017, 3:00 p.m. EST

Respondent Name:

Please Complete

26	Please make a selection			
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53	Please make a selection			

State of Indiana RFP 17-082, Modernization Systems and Services

Attachment I - Question Submission Template

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Respondent Name:	
	Please Complete

54	Please make a selection			
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81	Please make a selection			

State of Indiana RFP 17-082, Modernization Systems and Services

Attachment I - Question Submission Template

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Respondent Name:	
	Please Complete

82	Please make a selection			
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Attachment J: DOR Confidentiality Agreement

INDIANA DEPARTMENT OF STATE REVENUE
CONFIDENTIALITY AGREEMENT

Indiana Code section 6-8.1-7-1(a) and Chapter 45 of the Indiana Administrative Code, Section 15-7, *et seq.*, make all information acquired in administering taxes confidential. Confidential tax information includes, but is not limited to, information obtained in connection with the administration of a tax or information or parameters that would enable a person to ascertain the audit selection or processing criteria of the Department for a tax administered by the Department.

It is the policy of the Indiana Department of Revenue (the "Department"), based upon law, that all information obtained by an employee of a Potential Contractor in the course of providing services to the Department of Revenue shall be considered confidential and shall not be divulged to anyone outside the Department of Revenue.

The Potential Contractor understands and agrees that data, materials, computer system code, and information disclosed to the Potential Contractor may contain confidential, proprietary, and protected information ("State Material"). The Potential Contractor covenants that State Material gathered, based upon or disclosed to the Potential Contractor for the purpose of this Contract, will not be used, nor disclosed to or discussed with third parties without the prior written consent of the State. Except as expressly permitted under this Agreement, Potential Contractor may not: (i) distribute, disseminate, sublicense, copy, modify, reverse engineer, decompile, translate, disassemble or re-create State Material or allow others to do so or (ii) use the State Material to provide software application services, time-sharing or service bureau services to third parties.

The parties acknowledge that the services to be performed by Potential Contractor for the State under this contract may require or allow access to data, materials, and information containing Social Security numbers or other personal information maintained by the State in its computer system or other records. Any subcontractor or third party to whom the Potential Contractor gives access to any State Material must have a legitimate "need to know" such State Information and shall be bound in writing to maintain the confidentiality of, and not to use, any State Material under terms and conditions less stringent than those set forth in this Agreement. In addition to the covenant made above in this section and pursuant to 10 IAC 5-3-1(4), the Potential Contractor and the State agree to comply with the provisions of IC 4-1-10 and IC 4-1-11. If any Social Security number(s) or personal information (as defined in IC 4-1-11-3) is/are disclosed by Potential Contractor, Potential Contractor agrees to pay the cost of the notice of disclosure of a breach of the security of the system in addition to any other claims and expenses for which it is liable under the terms of this contract.

Confidentiality Provisions. It is illegal to reveal or browse the following, except as authorized:

All tax return information obtained in connection with the administration of a tax. This includes information from a tax return or audit and any information about the selection of a return for audit, assessment or collection, or parameters or tolerances for processing returns.

All Indiana Department of Revenue or federal tax returns or tax return information made available, including information marked "Official Use Only". Tax returns or tax return information shall not be divulged or made known in any manner to any person except as may be needed to perform official duties.

Access to Department or federal tax information, in paper or electronic form, is only allowed for compliance or collection purposes, or otherwise permitted under 45 IAC 15-7-1.

Disclosure of return information to other employees of your department, agency, division or office, must meet statutorily defined criteria and must be required for them to perform their official duties.

Confidential information shall not be disclosed by a department employee to confirm information made public by another party or source which is part of any public record. IC 6-8.1-7-1(a).

Penalty. Violating confidentiality laws is a felony, with penalties as described:

Agency Discipline
Absence of criminal prosecution does not prevent the Department from pursuing internal sanctions for unauthorized accessing, browsing, or disclosing state or federal tax returns or tax return information.

Indiana Penalties
IC 6-8.1-7-1(a) prohibits the disclosure of any Indiana tax return or information contained in a return. Browsing is defined as examining a return or return information acquired without authorization and without a need to know the information to perform official duties. Violators of IC 6-8.1-7-1 are guilty of a Class C misdemeanor and subject to any and all fines and penalties so prescribed. State employees will be immediately dismissed from state service upon conviction.

Federal Penalties
If you willfully disclose federal tax returns or tax return information to a third party, you are guilty of a felony with a fine of $5,000 or imprisonment for five years, or both, plus prosecution costs according to the Internal Revenue Code (IRC) §7213, 26 USC 7213.

In addition, inspecting, browsing or looking at a federal tax return or tax return information without authorization is a felony violation of IRC §7213A, 26 USC 7213A, subjecting the violator to a $1,000 fine or imprisonment for one year, or both, plus prosecution costs. Taxpayers affected by violations of §7213A must be notified by the government and may bring a civil action against the federal government and the violator within two years of the violation. Civil damages are the greater of $1,000 or actual damages incurred by the taxpayer, plus the costs associated with bringing the action, 26 USC 7431.

CERTIFICATION

I acknowledge that I have read this Agreement, which is intended to help me understand applicable Indiana and Federal law related to the protection of confidential information. I understand that failure to comply with applicable law, including the laws referenced in this Agreement, may subject a violator to criminal and civil penalties.

Company:

Name:_____

Signature:_____

Title:_____

Date:_____

WITNESS

Name:_____

Signature:_____

Date:_____

State of Indiana
RFP 17-082
Revenue Modernization - Integrated Tax Systems and Services
Attachment K – Intent to Respond Form

Return this form by e-mail to Lottie Hooyer (lhooyer@idoa.IN.gov) no later than **3:00 p.m. Eastern Time on July 21, 2017.**

Company Name: _____

Contact Name: _____

Contact Title: _____

Address: _____

_____

_____

Contact Telephone: _____

Contact Email: _____

Fax: _____

Mark **one** of the following:

_____ We **do** plan to respond to this RFP with a proposal for Revenue Modernization - Integrated Tax Systems and Services

_____ We **do not** plan to respond to this RFP

Reason if no: _____

_____

_____

_____

Briefly describe your Implementation Approaches to be proposed: _____

_____

STATE OF INDIANA

Request for Proposal 17-082

ADDENDUM 1

INDIANA DEPARTMENT OF ADMINISTRATION

On Behalf Of
Indiana Department of Revenue

Solicitation For:
Revenue Modernization Integrated Tax Systems and Services

Response Due Date: September 6, 2017

Lottie Hooyer, Senior Account Manager
Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468
Indianapolis, Indiana 46204

The following is a summary of the amendments made to the RFP Documents and Attachments. Respondents must perform the comparative due diligence to ensure they understand all updates and changes. The amended documents and attachments replace the originals and must be submitted with responses if appropriate.

1. **DOR RFP – AAA – Revenue Modernization ITS 17-082**

   The RFP has been amended to include several cosmetic updates which are shown in red text. The tax table in Section 1.4 was also updated to include Diesel Inventory Tax and Supplemental Wagering Tax types.

2. **DOR RFP - Attachment B – Sample Contract**

   The Sample Contract was amended as follows:

   - Section 1, Duties of Contractor, was expanded to provide a more detailed definition.
   - Section 50 was added to provide sample contract language for Exit Assistance Services.
   - Section 51 was added to provide sample contract language for Ongoing Services.
   - Section 52 was added to provide sample contract language for Security Requirements.
   - Section 53 was added to provide sample contract language for Implementation Services.
   - Section 54 was added to provide sample contract language for Service Levels.

3. **DOR RFP – Attachment F1 – Technical Proposal – Technical and Service Level Requirements Template**

   The Technical and Service Level Requirements Template was amended as follows:

   - Eight new interfaces were added to the Interface Requirements worksheet.
   - The General Architecture worksheet was updated
   - The System Security worksheet was updated

4. **DOR RFP – Attachment F2 – Technical Proposal – Process Driven Functional Requirements Template**

   The Process Driven Functional Requirements Template was amended as follows:

   - The Instruction worksheet was updated for FRIC information
   - The FRIC – Forms, FRIC – Reports, and FRIC Interface worksheets were updated
   - The Process Disbursements and Process Payments worksheets were updated

5. **DOR RFP– Attachment F3 – Technical Proposal – Project Related Requirements Template**

The Project Related Requirements Template was amended to provide updates to the Project Related Information, Project Management, Org Change Management and Data Conversion worksheets.

6. **DOR RFP – Attachment H – Mandatory Requirements Template**

   The Mandatory Requirements Template was amended to include a single mandatory requirement.

7. **DOR RFP – Attachment L – Technology Solutions Description**

   The Technology Solutions Description was amended to provide additional information in the Interface Details section.

8. **DOR RFP – Attachment M – Technology Infrastructure Description**

   The Technology Infrastructure Description was amended to provide updates primarily to the IOT Protected Zone section

9. **DOR RFP – Attachment O-PD – Process Disbursements Business Process Detail**

   The Process Disbursements Business Process Detail was amended to provide complete process details.

10. **DOR RFP – Attachment O-PP – Process Payments Business Process Detail**

    The Process Payments Business Process Detail was amended to provide complete process details.

11. **DOR RFP – Attachment P – Project Related Requirements Detail**

    The Project Related Requirements Detail was amended to provide updates primarily to the Updated Change Management Non-Functional Requirement Area section.

12. **Initial Vendor Questions From Modernization RFP**

    This question and answer spreadsheet was amended to include 2 additional questions and answers.

STATE OF INDIANA

Request for Proposal 17-082

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Lottie Hooyer, Senior Account Manager
Indiana Department of Administration
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PROFESSIONAL SERVICES CONTRACT

EDS # _____

This Contract ("this Contract"), entered into by and between _____ (the "State") and _____ (the "Contractor"), is executed pursuant to the terms and conditions set forth herein. In consideration of those mutual undertakings and covenants, the parties agree as follows:

1. Duties of Contractor. The Contractor shall perform all commitments and requirements of this Contract, including providing all services described below (collectively the "Services"), in an effective, timely, and accurate manner and that meet or exceed all required performance standards and Service Levels, including:

(a) Implementation Services as defined in Section 56;
(b) Ongoing Services as defined in Section 51, including;
  (i) Solution Maintenance Services;
  (ii) Solution Support Services;
  (iii) Solution Upgrade Services; and
  (iv) Ongoing Improvement Services;
(d) Exit Assistance Services as defined in Section 50;
(e) any other services provided or to be provided by Contractor under this Contract (including without limitation the requirements in the RFP and RFP Response), as the same may be amended from time to time in accordance with the change control procedure; and
(f) any tasks or activities necessary, incidental, or which may reasonably be inferred, for the performance of such services.

2. Consideration. Total remuneration under this Contract shall not exceed $ _____.

3. Term. This Contract shall be effective for a period of _____. It shall commence on _____ and shall remain in effect through _____.

4. Access to Records. The Contractor and its subcontractors, if any, shall maintain all books, documents, papers, accounting records, and other evidence pertaining to all costs incurred under this Contract. They shall make such materials available at their respective offices at all reasonable times during this Contract, and for three (3) years from the date of final payment under this Contract, for inspection by the State or its authorized designees. Copies shall be furnished at no cost to the State if requested.

5. Assignment; Successors. The Contractor binds its successors and assignees to all the terms and conditions of this Contract. The Contractor shall not assign or subcontract the whole or any part of this Contract without the State's prior written consent. The Contractor may assign its right to receive payments to such third parties as the Contractor may desire without the prior written consent of the State, provided that the Contractor gives written notice (including evidence of such assignment) to the State thirty (30) days in advance of any payment so assigned. The assignment shall cover all unpaid amounts under this Contract and shall not be made to more than one party.

6. Assignment of Antitrust Claims. As part of the consideration for the award of this Contract, the Contractor assigns to the State all right, title and interest in and to any claims the Contractor now has, or may acquire, under state or federal antitrust laws relating to the products or services which are the subject of this Contract.

7. Audits. The Contractor acknowledges that it may be required to submit to an audit of funds paid through this Contract. Any such audit shall be conducted in accordance with IC §5-11-1, *et seq.*, and audit guidelines specified by the State.

The State considers the Contractor to be a "Contractor" under 2 C.F.R. 200.330 for purposes of this Contract. However, if it is determined that the Contractor is a "subrecipient" and if required by applicable provisions of 2 C.F.R. 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements), Contractor shall arrange for a financial and compliance audit, which complies with 2 C.F.R. 200.500 *et seq.*

8. Authority to Bind Contractor. The signatory for the Contractor represents that he/she has been duly authorized to execute this Contract on behalf of the Contractor and has obtained all necessary or applicable approvals to make this Contract fully binding upon the Contractor when his/her signature is affixed, and accepted by the State.

9. Changes in Work. The Contractor shall not commence any additional work or change the scope of the work until authorized in writing by the State. The Contractor shall make no claim for additional compensation in the absence of a prior written approval and amendment executed by all signatories hereto. This Contract may only be amended, supplemented or modified by a written document executed in the same manner as this Contract.

10. Compliance with Laws.

A. The Contractor shall comply with all applicable federal, state, and local laws, rules, regulations, and ordinances, and all provisions required thereby to be included herein are hereby incorporated by reference. The enactment or modification of any applicable state or federal statute or the promulgation of rules or regulations thereunder after execution of this Contract shall be reviewed by the State and the Contractor to determine whether the provisions of this Contract require formal modification.

B. The Contractor and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State as set forth in IC §4-2-6, *et seq.*, IC §4-2-7, *et seq.* and the regulations promulgated thereunder. **If the Contractor has knowledge, or would have acquired knowledge with reasonable inquiry, that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor shall ensure compliance with the disclosure requirements in IC 4-2-6-10.5 prior to the execution of this contract.** If the Contractor is not familiar with these ethical requirements, the Contractor should refer any questions to the Indiana State Ethics Commission, or visit the Inspector General's website at http://www.in.gov/ig/. If the Contractor or its agents violate any applicable ethical standards, the State may, in its sole discretion, terminate this Contract immediately upon notice to the Contractor. In addition, the Contractor may be subject to penalties under IC §§4-2-6, 4-2-7, 35-44.1-1-4, and under any other applicable laws.

C. The Contractor certifies by entering into this Contract that neither it nor its principal(s) is presently in arrears in payment of taxes, permit fees or other statutory, regulatory or judicially required payments to the State of Indiana. The Contractor agrees that any payments currently due to the State of Indiana may be withheld from payments due to the Contractor. Additionally, further work or payments may be withheld, delayed, or denied and/or this Contract suspended until the Contractor is current in its payments and has submitted proof of such payment to the State.

D. The Contractor warrants that it has no current, pending or outstanding criminal, civil, or enforcement actions initiated by the State, and agrees that it will immediately notify the State of any such actions. During the term of such actions, the Contractor agrees that the State may delay, withhold, or deny work under any supplement, amendment, change order or other contractual device issued pursuant to this Contract.

E. If a valid dispute exists as to the Contractor's liability or guilt in any action initiated by the State or its agencies, and the State decides to delay, withhold, or deny work to the Contractor, the Contractor may request that it be allowed to continue, or receive work, without delay. The Contractor must submit, in writing, a request for review to the Indiana Department of Administration (IDOA) following the procedures for disputes outlined herein. A determination by IDOA shall be binding on the parties. Any payments that the State may delay, withhold, deny, or apply under this section shall not be subject to penalty or interest, except as permitted by IC §5-17-5.

F. The Contractor warrants that the Contractor and its subcontractors, if any, shall obtain and maintain all required permits, licenses, registrations, and approvals, and shall comply with all health, safety, and environmental statutes, rules, or regulations in the performance of work activities for the State. Failure to do so may be deemed a material breach of this Contract and grounds for immediate termination and denial of further work with the State.

G. The Contractor affirms that, if it is an entity described in IC Title 23, it is properly registered and owes no outstanding reports to the Indiana Secretary of State.

H. As required by IC §5-22-3-7:

(1) The Contractor and any principals of the Contractor certify that:

(A) the Contractor, except for de minimis and nonsystematic violations, has not violated the terms of:

(i) IC §24-4.7 [Telephone Solicitation Of Consumers];

(ii) IC §24-5-12 [Telephone Solicitations]; or

(iii) IC §24-5-14 [Regulation of Automatic Dialing Machines];

in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and

(B) the Contractor will not violate the terms of IC §24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.

(2) The Contractor and any principals of the Contractor certify that an affiliate or principal of the Contractor and any agent acting on behalf of the Contractor or on behalf of an affiliate or principal of the Contractor, except for de minimis and nonsystematic violations,

(A) has not violated the terms of IC §24-4.7 in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and

(B) will not violate the terms of IC §24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.

11. Condition of Payment. All services provided by the Contractor under this Contract must be performed to the State's reasonable satisfaction, as determined at the discretion of the undersigned State representative and in accordance with all applicable federal, state, local laws, ordinances, rules and

regulations. The State shall not be required to pay for work found to be unsatisfactory, inconsistent with this Contract or performed in violation of any federal, state or local statute, ordinance, rule or regulation.

12. Confidentiality of State Information. The Contractor understands and agrees that data, materials, and information disclosed to the Contractor may contain confidential and protected information. The Contractor covenants that data, material, and information gathered, based upon or disclosed to the Contractor for the purpose of this Contract will not be disclosed to or discussed with third parties without the prior written consent of the State.

The parties acknowledge that the services to be performed by Contractor for the State under this Contract may require or allow access to data, materials, and information containing Social Security numbers maintained by the State in its computer system or other records. In addition to the covenant made above in this section and pursuant to 10 IAC 5-3-1(4), the Contractor and the State agree to comply with the provisions of IC §4-1-10 and IC §4-1-11. If any Social Security number(s) is/are disclosed by Contractor, Contractor agrees to pay the cost of the notice of disclosure of a breach of the security of the system in addition to any other claims and expenses for which it is liable under the terms of this contract.

13. Continuity of Services.

A. The Contractor recognizes that the service(s) to be performed under this Contract are vital to the State and must be continued without interruption and that, upon Contract expiration, a successor, either the State or another contractor, may continue them. The Contractor agrees to:

1. Furnish phase-in training; and
2. Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

B. The Contractor shall, upon the State's written notice:

1. Furnish phase-in, phase-out services for up to sixty (60) days after this Contract expires; and
2. Negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the State's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this Contract are maintained at the required level of proficiency.

C. The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this Contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

D. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations).

14. Debarment and Suspension.

A. The Contractor certifies by entering into this Contract that neither it nor its principals nor any of its subcontractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from entering into this Contract by any federal agency or by any department, agency or political subdivision of the State of Indiana. The term "principal" for purposes of this Contract means

an officer, director, owner, partner, key employee or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor.

B. The Contractor certifies that it has verified the state and federal suspension and debarment status for all subcontractors receiving funds under this Contract and shall be solely responsible for any recoupment, penalties or costs that might arise from use of a suspended or debarred subcontractor. The Contractor shall immediately notify the State if any subcontractor becomes debarred or suspended, and shall, at the State's request, take all steps required by the State to terminate its contractual relationship with the subcontractor for work to be performed under this Contract.

15. Default by State. If the State, sixty (60) days after receipt of written notice, fails to correct or cure any material breach of this Contract, the Contractor may cancel and terminate this Contract and institute measures to collect monies due up to and including the date of termination.

16. Disputes.

A. Should any disputes arise with respect to this Contract, the Contractor and the State agree to act immediately to resolve such disputes. Time is of the essence in the resolution of disputes.

B. The Contractor agrees that, the existence of a dispute notwithstanding, it will continue without delay to carry out all of its responsibilities under this Contract that are not affected by the dispute. Should the Contractor fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional costs incurred by the State or the Contractor as a result of such failure to proceed shall be borne by the Contractor, and the Contractor shall make no claim against the State for such costs.

C. If the parties are unable to resolve a contract dispute between them after good faith attempts to do so, a dissatisfied party shall submit the dispute to the Commissioner of the Indiana Department of Administration for resolution. The dissatisfied party shall give written notice to the Commissioner and the other party. The notice shall include: (1) a description of the disputed issues, (2) the efforts made to resolve the dispute, and (3) a proposed resolution. The Commissioner shall promptly issue a Notice setting out documents and materials to be submitted to the Commissioner in order to resolve the dispute; the Notice may also afford the parties the opportunity to make presentations and enter into further negotiations. Within thirty (30) business days of the conclusion of the final presentations, the Commissioner shall issue a written decision and furnish it to both parties. The Commissioner's decision shall be the final and conclusive administrative decision unless either party serves on the Commissioner and the other party, within ten (10) business days after receipt of the Commissioner's decision, a written request for reconsideration and modification of the written decision. If the Commissioner does not modify the written decision within thirty (30) business days, either party may take such other action helpful to resolving the dispute, including submitting the dispute to an Indiana court of competent jurisdiction. If the parties accept the Commissioner's decision, it may be memorialized as a written Amendment to this Contract if appropriate.

D. The State may withhold payments on disputed items pending resolution of the dispute. The unintentional nonpayment by the State to the Contractor of one or more invoices not in dispute in accordance with the terms of this Contract will not be cause for the Contractor to terminate this Contract, and the Contractor may bring suit to collect these amounts without following the disputes procedure contained herein.

E. With the written approval of the Commissioner of the Indiana Department of Administration, the parties may agree to forego the process described in subdivision C. relating to submission of the dispute to the Commissioner.

F. This paragraph shall not be construed to abrogate provisions of Ind. Code 4-6-2-11 in situations where dispute resolution efforts lead to a compromise of claims in favor of the State as described in that statute. In particular, releases or settlement agreements involving releases of legal claims or potential legal claims of the state should be processed consistent with Ind. Code 4-6-2-11, which requires approval of the Governor and Attorney General.

17. Drug-Free Workplace Certification. As required by Executive Order No. 90-5 dated April 12, 1990, issued by the Governor of Indiana, the Contractor hereby covenants and agrees to make a good faith effort to provide and maintain a drug-free workplace. The Contractor will give written notice to the State within ten (10) days after receiving actual notice that the Contractor, or an employee of the Contractor in the State of Indiana, has been convicted of a criminal drug violation occurring in the workplace. False certification or violation of this certification may result in sanctions including, but not limited to, suspension of contract payments, termination of this Contract and/or debarment of contracting opportunities with the State for up to three (3) years.

In addition to the provisions of the above paragraph, if the total amount set forth in this Contract is in excess of $25,000.00, the Contractor certifies and agrees that it will provide a drug-free workplace by:

A. Publishing and providing to all of its employees a statement notifying them that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

B. Establishing a drug-free awareness program to inform its employees of: (1) the dangers of drug abuse in the workplace; (2) the Contractor's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;

C. Notifying all employees in the statement required by subparagraph (A) above that as a condition of continued employment, the employee will: (1) abide by the terms of the statement; and (2) notify the Contractor of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;

D. Notifying the State in writing within ten (10) days after receiving notice from an employee under subdivision (C)(2) above, or otherwise receiving actual notice of such conviction;

E. Within thirty (30) days after receiving notice under subdivision (C)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) taking appropriate personnel action against the employee, up to and including termination; or (2) requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and

F. Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (A) through (E) above.

18. Employment Eligibility Verification. As required by IC §22-5-1.7, the Contractor swears or affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien. The Contractor further agrees that:

A. The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC §22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

B. The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

C. The Contractor shall require his/her/its subcontractors, who perform work under this Contract, to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.

The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

19. Employment Option. If the State determines that it would be in the State's best interest to hire an employee of the Contractor, the Contractor will release the selected employee from any non-competition agreements that may be in effect. This release will be at no cost to the State or the employee.

20. Force Majeure. In the event that either party is unable to perform any of its obligations under this Contract or to enjoy any of its benefits because of natural disaster or decrees of governmental bodies not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately or as soon as is reasonably possible under the circumstances give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Contract shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so affected may, by giving written notice, terminate this Contract.

21. Funding Cancellation. When the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this Contract, this Contract shall be canceled. A determination by the Director of State Budget Agency that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

22. Governing Law. This Contract shall be governed, construed, and enforced in accordance with the laws of the State of Indiana, without regard to its conflict of laws rules. Suit, if any, must be brought in the State of Indiana.

23. HIPAA Compliance. If this Contract involves services, activities or products subject to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Contractor covenants that it will appropriately safeguard Protected Health Information (defined in 45 CFR 160.103), and agrees that it is subject to, and shall comply with, the provisions of 45 CFR 164 Subpart E regarding use and disclosure of Protected Health Information.

24. Indemnification. The Contractor agrees to indemnify, defend, and hold harmless the State, its agents, officials, and employees from all third party claims and suits including court costs, attorney's fees, and other expenses caused by any act or omission of the Contractor and/or its subcontractors, if any, in the performance of this Contract. The State shall not provide such indemnification to the Contractor.

25. Independent Contractor; Workers' Compensation Insurance. The Contractor is performing as an independent entity under this Contract. No part of this Contract shall be construed to represent the creation of an employment, agency, partnership or joint venture agreement between the parties. Neither party will assume liability for any injury (including death) to any persons, or damage to any property, arising out of the acts or omissions of the agents, employees or subcontractors of the other party. The Contractor shall provide all necessary unemployment and workers' compensation insurance for the Contractor's employees, and shall provide the State with a Certificate of Insurance evidencing such coverage prior to starting work under this Contract.

26. Information Technology Enterprise Architecture Requirements. If the Contractor provides any information technology related products or services to the State, the Contractor shall comply with all IOT standards, policies and guidelines, which are online at http://iot.in.gov/architecture/. The Contractor specifically agrees that all hardware, software and services provided to or purchased by the State shall be compatible with the principles and goals contained in the electronic and information technology accessibility standards adopted under Section 508 of the Federal Rehabilitation Act of 1973 (29 U.S.C. 794d) and IC §4-13.1-3. Any deviation from these architecture requirements must be approved in writing by IOT in advance. The State may terminate this Contract for default if the Contractor fails to cure a breach of this provision within a reasonable time.

27. Insurance.

A. The Contractor and their subcontractors (if any) shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which may in any manner arise out of or result from Contractor's performance under this Contract:

1. Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than $700,000 per person and $5,000,000 per occurrence unless additional coverage is required by the State. The State is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.

2. Automobile liability for owned, non-owned and hired autos with minimum liability limits of $700,000 per person and $5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.

3. Errors and Omissions liability with minimum liability limits of $1,000,000 per claim and in the aggregate. Coverage for the benefit of the State shall continue for a period of two (2) years after the date of service provided under this Contract.

4. Fiduciary Liability is required if the Contractor is responsible for the management and oversight of various employee benefit plans and programs such as pensions, profit-sharing and savings, among others. These contractors face potential claims for mismanagement brought by plan

members. Limits should be no less than $700,000 per cause of action and $5,000,000 per occurrence.

5. Valuable Papers coverage, available under an Inland Marine policy, is required when any plans, drawings, media, data, records, reports, billings and other documents are produced or used under this agreement. Insurance must have limits sufficient to pay for the re-creation and reconstruction of such records.

6. The Contractor shall secure the appropriate Surety or Fidelity Bond(s) as required by the state department served or by applicable statute.

7. The Contractor shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the services provided under this Contract involve work outside of Indiana.

B. The Contractor's insurance coverage must meet the following additional requirements:

1. The insurer must have a certificate of authority or other appropriate authorization to operate in the state in which the policy was issued.

2. Any deductible or self-insured retention amount or other similar obligation under the insurance policies shall be the sole obligation of the Contractor.

3. The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract.

4. The insurance required in this Contract, through a policy or endorsement(s), shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.

5. The Contractor waives and agrees to require their insurer to waive their rights of subrogation against the State of Indiana.

C. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.

28. Key Person(s).

A. If both parties have designated that certain individual(s) are essential to the services offered, the parties agree that should such individual(s) leave their employment during the term of this Contract for whatever reason, the State shall have the right to terminate this Contract upon thirty (30) days' prior written notice.

B. In the event that the Contractor is an individual, that individual shall be considered a key person and, as such, essential to this Contract. Substitution of another for the Contractor shall not be permitted without express written consent of the State.

Nothing in sections A and B, above shall be construed to prevent the Contractor from using the services of others to perform tasks ancillary to those tasks which directly require the expertise of the key person. Examples of such ancillary tasks include secretarial, clerical, and common labor duties. The Contractor shall, at all times, remain responsible for the performance of all necessary tasks, whether performed by a key person or others.

Key person(s) to this Contract is/are _____

29. Licensing Standards. The Contractor, its employees and subcontractors shall comply with all applicable licensing standards, certification standards, accrediting standards and any other laws, rules, or regulations governing services to be provided by the Contractor pursuant to this Contract. The State will not pay the Contractor for any services performed when the Contractor, its employees or subcontractors are not in compliance with such applicable standards, laws, rules, or regulations. If any license, certification or accreditation expires or is revoked, or any disciplinary action is taken against an applicable license, certification, or accreditation, the Contractor shall notify the State immediately and the State, at its option, may immediately terminate this Contract.

30. Merger & Modification. This Contract constitutes the entire agreement between the parties. No understandings, agreements, or representations, oral or written, not specified within this Contract will be valid provisions of this Contract. This Contract may not be modified, supplemented, or amended, except by written agreement signed by all necessary parties.

31. Minority and Women's Business Enterprises Compliance. Award of this Contract was based, in part, on the MBE/WBE participation plan. The following certified MBE or WBE subcontractors will be participating in this Contract:

MBE/WBE	PHONE	COMPANY NAME	SCOPE OF PRODUCTS and/or SERVICES	UTILIZATION	DATE	PERCENT

A copy of each subcontractor agreement must be submitted to IDOA's MBE/WBE Division within thirty (30) days of the effective date of this Contract. Failure to provide a copy of any subcontractor agreement will be deemed a violation of the rules governing MBE/WBE procurement, and may result in sanctions allowable under 25 IAC 5-7-8. Failure to provide any subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA's MBE/WBE Division before changing the participation plan submitted in connection with this Contract.

The Contractor shall report payments made to MBE/WBE Division subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as "Pay Audit." MBE/WBE Division subcontractor payments shall also be reported to the Division as reasonably requested and in a format to be determined by Division.

32. Nondiscrimination. Pursuant to the Indiana Civil Rights Law, specifically including IC §22-9-1-10, and in keeping with the purposes of the federal Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act, the Contractor covenants that it shall not discriminate against any employee or applicant for employment relating to this Contract with respect to the hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of the employee's or applicant's race, color, national origin, religion, sex, age, disability, ancestry, status as a veteran, or any other characteristic protected by federal, state, or local law

("Protected Characteristics"). Contractor certifies compliance with applicable federal laws, regulations, and executive orders prohibiting discrimination based on the Protected Characteristics in the provision of services. Breach of this paragraph may be regarded as a material breach of this Contract, but nothing in this paragraph shall be construed to imply or establish an employment relationship between the State and any applicant or employee of the Contractor or any subcontractor.

The State is a recipient of federal funds, and therefore, where applicable, Contractor and any subcontractors shall comply with requisite affirmative action requirements, including reporting, pursuant to 41 CFR Chapter 60, as amended, and Section 202 of Executive Order 11246 as amended by Executive Order 13672.

33. Notice to Parties. Whenever any notice, statement or other communication is required under this Contract, it shall be sent by first class mail or via an established courier/delivery service to the following addresses, unless otherwise specifically advised.

A. Notices to the State shall be sent to: **(Include contact name and/or title, name of agency & address)**

_____
_____
_____
_____

B. Notices to the Contractor shall be sent to: **(Include contact name and/or title, name of vendor & address)**

_____
_____
_____
_____

As required by IC §4-13-2-14.8, payments to the Contractor shall be made via electronic funds transfer in accordance with instructions filed by the Contractor with the Indiana Auditor of State.

34. Order of Precedence; Incorporation by Reference. Any inconsistency or ambiguity in this Contract shall be resolved by giving precedence in the following order: (1) this Contract, (2) attachments prepared by the State, (3) RFP#_____, (4) Contractor's response to RFP#_____, and (5) attachments prepared by the Contractor. All attachments, and all documents referred to in this paragraph, are hereby incorporated fully by reference.

35. Ownership of Documents and Materials.

A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials (the "Materials") not developed or licensed by the Contractor prior to execution of this Contract, but specifically developed under this Contract shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.

B. Use of the Materials, other than related to contract performance by the Contractor, without the prior written consent of the State, is prohibited. During the performance of this Contract, the Contractor shall be responsible for any loss of or damage to the Materials developed for or supplied by the State and used to develop or assist in the services provided while the Materials are in the possession of the Contractor.

Any loss or damage thereto shall be restored at the Contractor's expense. The Contractor shall provide the State full, immediate, and unrestricted access to the Materials and to Contractor's work product during the term of this Contract.

36. Payments.

A. All payments shall be made thirty five (35) days in arrears in conformance with State fiscal policies and procedures and, as required by IC §4-13-2-14.8, the direct deposit by electronic funds transfer to the financial institution designated by the Contractor in writing unless a specific waiver has been obtained from the Indiana Auditor of State. No payments will be made in advance of receipt of the goods or services that are the subject of this Contract except as permitted by IC §4-13-2-20.

B. The State Budget Agency and the Contractor acknowledge that if the Contractor is being paid in advance for the maintenance of equipment and/ or software. Pursuant to IC §4-13-2-20(b)(14), Contractor agrees that if it fails to perform the maintenance required under this Contract, upon receipt of written notice from the State, it shall promptly refund the consideration paid, pro-rated through the date of non-performance.

37. Penalties/Interest/Attorney's Fees. The State will in good faith perform its required obligations hereunder and does not agree to pay any penalties, liquidated damages, interest or attorney's fees, except as permitted by Indiana law, in part, IC §5-17-5, IC §34-54-8, IC §34-13-1 and IC § 34-52-2-3.

Notwithstanding the provisions contained in IC §5-17-5, any liability resulting from the State's failure to make prompt payment shall be based solely on the amount of funding originating from the State and shall not be based on funding from federal or other sources.

38. Progress Reports. The Contractor shall submit progress reports to the State upon request. The report shall be oral, unless the State, upon receipt of the oral report, should deem it necessary to have it in written form. The progress reports shall serve the purpose of assuring the State that work is progressing in line with the schedule, and that completion can be reasonably assured on the scheduled date.

39. Public Record. The Contractor acknowledges that the State will not treat this Contract as containing confidential information, and will post this Contract on its website as required by Executive Order 05-07. Use by the public of the information contained in this Contract shall not be considered an act of the State.

40. Renewal Option. This Contract may be renewed under the same terms and conditions, subject to the approval of the Commissioner of the Department of Administration and the State Budget Director in compliance with IC §5-22-17-4. The term of the renewed contract may not be longer than the term of the original Contract.

41. Severability. The invalidity of any section, subsection, clause or provision of this Contract shall not affect the validity of the remaining sections, subsections, clauses or provisions of this Contract.

42. Substantial Performance. This Contract shall be deemed to be substantially performed only when fully performed according to its terms and conditions and any written amendments or supplements.

43. Taxes. The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract.

44. Termination for Convenience. This Contract may be terminated, in whole or in part, by the State, which shall include and is not limited to IDOA and the State Budget Agency whenever, for any reason,

the State determines that such termination is in its best interest. Termination of services shall be effected by delivery to the Contractor of a Termination Notice at least thirty (30) days prior to the termination effective date, specifying the extent to which performance of services under such termination becomes effective. The Contractor shall be compensated for services properly rendered prior to the effective date of termination. The State will not be liable for services performed after the effective date of termination. The Contractor shall be compensated for services herein provided but in no case shall total payment made to the Contractor exceed the original contract price or shall any price increase be allowed on individual line items if canceled only in part prior to the original termination date. For the purposes of this paragraph, the parties stipulate and agree that IDOA. shall be deemed to be a party to this agreement with authority to terminate the same for convenience when such termination is determined by the Commissioner of IDOA to be in the best interests of the State.

45. Termination for Default.

A. With the provision of thirty (30) days' notice to the Contractor, the State may terminate this Contract in whole or in part if the Contractor fails to:

1. Correct or cure any breach of this Contract; the time to correct or cure the breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the parties;
2. Deliver the supplies or perform the services within the time specified in this Contract or any extension;
3. Make progress so as to endanger performance of this Contract; or
4. Perform any of the other provisions of this Contract.

B. If the State terminates this Contract in whole or in part, it may acquire, under the terms and in the manner the State considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the State for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

C. The State shall pay the contract price for completed supplies delivered and services accepted. The Contractor and the State shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The State may withhold from these amounts any sum the State determines to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders.

D. The rights and remedies of the State in this clause are in addition to any other rights and remedies provided by law or equity or under this Contract.

46. Travel. No expenses for travel will be reimbursed unless specifically permitted under the scope of services or consideration provisions. Expenditures made by the Contractor for travel will be reimbursed at the current rate paid by the State and in accordance with the State Travel Policies and Procedures as specified in the current Financial Management Circular. Out-of-state travel requests must be reviewed by the State for availability of funds and for appropriateness per Circular guidelines.

47. Indiana Veteran's Business Enterprise Compliance. Award of this Contract was based, in part, on the Indiana Veteran's Business Enterprise ("IVBE") participation plan. The following IVBE subcontractors will be participating in this Contract:

VBE	PHONE	COMPANY NAME	SCOPE OF PRODUCTS and/or SERVICES	UTILIZATION	DATE	PERCENT

A copy of each subcontractor agreement shall be submitted to IDOA within thirty (30) days of the request. Failure to provide any subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA before changing the IVBE participation plan submitted in connection with this Contract.

The Contractor shall report payments made to IVBE subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as "Pay Audit." IVBE subcontractor payments shall also be reported to IDOA as reasonably requested and in a format to be determined by IDOA.

48. Waiver of Rights. No right conferred on either party under this Contract shall be deemed waived, and no breach of this Contract excused, unless such waiver is in writing and signed by the party claimed to have waived such right. Neither the State's review, approval or acceptance of, nor payment for, the services required under this Contract shall be construed to operate as a waiver of any rights under this Contract or of any cause of action arising out of the performance of this Contract, and the Contractor shall be and remain liable to the State in accordance with applicable law for all damages to the State caused by the Contractor's negligent performance of any of the services furnished under this Contract.

49. Work Standards. The Contractor shall execute its responsibilities by following and applying at all times the highest professional and technical guidelines and standards. If the State becomes dissatisfied with the work product of or the working relationship with those individuals assigned to work on this Contract, the State may request in writing the replacement of any or all such individuals, and the Contractor shall grant such request.

50. Exit Assistance Services. Contractor shall provide Exit Assistance Services so as to enable an orderly and efficient transfer to any new Contractor or the State in a manner which will minimize disruption to the State on termination or discontinuance of any or all of the Services. The Exit Assistance Services include those services or requirements described in this Section, as well as other portions of this Contract including the RFP and RFP Response.

The following are the key definitions pertaining to Exit Assistance:

Exit Assistance Notice: The notice by the State of intent to exit and specifying the Exit Assistance Period and required Exit Assistance Services;
Exit Assistance Period: The period specified in the Exit Assistance Notice during which Contractor shall provide the Exit Assistance Services subject to this Contract;
Exit Assistance Services: The Services to be provided by Contractor to the State pursuant to the Exit Assistance Notice and Exit Plan to transfer the Services to the State and/or a new Contractor;
Exit Plan: The plan to facilitate the effective transfer of Services following termination from Contractor to the State and/or a new Contractor.

No later than twelve (12) months prior to the expiration of this Contract or as early as is practical, Contractor and the State will discuss and develop an Exit Plan, setting forth the respective tasks to be accomplished by Contractor and the State in connection with the termination transition and migration and a schedule pursuant to which such tasks are to be completed and identifying whether Contractor or the State is responsible for performing and/or paying the cost related to each task. Contractor will provide reasonable cooperation with the employees of the State who will be assuming responsibility for the replacement services following the transition and migration.

Contractor shall at all times during this Contract and the Exit Assistance Period, comply with the provisions of an Exit Plan that may be developed and provide the Exit Assistance Services to the. The Exit Plan, unless agreed otherwise in writing, shall be executed upon the State's request each time any of the Services expire or are terminated. Except as agreed otherwise in the Exit Plan, the Services provided during the Exit Assistance Period shall be at the same levels as when the Services were provided during the term of this Contract.

The Exit Assistance Services will be provided for a reasonable period of time, which will be for the remaining term of this Contract and twelve (12) consecutive months beyond the expiration of the term of this Contract after termination date unless the State requests a shorter period in the Exit Assistance Notice. The State will cooperate in good faith with Contractor in connection with Contractor's obligations under this Section and will perform its obligations under the Exit Plan. If the Exit Assistance Services extend beyond the expiration of the term of this Contract or the effective date of termination of this Contract, the provisions of this Contract will remain in effect for the duration of the Exit Assistance Services and will apply to all activities conducted by the Contractor during such Exit Assistance Period. Any additional expenses to be incurred in connection with the Exit Assistance Services which Contractor intends to seek reimbursement for must be approved in advance by the State.

For so long as this Contract remains in effect and during the Exit Assistance Period, the State will pay to Contractor on a monthly basis the appropriate charges set forth in this Contract, as well as the fee for the Exit Assistance Services, as mutually agreed in writing. If the Contract is terminated due to the State's failure to timely pay undisputed amounts, then Contractor's obligation to perform Exit Assistance Services will be conditioned upon payment by the State in advance of estimated monthly amounts for the Exit Assistance Services. If the Exit Assistance Services provided by Contractor under this Contract requires personnel or other resources in excess of those resources then being provided by Contractor under this Contract, the State will pay Contractor for such personnel or additional resources at Contractor's then current billing rates. Notwithstanding anything to the contrary in this Contract, all charges to be paid by the State to Contractor, including Charges for the Exit Assistance Services, will be paid on a monthly basis.

51. Ongoing Services: Ongoing Services are subject to the Service Levels and include Solution Maintenance Services, Solution Support Services and Solution Upgrade Services, each as defined below. The Ongoing Services include those services or requirements described in this Section as well as other portions of this Contract including the RFP and RFP Response.

Solution Maintenance Services: Recurring products and services, for the implementation period and 10 years following final implementation, that are required to enable the Contractor to a) correct system errors, faults or bugs, b) improve performance, c) provide federally mandated enhancements and d) provide community based enhancements. These products and services include, but are not limited to, help desk, advisory, consulting and development services.

Solution Support Services: Recurring products and services, for the implementation period and 10 years following final implementation that are required to enable the Contractor to provide a sufficient amount of support for the State to address ongoing State driven enhancements including normal annual legislative driven enhancements. These products and services may include, but are not limited to, a dedicated State support team and on-demand support from key Contractor resources.

Solution Upgrade Services: Recurring products and services, for the implementation period and 10 years following final implementation, that are required to provide all solution related services to fully implement all upgrades (major and minor) on a schedule mutually agreed by the State and the Contractor. Contractor commits to such upgrading within 12 months of upgrade availability.

Contractor warrants it shall discharge its Ongoing Services obligations under the Contract in a proper, timely and efficient manner, using that standard of care, skill, diligence and foresight that would be expected of an expert and experienced Contractor delivering services wholly similar or partially similar to the Services.

As part of Ongoing Services, Contractor will proactively identify opportunities to implement and promptly notify the State of new or emerging technologies, processes, methods and procedures that will be advantageous to the State ("Ongoing Improvement Services"). If requested by the State, Contractor shall propose to the State such change requests as may be required in order to implement a Service Improvement.

52. Security Requirements: The State has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the State's data confidential, available, and with high integrity. The Department of Revenue systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The State uses the highest intolerance for risk in its assessment of the system and thus will insist that all security controls appropriate for a moderate-impact system be implemented. The State requires that the Contractor be compliant with such a security scheme for its system and operations because the State will be transmitting its data to the Contractor. The State will not accept any Contractor solution that does not meet the State's security requirements as specified in the NIST and IRS documents and the DOR's system requirements as itemized in the RFP Attachments.

The State will evaluate all system security models based on the State's reading of FISMA, NIST SP800-53 (Rev 4), IRS Publication 1075 (issued September 2016) and security best practices. Contractor agrees to abide by the State's interpretations of these requirements. The Contractor further agrees that new or different requirements specified in later versions of these standards can be incorporated into this contract at the State's request.

The State requires each system to provide its own data security for handling input and output by providing native encryption functions that utilize a FIPS 140-2 validated encryption algorithm.

The State utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Specific Technology Implementation Guides (STIGs) as an objective way to evaluate compliance with our security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. The implemented system must operate correctly with all requisite STIGs applied to the infrastructure and application components before customization and configuration can begin. The final release candidate for each iteration of the system must maintain its adherence to the STIGs before it can be certified for production. The State will withhold payment due without late charges or penalties at these milestones until the system is certified.

The IRS requires that Pub 1075 Exhibit 7 be incorporated into the final contract in its complete form and unchanged by the State and Contractor. Contractor agrees to the inclusion of these terms.

53. Solution Escrow: Upon the State's request, Contractor shall at its cost and expense deposit, maintain and update Source Code Materials to the Contractor software designated by the State with a third party escrow agent selected by the State to be held, released to the State, and licensed to the State in accordance

with an escrow agreement. Contractor will update the Source Code Materials escrowed with the third party escrow agent to correspond with each subsequent major and minor release of the applicable Contractor Software.

54. Solution License: Contractor hereby grants to the State a royalty-free, non-exclusive license to use Contractor Intellectual Property Rights to use the Solution, Services and all Deliverables during the term of the Contract and the Exit Assistance Period.

55. Communications and Announcements: Contractor shall not make any press release, public announcement, advertisement, promotional material or other form of publicity whatsoever concerning or referring to the State or the existence of subject matter of the Contract without the prior written approval of the State.

The provisions relating to Communications and Announcements shall continue to apply after termination.

56. Implementation Services:

Contractor shall provide the State with the Implementation Services in connection with the implementation of the Solution. The scope and contractor responsibilities for the Implementation Services will encompass, at minimum, the following services and any other services required in the RFP and RFP Proposal:

56.1. Project Management Services
Contractor will lead a structured delivery methodology that includes project initiation, project organization, budget and scope management, cost and schedule management, change control, quality assurance, stakeholder communication, issues management, risk management and status reporting.

56.2. Base Solution Installation Services
Contractor will lead the construction, implementation, configuration and validation of the Contractor Solution, including all proposed environments (e.g. development, testing, training, staging and production) to enable implementation activities requiring such environments to begin.

Contractor will install their system in the State's Protected Zone computing environment with such configurations that it is free of any category 1 (CAT-1) security findings. Any category 2 (CAT-2) security findings must be incorporated into a Security Acceptance Test Plan before any subsequent work may be done on the project. A CAT-1 finding reveals a security vulnerability the exploitation of which will compromise the confidentiality, availability, and/or integrity of the system and its data. A CAT-2 finding reveals a security vulnerability the exploitation of which may compromise the confidentiality, availability, and/or integrity of the system and its data. The Security Acceptance Test Plan consists of the tasks and priorities to monitor the progress of remediation of the CAT-2 findings and to prevent the reemergence of CAT-1 findings. The Security Acceptance Test Plan must be completed before the system can be certified for production with live taxpayer data.

56.3. Solution Configuration and Customization Services
Contractor will lead the configuration, validation and implementation of the Contractor Solution in order to enable successful implementation activities including testing, training and go-live activities.

56.4. Testing Services
Contractor will provide appropriate Testing Services to ensure services and changes are ready for deployment and implementation within the timelines agreed with the State. Contractor will provide sample test scripts which Contractor and State will utilize to build final test scripts that articulate the State business process. Contractor will provide a coordinator/testing manager and subject matter experts (SMEs) to answer questions during the State test script execution. Contractor will be responsible for all testing, with the exception of user acceptance testing, of the Services prior to Go-Live and include these tasks in the Implementation Plan. Testing will include, integration testing, unit testing, system testing, functional testing, performance testing, load testing, stress testing, regression testing relevant network and connectivity testing. Contractor will make available testing environments to the same configuration and settings as the Solution to be used in production to ensure training is delivered in a system that mirrors the production systems. Testing Environments will be subject to Service Levels and the Security Acceptance Test Plan

56.5. Training Services
Contractor will deliver Training Services to ensure the Solution, State processes and State personnel are fully prepared for deployment and implementation within timelines proposed to the State. Contractor will provide train-the-trainer and train-the-specialist classes according to training schedule.
Contractor will make available training environments to the same configuration and settings as the Solution to be used in production to ensure training is delivered in a system that mirrors the production systems. Training environments will be subject to Service Levels and the Security Acceptance Test Plan.

56.6. Data Conversion Services
Contractor will lead the successful conversion of State data from the current system provider to the Contractor System including providing the tools and techniques to efficiently execute the conversion of data.

56.7. Go-Live Disruption Minimization Services
Contractor will supply Implementation Services in a manner to help minimize the disruption to the State business of processing tax revenue during Go-Live.

56.8. Steering Committee Support Services
Contractor will participate in a project steering committee or equivalent with ability to make decisions to allocate additional Contractor resources.

56.9. IV&V Support Services
Contractor will fully support, not lead, the Independent Verification and Validation efforts of the State including appropriate meetings and reporting.

56.10. Organizational Change Management Support Services
Contractor will fully support, not lead, the change management efforts of the State including communication and messaging, change assessment, organization or operational redesign, and organizational go-live support.

56.11. Project Transition Services

Contractor will perform the Implementation Services in a manner to ensure smooth system implementation and adoption.

57. Service Levels:

Contractor shall provide the Contractor Solution, Implementation Services and Ongoing Services at or above the Service Levels defined in this Section and committed in the RFP Proposal. Where conflicts arise, this Section will take precedence.

57.1. Overview

a. This Service Level Agreement (the "**SLA**") describes the terms and conditions generally applicable to all Service Levels relating to the Contractor Solution utilized by the State and Contractor's performance of the Services under the Agreement.
b. The Service Level commitments with respect to the Contractor Solution and Services are set forth below (referred to collectively as the "**Service Levels**").
c. This SLA shall apply to production and non-production environments.
d. The Core Functionality related Service Levels are measured only for Solution environments. The Service Levels do not apply to transactions once they have left the Solution environment for third party applications / systems or vendors.
e. Contractor's failure to achieve a Service Level will result in a Service Credit as outlined in this SLA.
f. The Service Levels set forth in this SLA will commence on base installation of each environment. Calculation of the below Service Credits will begin on the first day of the calendar month falling at least thirty (30) days after the base installation of each environment.
g. Any changes to the Service Levels or this Service Level Agreement requested by either party are subject to the Change Control Procedure.
h. The Service Levels set forth in this SLA for Core Functionalities are intended to cover all material capabilities identified in the RFP and RFP Proposal which are part of this agreement. If the parties subsequently determine a capability material to the State's operations is not being measured, they will work together in good faith to determine an appropriate method to measure such capability.

57.2. Key Definitions

For purposes of this Section, the following terms shall have the meanings set forth below:

a. "**Core Functionality**" means the following individual core capabilities of the Contractor Solution including; i) Returns Processing, ii) Account Maintenance, iii) Revenue Accounting, iv) Collections, v) Process Payments, vi) Process Disbursements, vii) Customer Service and viii) Online Portal Services.

b. "**Contractor Solution**" or "**Solution**" means all core system products, capabilities, licenses and authorizations required to meet the requirements committed by the Contractor in the RFP Proposal for Implementation Services and Ongoing Services.

c. "**Measurement Period**" means the total minutes available in the calendar month being measured, minus Scheduled Maintenance time.

d. "**Resolution**" or "**Resolve**" means, the removal or other remediation of the malfunction without causing loss of functionality such that the functionality is able to meet the applicable Service Level and contractual requirements under the Agreement in all material respects. Resolution may consist of a short term service restoration that may consist of a fallback, patch, or other means that may be temporary in nature until such time that a permanent resolution can be achieved.

e. "**Response Time**" is the period measured for a Core Functionality from the time a request is received by the Contractor Solution and the time a response is provided by the Contractor Solution.

f. "**Total Ongoing Services Fee**" is the total annual Recurring Products And Services Total proposed in the Cost Proposal Template for the given year, divided by 12.

g. **"Selective Entries"** are the minimally required set of entries automatically generated by Contractor, via robotic processes, that follow the critical path of a typical user entry to successfully execute a Core Functionality.

h. "**Service Level Failure**" means a failure of Contractor to meet a Service Level.

57.3. Incident Severity Levels

During the term of this Contract, Contractor will provide the services necessary to remedy any Severity Level 1, Severity Level 2 or major impact Severity Level 3 incidents in the Solution and to acknowledge, evaluate and record any other incidents in the Solution. Fixes for Severity Level 3 and Severity Level 4 incidents will be prioritized after all Severity Level 1 and Severity Level 2 incidents are remedied. Support Services will commence promptly after the State has identified an incident with the Solution and has notified Contractor's support desk of the incident.

During the Support Term, the State will have access to a Contractor support desk twenty-four (24) hours a day, seven (7) days a week, accessible via email and/or telephone support. The support desk will be responsible for facilitating the communication and resolution of the incident.

A support desk will be responsible for logging and tracking incidents after they have been reported by the State, contacting the State's, if deemed necessary, to confirm receipt of an incident report and determining the priority level of the incident. Severity levels will be determined as follows:

Severity Level 1 Incident -	A complete loss of service for a Core Functionality. The Core Functionality is inoperable.
Severity Level 2 Incident -	A severe loss of service of a Core Functionality. Incident affects a critical business function, however, use of the Core Functionality is restriced.
Severity Level 3 Incident -	A loss of service for a Core Functionality. A workaround is available permitting some use of the Core Functionality's capability.
Severity Level 4 Incident -	Problem is minor and no loss of service for Core Functionality.

57.4. Exceptions to Service Levels

Contractor shall be excused for its failure to meet any Service Level, and no Service Credit shall be provided, if such failure is attributable to any of the following:

a. The State's failure to perform its obligations under the Agreement that affects the performance of the Contractor Solution or hinders Contractor's performance of the Services, including failure caused by the State Systems; or
b. The performance of a third party not under Contractor's control, but excluding Contractor subcontractors; or
c. Unforeseen material volumes increases (i.e., in excess of double the State's normal volumes) based on changes in the State's business operations, processes or methodology for which the State has failed to give Contractor sufficient advance written notice; or
d. For Services that are dependent on a data feed from a State System or a third party system that the State has contracted for, a faulty, bad or incomplete data feed from such State System or third party system.

However, in each case, Contractor must (i) notify the State in writing reasonably promptly of becoming aware of the issue and its impact on the Service Levels, (ii) take commercially reasonable efforts to mitigate the impact of the State's or the Third Party's acts or omissions and (iii) continue to otherwise perform in accordance with this Agreement. If Contractor claims under this exception in a situation where Service Credit would otherwise apply, the State may request that Contractor provide substantiation of the excused performance.

57.5. Scheduled Maintenance

Contractor may schedule Contractor Solution maintenance and/or modifications, Contractor Solution hardware maintenance or upgrades, facility modification and/or similar reasons ("**Scheduled Maintenance**"). Scheduled Maintenance shall occur between 6 a.m. and 10 a.m. United States Eastern Time on Sundays, and must be coordinated with State IT. Contractor will give the State at least seven (7) days advance written notice of Scheduled Maintenance and its anticipated duration; provided, however, when Scheduled Maintenance is required to resolve urgent operational requirements, Contractor will provide a minimum of twenty-four (24) hours advance written notice of the Scheduled Downtime and its anticipated duration. Any downtime that does not meet the conditions for Scheduled Downtime shall be considered unscheduled downtime and shall be counted against Contractor's obligations to meet its Service Levels. In no event will the total of all Scheduled Downtime exceed forty eight (48) hours per calendar year.

Contractor will maintain advanced knowledge of upcoming Zero Day Vulnerability Patch announcements from vendors supplying the Contractor system's Technology Stack. Contractor will also monitor reports from the National Vulnerabilities Database for any non-proprietary technology used in the system. Any vulnerability resulting in a CAT-1 security finding announced via either channel must have a repair available for implementation in the State's environments by Zero Day plus 30 days if the system is incapable for functioning correctly following application of the Zero Day patch.

57.6. Monitoring and Reports

Contractor will retain monitoring systems and/or tools for monitoring the Service Levels including automated measurement systems utilizing Synthetic Transactions. The data and

detailed supporting information contained within SLA reports shall be considered confidential information. Contractor will provide the State with the reports described below in connection with the Services.

a. Service Level Reporting - By the fifteenth (15th) day of each month, Contractor will provide the State with a performance report describing Contractor's actual performance in comparison to the Service Levels for the prior month.
b. Incident and Root Cause Analysis Reporting – Within 3 days of a Severity Level 1 Incident, Contractor will provide a Root Cause Analysis and details of steps that will be taken in order to prevent a reoccurrence of similar issues for all Severity Level 1 Incidents. As soon as reasonably possible following the occurrence of a Severity Level 1 Incident, a Critical Incident Report (the "**CIR**") will be provided containing a description of the Incident, date and timestamp, outage duration, root cause of incident, resolution/recovery actions taken and steps that will be taken to prevent a reoccurrence of similar issues.

57.7. Service Levels

Service Level Name	**Service Level Calculation**	**Service Level**	**Service Credit**
Core Functionality Availability Service Level	The Availability Service Level will be measured in relation to each Core Functionality in the production environment. The period of the "Unscheduled Outage" for Core Functionalities refers to any period that the functionality is not available to the State due to Solution failure. The period of such Unscheduled Outage shall be measured from the point in time when Contractor determines that the Unscheduled Outage began, which shall be the earlier of: • the point in time that such Unscheduled Outage is detected by Contractor through its monitoring system; or • The State reports such Unscheduled Outage to the Contractor Help Desk; or • any other manner in which Contractor has actual knowledge that the Core Functionality is not available to the State.	Availability Service Level for each Core Functionality >= 99.90%	10% for each Core Functionality that fails to meet the Service Level

Service Level Name	Service Level Calculation	Service Level	Service Credit
	The Unscheduled Outage shall end at the point in time which is earlier of: • the time Contractor registers in its monitoring system that the Core Functionality is available for the State's use; or • the State reports activity for the Core Functionality proving it is available.		
Extended Severity Level 1 Incident	Severity Level 1 Incident has occurred.	No Severity 1 Incident affecting multiple Core Functionality will continue for longer than eight (8) consecutive hours	25%
Average Response Time Service Level (Core Functionality)	The Average Response Time Service Level for Core Functionalities. The Average Response Time Service Level will be measured in relation to the Core Functionalities in the production environment using the Selective Entries, agreed by both parties, ~~used~~ to measure the Availability Service Level.	~~Average Response Time Service Level for Core Functionalities of 1 second~~Response Time Service Levels listed in the Technical Proposal, Attachment F1	~~TBD~~10%
Online Portal Availability Service Level	The percentage of time the Online Portal is available for operational use according to the following formula: Online Portal Availability = [Measurement Period – Unscheduled Outage] ÷ Measurement Period x 100% The period of the "Unscheduled Outage" for Online Portal refers to any period that the functionality is not available to the State to Solution failure. The period of such Unscheduled Outage shall be measured from the point in time when Contractor determines that	Online Portal Availability Service Level >= 99.95%	~~TBD~~ 10%

Service Level Name	Service Level Calculation	Service Level	Service Credit
	the Unscheduled Outage began, which shall be the earlier of: • the point in time that such Unscheduled Outage is detected by Contractor through its automated transactions or monitoring system; or • The State reports such Unscheduled Outage to the Contractor Help Desk; or • any other manner in which Contractor has actual knowledge that the Online Portal is not available to the State. The Unscheduled Outage shall end at the point in time which is earlier of: • the time Contractor registers in its monitoring system that the Online Portal is available for the State's use; or • the time Contractor registers traffic from the State which generates responses from the Online Portal.		
Incident Notification	For Severity Level 1 and Severity Level 2 Incidents, the average timeline in which Contractor responds following the State's reporting of such Incident via the Contractor Help Desk.	90% of Severity Level 1 Incidents responded to within 15 minutes and Severity Level 2 Incidents responded to within 30 minutes	~~TBD~~5%
Incident Resolution Time (Severity Level 1 Incidents)	Time required for Contractor to Resolve Severity Level 1 Incidents, measured from the point in time that the Severity Level 1 issue is reported by the State to the Contractor Help Desk, and continuing until (a) Contractor's monitoring systems confirm the Resolution of the relevant Incident	~~100~~80% within 4 hours of reporting	~~TBD~~20%

Service Level Name	Service Level Calculation	Service Level	Service Credit
	or (b) Contractor registers traffic from the State through the Contractor Solution.		
Incident Resolution Time (Severity Level 2 Incidents	Time required for Contractor to Resolve Severity Level 2 Incidents, measured from the point in time that the Severity Level 2 issue is reported by the State to the Contractor Help Desk, and continuing until Resolution of the relevant Incident.	80% within 12 hours of reporting	~~TBD~~5%
Help Desk Response Time	Calls placed to the Contractor Help Desk will be answered/responded to within 60 seconds	80% of calls responded to within 1 minute	~~TBD~~5%
Change Request Response	Timeline for Contractor to respond to Change Requests following receipt from the State's Change Request provided in accordance with the Change Request Process	80% responded to within 10 Business Days	~~TBD~~5%

57.8. Service Level Credit Calculation

Upon a Service Level Failure, Contractor will provide the State with the Service Level Credit(s) which shall be calculated as the product of (i) the Service Level Credit percentage allocated by the relevant Service Level set out in Section 54.7 above, multiplied by (ii) the Total Ongoing Services Fee for the month corresponding to the Measurement Period (except with respect to the Availability Service Level for Online Portal, which shall be addressed as set forth below). The foregoing calculation shall be performed for each Service Level Failure occurring in a given month. With respect to the Availability Service Level for Online Portal, the Service Level Credit shall be calculated as a product of (i) the Service Level percentage allocated by the Availability for Online Portal Service Level set out in Section 54.7 above, multiplied by 10% of the Total Ongoing Services Fee.

If a single Incident results in the failure of Contractor to meet more than one Service Level, the State shall have the right to select any one of such multiple Service Levels affected by the Incident for which it will be entitled to receive a Service Level Credit; i.e., Notwithstanding and as an exception to the above, in the event of an Incident impacting the Availability Service Level for any Core Functionality, the Service Level Credit will be provided for each Core Functionality experiencing a Service Level Failure.

57.9. Service Level Credit Settlement

Within the standard monthly reporting, Contractor shall provide information about Service Level Credits due for the preceding month. Any Service Level Credit(s) due the State will be applied to the next Total Ongoing Services Fee invoice. Service Level Credits are not redeemable for cash.

For Service Level Credits that are based on the Total Ongoing Services Fees, the maximum amount of Service Level Credits that the State may collect in any month shall in no event exceed an amount equal to ten percent (~~10~~30%) of the Total Ongoing Services Fee unless there has been an Extended Severity Level 1 Incident when the maximum Service Level Credit for the applicable month will be an amount equal to fifteen percent (~~15~~50%) of the Total Ongoing Services Fees.

57.10. Service Level Credit Offsets

In the event Contractor meets or exceeds the Expected Service Level associated with a Service Level that was the subject of a Service Level Failure in each of the three (3) months immediately following a Service Level Failure, then Contractor shall reverse the Service Level Credit or the State shall refund the Service Level Credit if previously paid by Contractor to the State for the associated Service Level Failure. If the Expected Service Level associated with a Service Level that was the subject of a Service Level Failure is not met in all of the months in such three (3) months immediately following a Service Level Failure, then no earn back is possible.

57.11. Service Level Changes

The State can request additions or changes to the Service Levels at any time via the Change Request process.

58. State Boilerplate Affirmation Clause. I swear or affirm under the penalties of perjury that I have not altered, modified, changed or deleted the State's Boilerplate contract clauses (as contained in the *2016* OAG/ IDOA *Professional Services Contract Manual*) in any way except for the following clauses which are named below: _____

Non-Collusion and Acceptance

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. **Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.**

In Witness Whereof, Contractor and the State have, through their duly authorized representatives, entered into this Contract. The parties, having read and understood the foregoing terms of this Contract, do by their respective signatures dated below agree to the terms thereof.

[Contractor]

By: _____

_____
Name and Title, Printed

Date: _____

[Indiana Agency]

By: _____

_____
Name and Title, Printed

Date: _____

Approved by:
Indiana Department of Administration

By: _____(for)
Jessica Robertson, Commissioner

Date:_____

Approved by:
State Budget Agency

By: _____ (for)
Jason D Dudich, Director

Date: _____

APPROVED as to Form and Legality:
Office of the Attorney General

_____(for)
Curtis T Hill, Jr., Attorney General

Date: _____

Approved by:
Indiana Office of Technology

By: _____ (for)
Dewand Neely, Chief Information Officer

Date: _____

Technical Proposal

RFP 17-082 Attachment F1 - Technical and Service Level Requirements Template

Instructions for this Workbook

General Requirements Instructions

The light blue shaded cells indicate information Vendors are expected to provide. The description cells answers. The additional information must be referenced in the specific worksheet line item description. (e.g. "F1 - General Questions 10.8")

Rows of appropriate data can and should be added. Columns should not be added without prior

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be

Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires

Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coding or code like development. Configuration should be accomplished by

Customization: The modification or extension of software through coding or code like development to meet the specific needs of DOR. A customization must be fully supported by the Vendor as part of the

Vendor: The primary implementer who will be responsible for their products and services as well as

Vendor-Partner: A partner of the Vendor who will provide products or services, and be managed and

Third-Party: A partner of the Vendor who will provide products or services, and be managed and

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner

C = Requirement is fully met by currently available Third-Party products and services, or through

N = Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solution cannot meet the requirement now, however, the Vendor commits to having the

P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products

X = Requirement not met and not included in the proposal.

Brief Technical Proposal Worksheet Descriptions

Hardware Specifications - This worksheet must contain a full list of all hardware equipment and software required to fully implement the proposed solution in accordance with the responses to the

Qualifying Security Requirements - This worksheet contains near mandatory requirements. The failure of a Vendor to meet substantially all of these requirements could result in a Technical Proposal score

General Architecture - A list of general architecture requirements including, but not limited to configuration, change management, base code changes, system interfaces, interface standards, file

System Security - A list of System Security including, but not limited to STIG adherence, Tech Stack vulnerability Remediation, remediation testing, identity protection, encryption standards, user

Implementation Security - A list of Implementation Security requirements including, but not limited to implementation team personnel, on-site implementation team personnel, off-site implementation
On-Premise Implementation - A list of On-Premise Implementation requirements including, but not limited to protected zone, DR/COOP, service level assignment, go live requirements, knowledge
System Availability - A list of System Availability requirements including, but not limited to uptime.
Solution Capacity - A list of System Capacity requirements including, but not limited to concurrent users, individual income tax accounts, corporate income tax accounts, trust/excise tax accounts,
Service Level Requirements - A list of Service Level Requirements including, but not limited to general service levels, response time service levels and security service levels.
System Integrity - A list of System Integrity requirements including, but not limited to audit and
Interface Requirements - A current list of various interfaces including, but not limited to, internal and
General Questions - A list of General Questions including, but not limited to conversions, enterprise service bus, scheduling of batch processing, list of 3rd party software licenses, capabilities supporting

Hardware Specifications

Operating Systems	# Processors	Ram	Disks

Qualifying Security Requirements

#	Category	Requirement	Response Code	Description/Attachment (<500 words)
Q.01	DOR's Interpretation Governs	The Vendor shall agree to all terms regarding information security as specified in the Request for Proposal 17-082 Main Document Section 2.4.J and in Tabs 2, 5, and 6 of this Attachment F3 Technical Proposal - Technical and Service Level Requirements and the following information below: The State has adopted a FISMA-based security requirement for its operations and systems due to the high need to keep the State's data confidential, available, and with high integrity. The Department of Revenue systems are classified as moderate impact systems under the Federal Information Processing Standard (FIPS) 200 risk classification model. The State uses the highest intolerance for risk in its assessment of the system and thus will insist that all security controls appropriate for a moderate-impact system be implemented. The State requires that the Contractor be compliant with such a security scheme for its system and operations because the State will be transmitting its data to the Contractor. The State will not accept any Contractor solution that does not meet the State's security requirements as specified in the NIST and IRS documents and the DOR's system requirements as itemized in the RFP Attachments. The State will evaluate all system security models based on the State's reading of FISMA, NIST SP800-53 (Rev 4), IRS Publication 1075 (issued September 2016) and security best practices. Contractor agrees to abide by the State's interpretations of these requirements. The Contractor further agrees that new or different requirements specified in later versions of these standards can be incorporated into this contract at the State's request. The State requires each system to provide its own data security for handling input and output by providing native encryption functions that utilize a FIPS 140-2 validated encryption algorithm. The State utilizes the Defense Information Security Agency's (DISA – www.disa.mil) Specific Technology Implementation Guides (STIGs) as an objective way to evaluate compliance with our security requirements. The STIGs specify secure configurations for the technology stack and secure designs for system architecture. The implemented system must operate correctly with all requisite STIGs applied to the infrastructure and application components before customization and configuration can begin. The final release candidate for each iteration of the system must maintain its adherence to the STIGs before it can be certified for production. The State will withhold payment due without late charges or penalties at these milestones until the system is certified. The IRS requires that Pub 1075 Exhibit 7 be incorporated into the final contract in its complete form and unchanged by the State and Contractor. Contractor agrees to the inclusion of these terms		
Q.02	Vendor Self Assessment	The Vendor shall obtain all Security Technical Implementation Guides (STIGs) relevant to their system, including technology stack, application design, and proposed deployment, and perform a self assessment of their ability to conform to the guidelines. (See Requirement 2.01 for instructions). The results of this self assessment are to be included in the vendors proposal response. The vendor should feel free to request assistance from the DOR Security Team by using the protocol specified by the IDOA.		
Q.03	System Components	The Vendor shall assume responsibility for each component delivered as part of his solution including those from Vendor-Partners and Third-Parties.		
Q.04	First Milestone for Payment	The Vendor assures that their system will be able to be installed in the Protected Zone with all firewall rules implemented and all STIGs applied. The Vendor also assures the installed system will perform in a fashion that can be used for configuration and customization.		

1. General Architecture

#	Category	Requirement	Response Code	Description/Attachment (<300 words)
1.01	General Architecture - Configuration (1)	The base software is configurable by DOR staff with out of the box instruction.		
1.02	General Architecture - Configuration (2)	The Vendor's license to DOR shall include the ability to stand up as many non-production instances as we require at any given time. This includes a Disaster Recovery instance at our alternate data center.		
1.03	General Architecture - Configuration (3)	The system shall limit the amount of configuration data that is stored in configuration files.		
1.04	General Architecture - Configuration (4)	Any data that must be in a Configuration File must be allowed to be encrypted without adversely affecting system operation.		
1.05	General Architecture - Change Management (1)	The Vendor shall use a defined and documented Change Management process that includes a change request and defect tracking system		
1.06	General Architecture - Change Management (2)	The Vendor shall implement a repeatable, scripted build and code migration process.		
1.07	General Architecture - Base Code Changes (1)	Vendor code changes shall not inhibit our ability to upgrade versions of your system.		
1.08	General Architecture - Base Code Changes (2)	Vendor code must remain able to receive all Infrastructure and Component security patches within the timeframe prescribed by the issuing vendor.		
1.09	General Architecture - Custom System Interfaces (1)	The system shall allow DOR staff to develop secure plug-in interfaces to custom-developed systems (e.g. Other Agencies, Agents, INBiz Registration Portal)		
1.10	General Architecture - Custom System Interfaces (2)	The Vendor system shall provide a Service Bus architecture that meets DOR's security requirements.		
1.11	General Architecture - Interface Standards (1)	The Vendor system shall accept PGP-encrypted XML Documents		
1.12	General Architecture - Interface Standards (2)	The Vendor system shall accept PGP-encrypted Fixed Length, Fixed Zone Flat ASCII Files		
1.13	General Architecture - Interface Standards (3)	The Vendor system shall accept PGP-encrypted Comma Delimited ASCII Files		
1.14	General Architecture - Interface Standards (4)	All movement of data files shall be accomplished using SFTP or HTTPS. (i.e. Shares and NFS mounts are not acceptable.)		
1.15	General Architecture - Interface Standards (5)	The Vendor system shall send a receipt for all files received from an outside party.		
1.16	General Architecture - Interface Standards (6)	The Vendor system shall send an acknowledgement for all files received from an outside party that have been accepted for processing.		
1.17	General Architecture - Interface Standards (7)	The Vendor system shall send a rejection for all files received from an outside party that have been failed to be accepted for processing.		
1.18	General Architecture - File Encryption (1)	The Vendor system shall be able to input files that have been encrypted using PGP without having to decrypt them to disk prior to processing the data in the file.		
1.19	General Architecture - File Encryption (2)	The Vendor system shall be able to output files in an encrypted format using PGP/PKI without having to encrypt them after the file closes.		
1.20	General Architecture - File Encryption (3)	All files created by the system containing FTI, PII, or PII shall be encrypted using a FIPS 140-2-validated (list available here http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140val-all.htm) service during output. (i.e. Disk-level encryption is not sufficient. Encryption after file close is not sufficient.)		
1.21	General Architecture - Web Services (1)	The Vendor system shall provide web service interfaces for standard industry needs (e.g. Taxpayer Status, Taxpayer Liabilities, Mef)		
1.22	General Architecture - Web Services (2)	The Vendor system shall accommodate web service interfaces developed by DOR for custom needs.		
1.23	General Architecture - User Interface (1)	The Vendor system shall provide a browser-based user interface supporting versions IE, Google Chrome, Firefox, and Safari that are currently supported by their Vendors. The DOR standard for its internal users is IE11.		
1.24	General Architecture - User Interface (2)	The Vendor system shall allow various user interfaces to access the same business rule processing for the same online transaction without duplicating source code.		
1.25	General Architecture - User Interface (3)	DOR may wish to expose public portal transactions to more than just the ITS Taxpayer portal. All portal transactions should be processed using the same implementation of the system's business rules regardless of their origin. (e.g. INTax-like transactions could be exposed within the ITS Taxpayer portal and the SOS INBiz portal)		
.26	General Architecture - User Interface (4)	Any user interface should automatically format to the browser on the user's device.		
1.27	General Architecture - User Interface (5)	The user interface should be brandable without having to recode it. (e.g. uses CSS or included HTML files for functionality, formatting and branding)		
1.28	General Architecture - User Interface (6)	The Vendor system shall have management consoles displaying performance indicators for various processes.		
1.29	General Architecture - Batch Processing (1)	The Vendor system shall be able to use COTS product as the job scheduler for all Batch Processing		
1.30	General Architecture - Batch Processing (2)	The Vendor system shall pre-validate incoming data prior to attempting to process it. (i.e. XML returns must adhere to schema).		
1.31	General Architecture - Batch Processing (3)	The Vendor system shall balance and report that the number of records passed from the prior process equals the number taken in by the next process		
1.32	General Architecture - Batch Processing (4)	The Vendor system shall allow for checkpoint/restart if a multi-step batch process abnormally terminates in a step?		
1.33	General Architecture - Batch Processing (5)	The Vendor system shall have the ability to bypass a bad input without having to terminate the process for the entire batch.		
1.34	General Architecture - Batch Processing (6)	The Vendor system shall save transactions that have been bypassed so they can be researched, corrected, and processed at a later time		
1.35	General Architecture - Printing (1)	All print jobs/requests shall go to an assigned print queue requested by the business user		
1.36	General Architecture - Printing (2)	All print jobs shall execute on PCL-compliant printers		
1.37	General Architecture - Printing (3)	The Vendor system shall interface to the agency's designated printing vendor using predefined printing queues.		
1.38	General Architecture - Printing (4)	All print files pushed to the printing vendor shall be PGP encrypted and use sftp for transport.		
1.39	General Architecture - Scalability	The Vendor system shall be able to execute within containers (e.g. Docker, Windows Server Containers)		

1.40	General Architecture - Deployment Specifications	The Vendor shall provide the endpoints (symbolic, e.g. DBMS Server, Application Server), protocol, and port for each interserver connection required for each system tier and component to communicate with its peers.		
1.41	General Architecture - Workflow Support (1)	The Vendor system shall contain or integrate with a configurable workflow engine that can be used to create workflows for Business Processes (e.g. Trust/Excise tax account registration)		
1.42	General Architecture - Workflow Support (2)	The Vendor system shall contain or integrate with a configurable workflow engine that can be used to create workflows for System Administration Processes (e.g. Correspondence Compliance/Editorial process)		

2. System Security

#	Category	Requirement	Response Code	Description/Attachment (<300 words)
2.01	System Security - Technology Stack STIG Adherence	The Vendor shall identify all technologies with the specific version and release employed utilized to develop and operate the application and submit the list to Indiana DOR. This is the technology stack for the application. Indiana DOR will provide the specific STIG checklists for those technologies to the Vendor. The Vendor shall conduct an assessment as to the technologies' adherence to each STIG.		
2.02	System Security - Application Architecture STIG Adherence	The Vendor shall provide to Indiana DOR a description of the architecture used to develop the application (e.g. three tier, web client). Indiana DOR will provide the specific STIG checklists for an application of that specified architecture. The Vendor shall conduct an assessment as to the application's adherence to each STIG.		
2.03	System Security - Technology Stack Vulnerability Remediation (1)	The Vendor shall maintain development partner relationship of each technology Vendor used in the technology stack so as to receive early access to security patches so that they may test the effect of applying these new patches on their application in advance of the technology Vendor's Day Zero announcement.		
2.04	System Security - Technology Stack Vulnerability Remediation (2)	The Vendor shall be able to apply any security patch for a CAT-1 vulnerability for any technology in the technology stack without adversely affecting the operation of the application in Indiana DOR's production environment by Day Zero+30.		
2.05	System Security - Technology Stack Currency	The Vendor shall keep the technology stack current by ensuring that all technologies are within two release of the current version for maintenance and enhancement releases and the current version for security releases every twelve months.		
2.06	System Security - Remediation Testing	The Vendor shall implement and regression test each change in application or technology stack in the non-production instances of the DOR system prior to implementing the update in the DOR production instance. DOR shall conduct their final acceptance regression test prior to authorizing migration to Production.		
2.07	System Security – Identity Protection (1)	All sensitive data elements (e.g. Taxpayer ID Numbers, PII) shall be redacted on all user interfaces and reports		
2.08	System Security – Identity Protection (2)	The Vendor shall not utilize data direct from the PROD instance of the system for testing purposes. All data will be thoroughly de-identified prior to use.		
2.09	System Security – Encryption Standard (1)	All data shall be encrypted using a FIPS 140-2-validated process when at rest.		
2.10	System Security - Encryption Standard (2)	All data shall be encrypted using a FIPS 140-2-validated process when in motion.		
2.11	System Security - User Authentication (1)	The Vendor system shall authenticate internal users against the State of Indiana Active Directory (SOIAD)		
2.12	System Security - User Authentication (2)	The Vendor system shall be compatible with a Single Sign-on systems of Indiana DOR's choosing. SSO system to be determined.		
2.13	System Security - User Authentication (3)	The Vendor system shall determine a user's primary system role based on the role supplied either directly by the SOIAD or from a light directory structure synchronized with the SOIAD.		
2.14	System Security - User Authentication (4)	The Vendor system shall utilize a secure synchronization protocol (e.g. SAML) for synchronizing with the SOIAD should it utilize its own light directory structure.		
2.15	System Security - User Authentication (5)	The Vendor system shall maintain a user's authentication to each component of the system once the user has been first authenticated for his session.		
2.16	System Security - User Authentication (6)	The Vendor system shall be able to authenticate constituent users of the external portal using the state's constituent authentication system (Azure B2C).		
2.17	System Security - User Authentication (7)	The Vendor system shall be able to use a federated authentication model		
2.18	System Security - User Authentication (8)	The Vendor system shall require multifactor authentication for all users		
2.19	System Security - User Authentication (9)	The Vendor system shall require multifactor authentication for all administrators		
2.20	System Security - User Authorization (1)	The Vendor system shall assign Vendor system-specific rights based on the user's primary being authenticated by the SOIAD.		
2.21	System Security – User Authorization (2)	The system shall automatically log the user out of his session after 20 minutes of inactivity.		
2.22	System Security - Risk Management (1)	The Vendor system shall require separation of duties making multiple users to complete monetary transactions		
2.23	System Security - Risk Management (2)	The Vendor system shall maintain audit trails of before and after values for each record change		
2.24	System Security - Risk Management (3)	System log files shall support the ability to roll over log files on a periodic basis		
2.25	System Security - Risk Management (5)	The Vendor system shall have thorough logging within batch processes to assist in troubleshooting.		
2.26	System Security - Risk Management (6)	The Vendor system logging debug level shall be configurable		
2.27	System Security - Risk Management (7)	The Vendor system shall log the access of each taxpayer record showing the taxpayer record UID, the DOR associate's Vendor system id, and a date-time stamp		
2.28	System Security - Risk Management (8)	The Vendor system shall log the access to DOR associate-self, DOR associate-family member, or high financial value taxpayer records and report these accesses separately		
2.29	System Security - Risk Management (9)	The Vendor system shall operate properly when antivirus software is running on all servers and workstations.		
2.30	System Security - Go Live Requirements (1)	The Vendor shall agree that before the Vendor system can be placed into production, all CAT-1 findings remediable by Vendor in entire application, Vendor system, and infrastructure are remediated or negotiated for acceptance of risk		
2.31	System Security – Go Live Requirements (2)	The Vendor shall agree that before the Vendor system can be placed into production, specified CAT-2 findings are eliminated or under Plan of Action & Milestones (POA&M). CAT-2 remediation subject to negotiation with DOR final approval.		
2.32	System Security - Go Live Requirements (4)	The Vendor shall agree that before the Vendor system can be placed into production, they will successfully complete DOR's Security Acceptance Test Plan in highest pre-prod instance		
2.33	System Security - Go Live Requirements (5)	The Vendor shall prepare and provide to DOR a NIST-compliant System Security Plan prior to going live with the system.		
2.34	System Security - Payment Processing (1)	The Vendor and system shall be PCI-DSS compliant if the system participates in the acceptance to financial account/credit card information.		
2.35	System Security - Payment Processing (2)	Regardless of participation in acceptance of account numbers, the system shall protect any account information it stores using the prescribed encryption standards.		
2.36	System Security - Payment Processing (3)	The Vendor's system shall be able to shell out to a hosted web checkout for credit card payments.		
2.37	System Security - SEIM	The vendor shall implement a security information and event management (SIEM) solution. The SIEM system shall monitor the solution for potential security events and if a security incident is discovered, it will be addressed according to the approved incident response plan.		

2.38	System Security - Data Classification	The vendor shall produce a Data Classification Document that defines the data elements related to the security and privacy controls in the Solution. The Data Classification Document is a key factor in determining the control requirements applicable for the project and detailed in the System Security Plan (SSP). The Data Classification Document shall track and monitor all data from input and output sources.		
2.39	System Security - SIEM	The system shall create log files using common industry formats that can be loaded and parsed by a Security Information and Event Management system.		

3. Implementation Security

#	Category	Requirement	Response Code	Description/Attz
3.01	Implementation Security - All Implementation Team Personnel (1)	The Vendor shall identify all personnel to be involved in the project before commencing work		
3.02	Implementation Security - All Implementation Team Personnel (2)	The Vendor shall immediately identify those personnel who permanently leave the project		
3.03	Implementation Security - All Implementation Team Personnel (3)	All currently identified personnel shall successfully complete all DOR-required annual Security/Confidentiality training. Any failure to complete by the deadline will result in suspension of the non-compliant users' network ids and a suspension of payments to Vendor until rectified		
3.04	Implementation Security - All Implementation Team Personnel (4)	Contractor network accounts shall be re-certified monthly		
3.05	Implementation Security - On-site Implementation Team Personnel (1)	All on-site Vendor personnel shall utilize Indiana DOR-issued workstations and laptops exclusively		
3.06	Implementation Security - On-site Implementation Team Personnel (2)	All on-site Vendor personnel shall exchange email with off-site workers using Indiana DOR issued email accounts		
3.07	Implementation Security - Off-site Implementation Team Personnel (1)	All off-site Vendor personnel shall work in development area(s) that conform(s) to NIST requirements		
3.08	Implementation Security - Off-site Implementation Team Personnel (2)	All off-site Vendor personnel shall use networks, email systems, development system, testing systems, workstations, and laptops governed by the Vendor's NIST-compliant security policies		
3.09	Implementation Security - Off-site Implementation Team Personnel (3)	All off-site Vendor personnel shall exchange email with on-site team using on-site team members' DOR email accounts		
3.10	Implementation Security - Off-site Implementation Team Personnel (4)	All off-site Vendor personnel shall attach to State of Indiana network using only workstations or laptops governed by Vendor's NIST-compliant security policies		
3.11	Implementation Security - Off-site Implementation Team Personnel (5)	All off-site Vendor personnel shall not share DOR remote access accounts with other off-site team members		
3.12	Implementation Security - Off-site Implementation Team Personnel (6)	All off-site Vendor personnel shall access IRS FTI data only from DOR-issued equipment		
3.13	Implementation Security - Certification of Development Area(s)	The Vendor shall submit to approval of compliance of development area(s) by DOR Security team		

4. On-Premise Implementation

#	Category	Requirement	Response Code	Description
4.01	On-Premise Implementation - Protected Zone (1)	The Vendor shall implement every instance of the application system in the Indiana Office of Technology Protected Zone (PZ)		
4.02	On-Premise Implementation - Protected Zone (2)	The Vendor shall work under IOT protocols to install and maintain the software in the PZ		
4.03	On-Premise Implementation - Protected Zone (3)	The Vendor shall provide the IOT system administrator and database administrator with all media containing executables, installation instructions and scripts 7 days prior to the scheduled installation session.		
4.04	On-Premise Implementation - Protected Zone (4)	The Vendor shall participate in all installations in person or via WebEx in on premise attendance is not viable.		
4.05	On-Premise Implementation - DR/COOP (1)	The system PROD instance shall be deployed simultaneously in the IOT Main Data Center and in the IOT Backup Data Center in order to provide critical system recovery in the case of a disaster in the Indianapolis metro area.		
4.06	On-Premise Implementation - DR/COOP (2)	The system shall accommodate asynchronous replication of taxpayer data across data centers.		
4.07	On-Premise Implementation - DR/COOP (3)	The system shall accommodate asynchronous replication of system configurations across data centers.		
4.08	On-Premise Implementation - DR/COOP (4)	The Vendor shall include this DR/COOP capability in the license for the system.		
4.09	On-Premise Implementation - Service Level Assignment Requirements	The Vendor shall be responsible for maintaining the application components only.		
4.10	On-Premise Implementation - Go Live Requirements (1)	The system shall be successfully deployed for PROD in the IOT PZ		
4.11	On-Premise Implementation - Go Live Requirements (2)	The Vendor shall be able to demonstrate compliant DR/COOP failover capabilities		
4.12	On-Premise Implementation - Knowledge Transfer (1)	The Vendor must develop and maintain central repositories or data models for managing architecture, development, business process, and infrastructure metadata such as: • Source Code Repositories (Extensions only) • Work Item Tickets and change control sets • Third Party Integration Platforms and Applications including Licensing, Modules, and version information • Operating System Names and Versions • Deployed systems dependencies • Programming Languages Used to Build and Maintain the Systems • Integrated Development Environments and Versions • Automated Build Systems (Names and Versions) • Data Stores: Names, Versions, Instance Count, Environments, Clustering, and Replication Information		
4.13	On-Premise Implementation - Knowledge Transfer (2)	The Vendor shall maintain sufficient staffing to cover knowledge gaps in DOR staff until knowledge transfer is achieved.		
4.14	On-Premise Implementation - Knowledge Transfer (3)	The Vendor shall update all documentation in DOR's system knowledgebase upon implementation of each new release of the system.		
4.15	On-Premise Implementation - Testing (1)	The Vendor shall create a repeatable, scripted baseline testing script.		
4.16	On-Premise Implementation - Testing (2)	The Vendor must utilize a security testing approach that aligns with NIST 800-115, Technical Guide to Information Security Testing and Assessment.		
4.17	On-Premise Implementation - System Audits	The Vendor shall provide all staffing resources required to assist DOR in their triennial IRS Safeguard Audits as well as all pre-audit activities conducted by DOR and the State Board of Accounts.		
4.18	On Premise Implementation - Roadmaps	The Vendor shall maintain a system roadmap to support infrastructure and technology spending decisions for a 5 year planning horizon		

5. System Availability

#	Category	Requirement	Response Code	Description/Attachment
5.01	System Availability - Uptime (1)	The Vendor system shall be available to users 24 hours per day (i.e. no requirement to take online interfaces down in order to run batch processes)		
5.02	System Availability - Uptime (2)	The Vendor system's user interface functions shall be available to internal users from 6:00am until 10:00pm Monday - Saturday		
5.03	System Availability - Uptime (3)	The Vendor system's user interface functions shall be available to public business users 24 hours per day from the 15th of each month through the end of the month		
5.04	System Availability - Uptime (4)	The Vendor system's user interface functions shall be available to public individual users from 6:00am until 12:00pm seven days per week		
5.05	System Availability - Uptime (5)	The system shall be considered as unavailable if the online response times are a factor of three (3) greater than the response time requirements in the Service Level Requirements worksheet.		

6. Solution Capacity

#	Category	Requirement	Response Code	De[illegible]io
6.01	Solution Capacity - Concurrent Users (1)	The Vendor system shall support at least 700 concurrent internal users		
6.02	Solution Capacity - Concurrent Users (2)	The Vendor system shall support at least 10000 (normal load) and 25000 (peak load) concurrent external users		
6.03	Solution Capacity - Individual Income Tax Accounts	The Vendor system shall support at least 4M individual income tax accounts with annual tax filings		
6.04	Solution Capacity - Corporate Income Tax Accounts	The Vendor system shall support at least 400K corporate income tax accounts with annual tax filings		
6.05	Solution Capacity - Trust/Excise Tax Accounts	The Vendor system shall support at least 1.6M business trust and excise tax accounts with monthly tax filings		
6.06	Solution Capacity - Income Tax Processing Load	The Vendor system shall process at least 120K income tax returns per day		
6.07	Solution Capacity - Trust/Excise Tax Processing Load	The Vendor system shall process at least 70K trust tax returns per day		
6.08	Solution Capacity - Data Retention	The Vendor system shall store data (i.e. account, filings, correspondence) for each taxpayer for 10 years		
6.09	Solution Capacity - Unlimited Software Transactions	The software license of the solution shall support an unlimited number of concurrent internal users, concurrent external users, tax accounts, tax returns and other transactions		

7. Service Level Requirements

#	Category	Requirement	Response Code	Description/A
7.01	Required Service Levels - General (1)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Concurrent User System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.02	Required Service Levels - General (2)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Individual Income Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.03	Required Service Levels - General (3)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Corporate Income Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.04	Required Service Levels - General (4)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Trust/Excise Tax Accounts System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.05	Required Service Levels - General (5)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Income Tax Processing Load System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.06	Required Service Levels - General (6)	The Vendor shall specify the infrastructure, licensing and non-Vendor software required to meet Trust/Excise Tax Processing Load System Capacity listed in the Technical Requirements 100% of the time and the Response Time service levels listed herein		
7.07	Required Service Levels - General (7)	The Vendor shall monitor performance of the Services against the Service Levels and provide CUSTOMER with performance reports, as soon as reasonably practicable and in any event within ten (10) days of the end of each month, in a mutually agreed format, specifying the: Service Levels; Provider's performance that month against each of the Service Levels, including full details of any failure to meet the Service Levels; and number of Service Credits due (if any) against each Service Level.		
7.08	Required Service Levels - General (8)	The Vendor shall provide remediation plans with respect to underperformed Service Levels and recommendations (if any) for any modifications to the Services and/or the Service Levels.		
7.09	Required Service Levels - Response Time (1)	The Vendor system shall respond to user input within 3 seconds for 99.9% of transactions		
7.10	Required Service Levels - Response Time (2)	The Vendor system shall respond to user input within 2 second for 99.8% of transactions		
7.11	Required Service Levels - Security (1)	The Vendor shall agree to comply with the requirement System Security - Technology Stack Vulnerability Remediation (2) 95% of the time		
7.12	Required Service Levels - Security (2)	The Vendor shall agree to comply with the requirement System Security - Technology Stack Currency 95% of the time		
7.13	Required Service Levels - Security (3)	The Vendor shall agree to comply with the requirement System Security - Remediation Testing 100% of the time		
7.14	Required Service Levels - Security (4)	The Vendor shall agree to comply with the requirement System Security - Identity Protection (2) 100% of the time		
7.15	Required Service Levels - Security (5)	The Vendor shall agree to update the plan described in requirement System Security - System Security Plan on an annual basis		
7.16	Required Service Levels - Security (6)	The Vendor shall agree to comply with all Implementation Security requirements 100% of the time		

8. System Integrity

#	Category	Requirement	Response Code	Description/Attachment (<300 words)
8.01	Audit & Tracking	The Vendor system shall maintain a log of all instances of a user account being employed to access taxpayer data.		
8.02	Audit & Tracking	Audit logs shall roll over on a periodic basis so their contents can be analyzed and archived without affecting system operation or retention requirements.		
8.03	Audit & Tracking	Logging shall be configurable at the component level.		
8.04	Audit & Tracking	Logging detail level shall be configurable to specify the verbosity of the messages.		

9. Interface Requirements

#	Category	Requirement	Response Code	
9.001	Interfaces - General (1)	All interfaces shall be maintained and operated in a secure fashion. File read will be decrypted in memory. Files shall be encrypted before they are written. The Vendor must also provide a utility to allow us to decrypt the file for troubleshooting.		
9.002	Interfaces - General (2)	All existing interfaces shall be implemented so as not to cause unwanted additional work (other than testing) for DOR's trading partners. Existing file formats shall be used for existing interfaces unless the partner agrees to update the interface within the ITS Modernization mandated timeframes.		
9.003	Interfaces - General (3)	The Vendor system shall provide a secure enterprise service bus (ESB) for moving files through the processing environment. Any interface not using the ESB shall move via SFTP protocol.		
9.004	ITS Application Web User Interface - Authentication	The Vendor system shall provide a web server-based user interface allowing the user to authenticate with the Vendor system.		
9.005	ITS Application Web User Interface - Authorization (1)	The Vendor system shall provide a web server-based user interface allowing the security manager to establish user roles for purposes of granting rights to specific Vendor system tasks and transactions.		
9.006	ITS Application Web User Interface - Authorization (2)	The Vendor system shall provide a web server-based user interface allowing the security manager to assign specific users to user roles.		
9.007	ITS Application Web User Interface - Configuration	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to modify or augment Vendor system configurations.		
9.008	ITS Application Web User Interface - Business Process Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute business functions made available by the Vendor system.		
9.009	ITS Application Web User Interface - Financial Process Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute financial functions made available by the Vendor system.		
9.010	ITS Application Web User Interface - Analytical Functions	The Vendor system shall provide a web server-based user interface allowing users assigned to the proper role to execute analytical functions made available by the Vendor system.		
9.011	OSS Web Service - Taxpayer Status	The Vendor system shall provide a web service allowing the MCSD OSS to obtain the compliance status of a taxpayer using the WSDL provided by DOR.		
9.012	NACHA Bank File Interface (Bank EFT)	The software shall provide the ability to generate a NACHA-format file that can be accepted by each of the Financial Institutions into which DOR deposits funds.		
9.013	INBiz Web Service - Taxpayer Standing	The Vendor system shall provide a web service allowing the SOS INBiz Vendor system to obtain the compliance status of a taxpayer using the WSDL provided by DOR.		
9.014	INBiz Web Service - Taxpayer Account	The Vendor system shall provide a web service allowing the SOS INBiz Vendor system to obtain the details of a taxpayer account using the WSDL provided by DOR.		
9.015	INBiz File - Tax Period Filings	The Vendor system shall provide web server services for Business/Excise/Trust tax returns filed via the INBiz Vendor system. These services shall be the same services as those used to service the same transactions entered via the ITS Taxpayer Portal.		
9.016	INBiz Payments	The Vendor system shall receive payments from the INBiz Payment Processing provider (VPS)		
9.017	ITS Database VRU Web Service - Taxpayer Information	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to obtain the compliance status of a taxpayer using the WSDL provided by DOR.		
9.018	ITS Database VRU Web Service - Account Status	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to obtain the status of a taxpayer account using the WSDL provided by DOR.		
9.019	ITS Database VRU File - Taxpayer Payment	The Vendor system shall provide a web service allowing the CIC IVR/VRU Vendor system to accept a payment from a taxpayer using the WSDL provided by DOR.		
9.020	ITS Application PostMasters File (Form-Driven Correspondence)	The Vendor system shall create data files for correspondence items that are formatted and printed by the state's mailing and printing vendor.		
9.021	ITS Application PostMasters File (Correspondence Letter)	The Vendor system shall create portable document files (Postscript) for correspondence items that are printed by the state's mailing and printing vendor.		
9.022	ITS Application PostMasters File (Mailing Confirmation)	The Vendor system shall accept a confirmation file from the state's mailing and printing vendor.		
9.023	ITS Application LexisNexis File	The Vendor system shall provide a file of suspect taxpayer identities and provide them to the DOR's LexisNexis interface		
9.024	ITS Application LexisNexis Response File	The Vendor system shall accept a file of suspect taxpayer identity confirmation results from the DOR's LexisNexis interface		
9.025	ITS Application GMIS File (Financial Accounting Transactions)	The Vendor system shall generate a file of Revenue Accounting transactions using the format prescribed by the state's PeopleSoft GMIS.		
9.026	ITS Application GMIS File (Direct Deposit Transactions)	The Vendor system shall generate a file of Direct Refund Deposit Totals using the format prescribed by the state's PeopleSoft GMIS.		
9.027	ITS Application GMIS File (Refund - Paper Transactions)	The Vendor system shall generate a file of Refund (paper) using the format prescribed by the state's PeopleSoft GMIS.		
9.028	Bank - Direct Deposit	The Vendor system shall generate a file of Direct Refund Deposit transactions to be sent to Bank using the format prescribed by the Bank NACHA format. Must balance to GMIS Direct deposit total.		
9.029	ITS Application GMIS File (Warrant Number - Original Transactions)	The Vendor system shall receive a file of tracking ids i.e. check numbers for paper refunds and check payments to collection agents; and the electronic deposit id for electronic collection agent payments using the format prescribed by the state's PeopleSoft GMIS.		
9.030	ITS Application GMIS File (Warrant Number - Replacement Transactions)	The Vendor system shall receive a file of replacement check numbers for paper refunds using the format prescribed by the state's PeopleSoft GMIS.		
9.031	ITS Application GMIS File (Collection agents Transactions - clerks, sheriff, collection agency)	The Vendor system shall generate a file of collection agent payments using the format prescribed by the state's PeopleSoft GMIS.		
9.032	ITS Application GMIS File (VPS rejects)	The Vendor system shall generate a file of VPS rejected payments using the format prescribed by the state's PeopleSoft GMIS.		
9.033	Bank - Direct Deposit Rejects	The Vendor system shall receive a file of Direct Refund Deposit Rejection transactions from the Bank using the format prescribed by the Bank NACHA format.		
9.034	ITS Application CIC Web Service (Taxpayer Information)	The Vendor system shall provide a web service allowing the CIC telephony Vendor system to obtain the tax account information of a taxpayer using the WSDL provided by DOR.		
9.035	ITS Application CIC Web Service (Taxpayer Information)	The Vendor system shall provide a web service allowing the CIC telephony Vendor system to accept and store the interaction ID for a taxpayer encounter using the WSDL provided by DOR.		
9.036	DOR Web User Interface (DORStor user Interaction)	The Vendor system shall provide a data context sensitive link to the DOR's Image Repository.		
9.037	IRS Modernized eFile (Electronic Returns Download & Filings)	The software shall provide an interface to the IRS Modernized eFile (MeF) system		
9.038	IRS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)	The software shall receive file through an interface to IRS Secure Data Facility (SDT) system. Includes IMF, ITRF, BMF, BTRF, INFR, CP2000, EOAD, PITFR, STATE_LEADRPT_X		

9.039	IRS Secure Data Transfer File (GLDEP files via IRS Secure Data Facility)	The software shall created files and interface to IRS through IRS Secure Data Facility (SDT) system		
9.040	Imaging ITS Database XML File	The software shall accept XML Payment and Return files from the DOR imaging systems.		
9.041	Imaging ITS Database ASCII File	The software shall accept ASCII Payment and Return files from the DOR imaging systems.		
9.042	External Agency XML File - SSA	The Vendor system shall accept files from the Social Security Administration using the SSA's prescribed format		
9.043	External Agency File (92 County Clerks – Warrant Recording Number)	The Vendor system shall create files to be sent to County Clerks to request Entries of Judgement against delinquent taxpayers and to provide warrant numbers for recording using DOR's required file format.		
9.044	External Agency File (County Clerks - Warrant Recording Number)	The Vendor system shall receive files from County Clerks verifying Entries of Judgement against delinquent taxpayers and recording of warrant numbers.		
9.045	External Agency File (County Clerks - Warrant Sat of Lien)	The system shall create Satisfiaction of Lien files to send to County Clerks releasing Entries of Judgement against delinquent taxpayers and recording of warrant numbers.		
9.046	External Agency File (70 County Sheriffs - Warrant Status)	The Vendor system shall create files to be sent to County Sheriffs placing tax warrants into their jurisdictions for collection by them.		
9.047	External Agency File (County Sheriffs - Warrant Status)	The Vendor system shall receive files from County Sheriffs reporting status or changes of tax warrants placed into their jurisdictions for collection by them.		
9.048	External Agency File (County Sheriffs - Warrant Status)	The Vendor system shall receive files from County Sheriffs reporting payments or payment plans on tax warrants placed into their jurisdictions for collection by them.		
9.049	External Agency File (Third Party Collection Agent - Warrant Status)	The Vendor system shall create files to be sent to Third Party Collection Agents placing tax warrants for collection by them.		
9.050	External Agency File (Third Party Collection Agent - Warrant Status)	The Vendor system shall receive files from Third Party Collection Agents reporting status or changes of tax warrants placed for collection by them.		
9.051	External Agency File (Informatix Bank Account Request)	The Vendor system shall request files from Informatics identifying Taxpayers we would wish to know their Bank Accounts.		
9.052	External Agency File (Informatix Bank Account Data)	The Vendor system shall receive files from Informatics identifying Bank Accounts that could be levied.		
9.053	External Agency File (Address Standardization)	The Vendor system shall interface with an Address Standardization provider		
9.054	External Agency File (Address Validation)	The Vendor system shall interface with an Address Validation (NCOA) provider		
9.055	External Agency File (Bulk Returns Filings)	The Vendor system shall provide the ability for pre-approved external entities (e.g. Payroll Providers, Retirement Plans) to upload tax filings for their clients.		
9.056	External Agency File (Federal Court System)	The software shall accept a file from the Public Access to Court Electronic Records (PACER) system (www.pacer.gov) using the PACER XML format.		
9.057	External Agency File (IRS - Federal Offset Levy - Candidates)	The Vendor system shall accept a IRS file of available Federal Taxpayer Debts using the DOR's prescribed file format.		
9.058	External Agency File (IRS - Federal Offset Levy - Refunds)	The Vendor system shall create a file of available Taxpayer Tax Refund Offset Amounts for the IRS (Exchange through EFTPS) using the DOR's prescribed file format.		
9.059	External Agency File (IRS - Federal Offset Levies Confirmation)	The Vendor system accept a Confirmation file of Indiana Taxpayer Tax Refund Offset Amounts for the IRS using the DOR's prescribed file format.		
9.060	External Agency File (IRS - Federal Offset Levies Acknowledgement)	The Vendor system accept a acknowledgment file of Indiana Taxpayer Tax Refund Offset Amounts for the IRS using the DOR's prescribed file format.		
9.061	External Agency File (IRS - State Offset Request - FMS/TOP program)	The Vendor system shall create a file of requests and updates for Indiana Liabilities Amounts for the IRS using the FMS/TOP's prescribed file format.		
9.062	External Agency File (IRS - Federal Offset Reply - Unprocessable)	The Vendor system shall receive a file of Unprocessable using the FMS/TOP's prescribed file format.		
9.063	External Agency File (IRS - Federal Offset Reply - Payments/Reversal)	The Vendor system shall receive a file of payments and reversals using the FMS/TOP's prescribed file format.		
9.064	External Agency File (IRS - State Offset)	The Vendor system shall create a file of available Taxpayer Tax Refund Offset Amounts from the IRS using the DOR's prescribed file format.		
9.065	External Agency File (Opay - Payment)	The Vendor system shall accept an ASCII payments file from Official Payments for processing.		
9.066	Internal Agency File (DWD - Employer Employee Census & Withholding)	The Vendor system shall accept from the Department of Workforce Development a file containing reports from employers as to their employee census and their income tax withholding using DOR's prescribed file format.		
9.067	Internal Agency File (BMV - Title Lien Request)	The Vendor system shall create a file of delinquent taxpayers for evaluation of lienable assets by the Bureau of Motor Vehicles using DOR's prescribed file format.		
9.068	Internal Agency File (BMV - Title Lien Proposal)	The Vendor system shall accept a file of taxpayer lienable assets from the Bureau of Motor Vehicles using the BMV's prescribed file format.		
9.069	Internal Agency File (BMV - Title Lien)	The Vendor system shall create a file of lien requests using the DOR's prescribed file format.		
9.070	Internal Agency File (BMV - Address Changes) ???	The Vendor system shall accept a file of taxpayer address changes derived from changes to a taxpayer's BMV account using the prescribed format.		
9.071	Internal Agency File (BMV - Motor Vehicle Rental Excise filing)	The Vendor system shall create a file of Motor Vehicle Rental Excise taxpayer return filing for the BMV using DOR's prescribe format.		
9.072	Internal Agency File (JTAC)	The Vendor system shall create a file Taxpayer filing Individual income tax returns for the last 12 months to Jury Pool selection using the DOR's prescribed file format.		
9.073	Internal Agency File (DCR - Child Support)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from DCR - Child Support to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.074	Internal Agency File (DCR - Child Support)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for DCR - Child Support using the DOR's prescribed file format.		
9.075	Internal Agency File (DCR - Child Support)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for DCR - Child Support to apply to debts using the DOR's prescribed file format.		
9.076	Internal Agency File (DCR - Child Support)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for DCR – Child Support using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.077	Internal Agency File (FSSA - CCDF)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Child Care Development Fund to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.078	Internal Agency File (FSSA - CCDF)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for FSSA - Child Care Development Fund using the DOR's prescribed file format.		
9.079	Internal Agency File (FSSA - CCDF)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for FSSA - Child Care Development Fund to apply to debts using the DOR's prescribed file format.		
9.080	Internal Agency File (FSSA - CCDF)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA - Child Care Development Fund using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		

9.081	Internal Agency File (FSSA - TANF)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Temporary Assistance for Needy Family to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.082	Internal Agency File (FSSA - TANF)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for FSSA - Temporary Assistance using the DOR's prescribed file format.		
9.083	Internal Agency File (FSSA - TANF)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for FSSA - Temporary Assistance to apply to debts using the DOR's prescribed file format.		
9.084	Internal Agency File (FSSA - TANF)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA - Temporary Assistance using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.085	Internal Agency File (FSSA - SNAP)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from FSSA - Supplemental Nutrition Assistance Program to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.086	Internal Agency File (FSSA - SNAP)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for FSSA - Supplemental Nutrition Assistance Program using the DOR's prescribed file format.		
9.087	Internal Agency File (FSSA - SNAP)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for FSSA -Supplemental Nutrition Assistance Program to apply to debts using the DOR's prescribed file format.		
9.088	Internal Agency File (FSSA - SNAP)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for FSSA – Supplemental Nutrition Assistance Program using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.089	Internal Agency File (DWD - IDET)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from DWD for employment taxes to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.090	Internal Agency File (DWD - IDET)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for DWD using the DOR's prescribed file format.		
9.091	Internal Agency File (DWD - IDET)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for DWD to apply to debts using the DOR's prescribed file format.		
9.092	Internal Agency File (DWD - IDET)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for DWD using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.093	Internal Agency File (JTAC)	The Vendor system shall receive a file of Outstanding Court Fees Amount requests (candidates) from JTAC to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.094	Internal Agency File (JTAC)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for JTAC using the DOR's prescribed file format.		
9.095	Internal Agency File (JTAC)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for JTAC to apply to debts using the DOR's prescribed file format.		
9.096	Internal Agency File (JTAC)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for JTAC using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.097	Internal Agency File (INDOT)	The Vendor system shall receive a file of Taxpayer Debt Amount requests (candidates) from INDOT for damages to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.098	Internal Agency File (INDOT)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for INDOT using the DOR's prescribed file format.		
9.099	Internal Agency File (INDOT)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for INDOT to apply to debts using the DOR's prescribed file format.		
9.100	Internal Agency File (INDOT)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for INDOT using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.101	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall receive a file of Unpaid Student Debt Amount requests (candidates) from Purdue University (PU) to be offset by Taxpayer refunds using the DOR's prescribed file format.		
9.102	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for University using the DOR's prescribed file format.		
9.103	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Amount for University to apply to debts using the DOR's prescribed file format.		
9.104	Internal Agency File (Universities - PU, IU, ISU, VU, IVT, IUPUI)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of Taxpayer Refunds for University using the DOR's prescribed file format. The file must reconcile to the intercepted monies transferred to the agency.		
9.105	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall receive a file of Unpaid Property Tax Debt Amount requests (candidates) from External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) to use to evaluate eligibility using the DOR's prescribed file format.		
9.106	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall create a files of possible intercept Taxpayer Refund Amounts for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) Debt using the DOR's prescribed file format.		
9.107	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall receive a file approval/changes/releases of intercepts for Taxpayer Refund Income Amount for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)o using the DOR's prescribed file format.		
9.108	External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC)	The Vendor system shall create a notification/reconciliation file from the approval/changes/releases of refunds of Taxpayer Refund amounts for External Agency File (Indiana Assoc. of Counties (debt setoff clearinghouse) (IAC) using the DOR's prescribed file format. The file must reconcile to the refund monies transferred to the agency.		
9.109	Internal Agency - Auditor of State, Indiana State Department of Health, Dept. of Workforce Development. D.O.C., INDOT, Indiana Arts Commission, Department of Education, Hospitals, State Personnel Department)	The Vendor system shall receive a file taxpayer applying for grants, procurements, contract for check of outstanding debt with DOR using the DOR's prescribed file format.		
9.110	Internal Agency - Auditor of State, Indiana State Department of Health, Dept. of Workforce Development. D.O.C., INDOT, Indiana Arts Commission, Department of Education, Hospitals, State Personnel Department)	The Vendor system shall create a file taxpayer responses for taxpayer's applying for grants, procurements, contract of standing \with DOR using the DOR's prescribed file format.		
9.111	Internal Agency File (PLA - License Renewal Requests)	The Vendor system shall accept a file of professional license new and renewal requests from the Professional Licensing Agency using the prescribed format.		
9.112	Internal Agency File (PLA - License Renewal Protest)	The Vendor system shall create list of the PLA licenses that have been protested using the prescribed format.		
9.113	Internal Agency File (PLA - License Renewal Clearances)	The Vendor system shall create list of the PLA licenses that have been cleared using the prescribed format.		
9.114	Internal Agency File (ATC - License Renewal Requests)	The Vendor system shall accept a file of alcoholic beverage license renewal requests from the Alcoholic Beverage Commission using the prescribed format.		
9.115	Internal Agency File (ATC - License Renewal Protest)	The Vendor system shall create list of the ATC licenses that have been protested using the prescribed format.		
9.116	Internal Agency File (ATC - License Renewal Clearances)	The Vendor system shall create list of the ATC licenses that have been cleared using the prescribed format.		
9.117	Internal Agency File (HPA - License Renewal Requests)	The Vendor system shall accept a file of health professional license renewal requests from the Health Professions Licensing Agency using the prescribed format.		
9.118	Internal Agency File (HPA - License Renewal Protest)	The Vendor system shall create list of the HPA licenses that have been protested using the prescribed format.		
9.119	Internal Agency File (HPA - License Renewal Clearances)	The Vendor system shall create list of the HPA licenses that have been cleared using the prescribed format.		

9.120	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall accept a list of prospective Lottery retailers from the Hoosier Lottery for determination that each is registered to collect the taxes appropriate for a retail business.		
9.121	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall create list of the Lottery retailers that have been protested using the prescribed format.		
9.122	Internal Agency File (Hoosier Lottery - Retailers)	The Vendor system shall create list of the Lottery retailers that have been cleared using the prescribed format.		
9.123	Internal Agency File (State Universities - Concessionaire Verification)	The Vendor system shall accept a file of business taxpayer identifiers from each state university for use to determine that each is in tax compliance with the DOR.		
9.124	Internal Agency File (State Universities - Concessionaire Verification) Universities: IU, PU, BSU, IVT, USI)	The Vendor system shall create list of the retailers that have been protested using the prescribed format.		
9.125	Internal Agency File (State Universities - Concessionaire Verification) Universities: IU, PU, BSU, IVT, USI)	The Vendor system shall create list of the retailers that have been cleared using the prescribed format.		
9.126	Internal Agency File (FSSA Social Services Data Warehouse)	The Vendor system shall create a files of Taxpayer Refund Amounts for FSSA Social Services Data Warehouse for FSSA interface with Federal programs using the DOR's prescribed file format.		
9.127	Internal Agency File (Hoosier Lottery)	The Vendor system shall generate a file of delinquent taxpayers for DOR and external agencies involved in the refund offset and provide it to the Hoosier Lottery.		
9.128	Internal Agency File (ISDH - Death Certificate File)	The Vendor system shall receive a file of death certificates from the Indiana State Department of Health using the prescribed format.		
9.129	Internal Agency File (IEDC - EDGE Credits)	The Vendor system shall receive a file of EDGE, EDGE-R, HBI and HBIL Credits taken by taxpayers for use by the Indiana Economic Development Corporation in managing their development contracts using the defined format.		
9.130	Internal Agency File (IHCDA -NAP Credits)	The Vendor system shall receive a file of Neighborhood Assistance Program Credits taken by taxpayers for use by the Indiana Housing and Community Development Authority in managing their development contracts using the defined format.		
9.131	Internal Agency File Ascensus)	The Vendor system shall receive a file of Collect Choice (529) Credits which taxpayers made for use as a tax credit using DORs prescribe the defined format.		
9.132	Internal Agency File (College Saving)	The Vendor system shall receive a file of Collect Choice (529) Credits which taxpayers made for use as a tax credit using DORs prescribe the defined format.		
9.133	Internal Agency File (IESA -Collect Choice Credits)	The Vendor system shall create a file of Collect Choice (529) Credits taken by taxpayers for use by the Indiana Education Savings Authority in managing their grants using the defined format.		
9.134	Internal Agency Request (SOS)	The Vendor system shall make and process a request from the INBiz Vendor system for non-public information pertaining to a business' registration standing in the state.		
9.135	Internal Agency Request (GIS)	The Vendor system shall make and process a request to the state's Geographic Information Vendor system to geo-code taxpayer locations.		
9.136	Streamlined Sales Tax Registration Clearinghouse	The Vendor system shall provide an interface to the Streamlined Sales Tax Clearinghouse to manage registrations and electronic payments and filings of retail sales tax.		
9.137	Streamlined Sales Tax Returns/Payments	The Vendor system shall provide an interface for accepting electronic payments and filings of retail sales tax.		
9.138	ITS Taxpayer Portal – Business Taxpayers	The Vendor system shall provide a portal Vendor system exposing taxpayer account maintenance, account inquiry, tax filing, and tax payment functions to business taxpayers.		
9.139	ITS Taxpayer Portal - Individual Taxpayers	The Vendor system shall provide a portal Vendor system exposing taxpayer account maintenance, tax account inquiry, and tax payment functions to individual taxpayers.		
9.140	ITS Tax payment Portal – Credit/Debit Payment Processor	The Vendor system shall use the state's preferred Credit/Debit Payment Processor for collecting payments made by credit/debit card.		
9.141	ITS Tax payment Portal - VPS Payment and Payment Rejection	The Vendor system shall use the VPS interface for collecting payments made by eCheck or Credit cards transactions.		
9.142	ITS Tax payment Portal - eCheck Payment Processor	The Vendor system shall use the ITS's Bank interface for collecting payments made by eCheck or ACH Debit transactions.		
9.143	VPS Payment Files (RPE)	The Vendor system shall receive VPS -credit card and ACH debit (echeck) payment file from VPS using the prescribe formats.		
9.144	Bank Payment Files	The Vendor system shall receive NACHA payment files (ACH Credit) from the States financial institutions.		
9.145	Tax Knowledgebase	The Vendor system shall generate a context-sensitive link allowing the user to access the DOR's Tax Wiki in order to obtain tax information for reference while processing a transaction.		
9.146	External Agency File (Payroll Vendor Filing Verification Requests) (ADP/PayCheck/Paycor)	The system shall receive a file of customers of Payroll Vendor that are Indiana Withholding Taxpayers to verify Indiana filing frequencies and ids using the DOR's prescribed file format.		
9.147	External Agency File (Payroll Vendor Filing Verification Responses) (ADP/PayCheck/Paycor)	The system shall create a files verify Indiana filing frequencies and ids to be returned to Payroll Vendor using the DOR's prescribed file format.		
9.148	Internal Agency Request (OAG)	The system shall create reports/files (PACT) for the Office of Attorney General.		
9.149	ITS Registration/Liability Portal - MCS	The system shall use the Webservice to verify taxpayer registrations, and outstanding debts status, including payments on debts.		
9.150	External Agency File (Collection Agent) Out-of-Business and Skip filers	The system shall accept files of Taxpayer's that are 'Out of Business' and Skip filers using the DOR's prescribed file format.		
9.151	External Agency File (Fuel Tax Exchange) (KY, TN, OH, IL)	The system shall exchange a spead sheet file of state fuel tax with Indiana and surrounding states.		
9.152	External EDI files	The system shall receive a file of return files for taxpayer and 3rd agent filing on behalf of taxpayers using the DOR's prescribed file format.		

10. General Questions

#	Inquiry	Description/Attachment (<300 words)
10.01	We will be migrating primarily from an Accenture Tax Processing System that went live in 2000. Do you have experience converting from this system?	
10.02	Please describe your capabilities for supporting Adaptive technologies. (e.g. ADA, Sec. 508)	
10.03	Please describe all compatible ESB's that can interface with your system?	
10.04	Describe how any COTS software licenses will handled? Also provide a list of all 3rd party software licenses required for your system.	
10.05	Please describe batch processing in your system and your requirements for the scheduling system to manage it.	
10.06	Provide a list and description of innovative capabilities that will be included in the scope of your ITS implementation.	
10.07	Provide a list and description of requirements not listed in this RFP that will be included in the scope of your ITS implementation.	
10.08	Please provide a list of all phone systems(e.g. genesys, aspect) that you have integrated with your system? Also please describe all the capabilities that your system has with the integrated phone systems?	

Technical Proposal

RFP 17-082 Attachment F2 - Process Driven Functional Requirements Template

Instructions for this Workbook

General Requirements Instructions
The light blue shaded cells indicate information Vendors are expected to provide. The description cells should be limited to 300 words or less
Additional information can be provided beyond what is included in the worksheet descriptions or answers. The additional information must be referenced in the specific worksheet line item description.
Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be fulfilled by a future state ITS.
Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires to be fulfilled by a future state
Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coding or code like development. Configuration should be accomplished by functional resources without the need for programming experience.
Customization: The modification or extension of software through coding or code like development to meet the specific needs of DOR. A customization must be fully supported by the Vendor as part of the solution.
Vendor: The primary implementer who will be responsible for their products and services as well as Vendor-Partner products and
Vendor-Partner: A partner of the Vendor who will provide products or services, and be managed and contracted by the Vendor.
Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DOR.

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner products and services.
C = Requirement is fully met by currently available Third-Party products and services, or through current Customization.
N = Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solution cannot meet the requirement now, however, the Vendor commits to having the capability to meet the appropriate implementation timeline.
P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products and services.
X = Requirement not met and not included in the proposal.

Brief Technical Proposal Worksheet Descriptions

Process Diagram - Process overview diagram
FRIC - Complexity Definitions - Definitions of simple, medium, complex and very complex complexity levels for the FRIC (Forms, Reports, Interfaces, Conversions) documents
FRIC - Forms - List of forms from business process workshops
FRIC - Reports - List of reports from business process workshops
FRIC - Interface - List of interfaces from business process workshops
Taxpayer Registration -Defines the activities for DOR including but not limited to, create and maintain taxpayer registrations, as well as licensing and bonding, for all tax types.
Correspondence - Defines the activities for DOR including but not limited to, generate and contact taxpayers regarding the status of their accounts and to track the history of correspondence between DOR and the taxpayer.
Account Maintenance - Defines the activities for DOR including but not limited to, manage account correspondence, to load and process external offsets (e.g. unemployment, child support, or comptroller offsets), to manually post adjustments and perform clearance of open items, and to process penalties and interest. Also defines the activities for DOR to review and approve overpayment and to process fraudulent activity. Finally, also defines the activities to manage postings on an entity's account.
Revenue Accounting and Distribution - Defines the activities for DOR including but not limited to, create distribution rules, to process estimated and final distributions, to make accounting transfers and adjustments, to create and maintain General Ledger master data and bank master data and to reconcile these balances, and to perform closing.
Taxpayer Self Service - Defines the activities including but not limited to, entity self-service through profile log-in and account maintenance after online registration (the activities for which are also defined in this process). Also defines activities that an entity can complete through online self-service: online filings, online payments, and viewing history.
Customer Service - Defines the activities for DOR including but not limited to, process customer correspondence in the form of fax, email, text (SMS), or mail, to manage customer calls, and to manage follow-up activities, the call center workforce, and the service

Collections Activities - Defines the activities including but not limited to, capture debts owed to DOR, through outstanding tax payments and license/bond fees. This includes activities that are both automated and outsourced from discovery to taxpayer contact
Process Distribution - Defines the activities including but not limited to, process refunds, disbursements, check management, and
Process Payments - Defines the activities including but not limited to, post payments by using payment lots, identify and process taxpayer payments returned by bank, clear open items against corresponding payments, and calculate appropriate penalty and interest
Manage Case Activities - Defines the activities to initiate, execute, and close cases escalated within DOR, including but not limited to appeals, audit, bankruptcy, collections, fraud, internal affairs, investigations, and taxpayer advocate.
Process Submissions - Defines the activities for DOR including but not limited to, process submission of tax returns, loading returns into the system, verifying their accuracy, and processing the returns and exceptions.
Worklist - Defines the activities including but not limited to, generate and maintain work items along with their attributes in task-

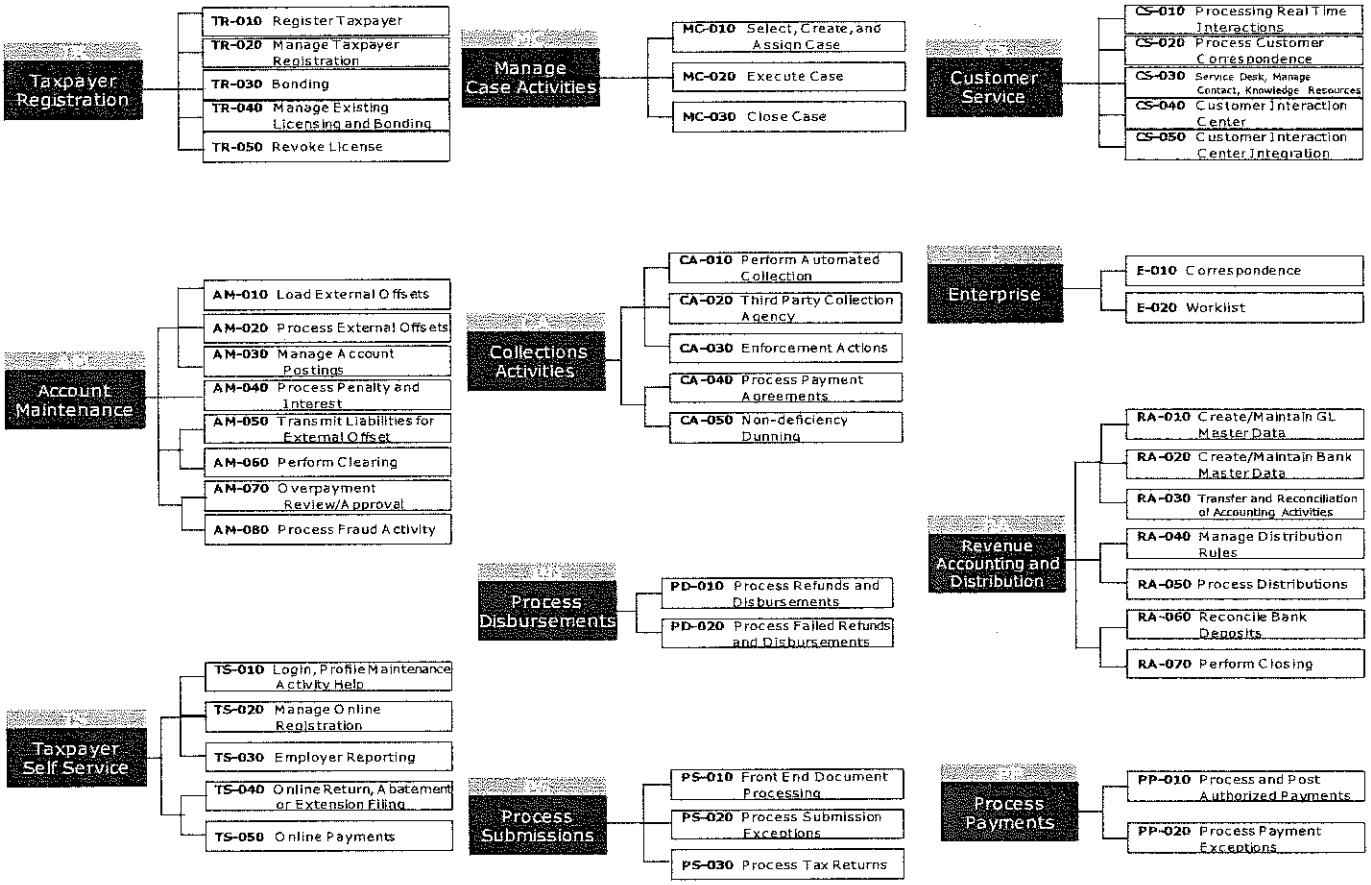
FRIC

Forms, Reports, Interfaces, and Conversions are development objects that are either pre-built as part of the vendor solution or must be developed specifically for the Indiana Department of Revenue. The FRIC tabs in the worksheets have been documented in order to provide additional context to the vendor. It is DOR's expectation that the vendor will leverage this list and experience from other implementations to create the appropriate estimate of effort. The development objects are provided as examples, but the vendor must estimate based on a full implementation of the desired end state processes as documented in this RFP. Any additional development objects necessary to fully automate and execute the processes included in this RFP are the responsibility of the vendor as DOR is expecting that the vendor has the appropriate experience to estimate effort, complexity, and apply the appropriate contingency within the firm fixed price bid.

FRIC object descriptions will include the following:

- Name – Short name of the object for reference purposes
- Description – Description of the object and the purpose within the execution of the business process
- Process Reference – Mapping to the process or task that generated the object
- Complexity – High, Medium, Low designation for each object that designates the relevant level of complexity. The definitions for high, medium, and low will vary by FRIC elements. The definition for each can be found within the (FRIC - Complexity Definitions tab)
- Justification & Impact – The business impact of not building the object and any potential alternatives/workarounds
- Object Type-Specific Data – Other relevant data items that may be specific to the object type, including timing constraints, frequency,

This diagram represents the processes being mapped with requirements defined.



#	Name	Description	Task Reference ID	Response

FRIC Complexity Definitions

Element	Simple (S)	Medium (M)	Complex (C)	Very complex (V)
Correspondence (Forms)	• Layout/layout changes - Simple • Windows – One main window with few elements • Pages – Minimal changes between pages • Print Program – Minor changes to an existing program • SubRoutines – Changes in the existing subroutine program • Barcodes – No printing • Logo – Standard printing	• Layout – Complex with multiple windows • Windows – May require new windows with some format changes; Multiple main windows • Print Program – May require substantial changes or new program • SubRoutines – Creation of a subroutine • Barcodes – Standard printing • Logo – Simple fonts and basic graphics	• Windows – Requires new windows with complex formatting; Contains multiple main windows with multiple elements • Print Programs – Nonstandard with complex logic • SubRoutines – New functionality / business logic or multiple subroutines across different areas • Multiple logical databases • Barcodes – Requires creation of custom Barcodes; Conditional Barcode printing • Requires creation of cosmetics (grids, boxes)	• Layout – Data driven, Different layouts and data selections • Requires new print programs with complex window structures • Print Program – Non-standard with complex logic • SubRoutines – Multiple or new functionality / business logic • Comprised of multiple
Reports	• Existing Report – Minimal modifications • Standalone simple report • Data Retrieval – Minimal • SQL statements – Standard • Data computations – none • Layout – one with page totals • Repository creation or modification – Minimal or none	• Existing Report – Modifications with new additional fields, alignment, or header/footer changes • Report that calls another program internally • Data retrieval – from multiple tables, views • Contains complex checks and/or authorizations needed • SQL statements – dynamic • Data computations – Arithmetic • Layout – More than one with control break totals • Logo printing, Input enabled fields, or 2/3D Graphics Printing • Repository creation or modification – Some	• Existing Report – No, Custom built with multiple events • Consolidation of two to four complete reports • Data computations – needed • Requires debug skills and knowledge to determine underlying logic • Requires moderate performance considerations • Layout – dynamic column fields, large number of drilldowns, tree Structure • Requires large amount of repository object creation or modification • Significant effort required to identify components	• Combination of Legacy and data for report generation • Data not readily identifiable for report selection • Ambiguous Report Requirements • Contains large number of alternate views • Involves multiple currencies and/or their corresponding calculations/t
Interface	• Simple direct interface to one subsystem with minimum data validation • 0 to 10 data transformations • Web Service request/reply calls with no business logic • No business logic/rules • Uses standard functions • No cross reference lookups • Standard exception handling	• Interface to multiple subsystems that requires some logging, reporting, notification, performance and security capabilities • 11 to 20 data transformations • Uses a combination of standard and/or custom functions • Limited business logic/rules • Uses cross-reference lookups • Orchestration of 1 to 2 end-points/services and processes • Standard exception handling	• Interface that requires routing, data transformation, workflow, role based security, and in real time environment to support high volume transactions • 21 to 30 data transformations • Uses a combination of standard and custom functions • Complex business logic/rules requiring custom functions • Orchestration of 3-4 end-points/services /processes • May require custom exception handling/processing	• Interface that requires complex routing, workflow, role based security, and in real time environment to support high volume transactions including standardizati on such as NIEM, XML, etc. • 30+ data transformati ons • Uses a combination of standard and custom functions • Complex business

	Forms			Justification & Costs					
	Name	Description	Current Forms	Sub Process Task ID	Complexity (S, M, C, V)	Business Impact of not Building this Object	Alternatives/ Workarounds	Timing Constraints	Depend
				Taxpayer Registration					
1	Missing Information Request	Correspondence with taxpayer to request missing information	CRR206: BT-1: Desired Information Requested CRR205: BT-1: Mandatory Information Required CRR238: Legal Name Chg - Request for Articles of Amendment CRR518: Incomplete Application Letter DW0172: Request for Info – Cigarette/OTP Distributer's License DW0202: Final Request for Missing/Incomplete Info DW0203: Incomplete License Application (FT-1) DW0262: BT-1 Form - Additional Info Needed DW0268: ROC-1 Incomplete	TR-010-060 TR-020-060 TR-030-020 TR-030-100 TR-010-140	M	Incomplete entity registration	None	None	Address, Em
2	Successful Submission Notice	Electronic notification of successful submission	DW0133: Aviation Fuel Dealer's Permit DW0188: Tax Returns Enclosed (Gaming) INBiz001: INBiz Payment Confirmation email INBiz002: INBiz Application Successfully Submitted email	TR-010-100 TR-020-120 TR-030-160	M	Entity confusion, increased call volume for DOR CIC. Increase volume via INTax message center	None	None	Email A Successful F Successfu
3	Registration Packet	Packet with filing obligation, instructions for calculating estimated payments, entity locations, relationships, and (if applicable) certificate/license	CRR368: SSTP Welcome Letter CRR377: SSTP Non-Seller Welcome Letter CRR372: SSTP Welcome Letter Non-Voluntary Model 1 CRR369: SSTP Welcome Letter Non-Voluntary CRR319: Filing Frequency Explanation CRR290: Temp Registered Retail Merchant Certificate CRR363: Sales and Use Tax NAICS Code Letter CRR370: SST Letter of Intent CRR373: SSTP Welcome Letter Voluntary Model 2 CRR374: SSTP Welcome Letter Non-Voluntary Model 2 CRR375: SSTP Welcome Letter Voluntary Model 3 CRR376: SSTP Welcome Letter Non-Voluntary Model 3 CRR289: Registered Retail Merchant Certificate CRR221: EFT Authorization Confirmation CRR371: SSTP Welcome Letter Voluntary Model 1 CRR503: Alternative Fuel Decal Cover Letter DW0251: BT-1 Needed – Not Registered DW0209: Petroleum Severance License	TR-010-100	C	Entity confusion, increased call volume for DOR CIC, incorrect estimated payments, and additional manual reviews.	Manual	None	Address, Em Successful I
4	Bond Information Request	Bond renewal information request	CRR339A: Bond Status - Bond Increase Approved CRR339B: Bond Status - Bond Decreased Denied CRR339D: Bond Status - Taxpayer Request for Bond Release Approved CRR339E: Bond Status - Taxpayer Request for Bond Release Denied CRR339F: Bond Status - Taxpayer Request for Bond Release Denied/EFT CRR339G: Bond Status - Request for Increased Bond CRR336: Received Notice of Bond Cancellation CRR337: Notice of Bond Receipt Letter CRR338: Receipt of Bond Rider Letter CRR339: Bond Status Letter CRR543: Replace Bond Request Letter REINT: Bond Status - Reinstatement of Bond RELT: Bond Status - Bond Release DW0141: Bond Increase Protest Denied DW0142: Cancellation of Hearing DW0143: Cancellation of Letter of Credit DW0144: Irrevocable Letter of Credit Receipt DW0145: Notice of Bond Continuation Certificate DW0146: Notice of Bond Receipt DW0147: Reinstatement of Bond DW0148: BON-127 Taxpayer Assessment Letter DW0149: Expired Letter of Credit DW0150: Request for Increased Bond Amount DW0151: BON-105 Bond Correction DW0152: BON0123 Request for Replacement Bond Letter DW0153: BON-124 Secon Request Bond Increase Letter DW0154: BON-126 Secretary of State Noncompliance DW0155: BON-114 Irrevocable Letter of Credit Release DW0156: BON-122 Request for License Reinstatement DW0157: Bond Cancellation Notice DW0158: Bond Claim DW0159: Bond Claim Withdrawal DW0160: Bond Information Request	TR-030-180	C	Unable to support the bonding process as entities would not have necessary forms to renew licenses	None	None	Address, Em Bond Renew
5	License Renewal Notification	License renewal notification	CRR291: Not for Profit Tax Registration Certificate CRR294: Out of State Use Tax Collection and Remittance Permit CRR382: RRMC Account Closure Letter CRR386: Receipt of RRMC Payment CRR243: Notice of Closed Location/Account CRR387: Taxpayer to Register NP-20A DW0130: Aircraft Registration Cancelled DW0136: Aviation Fuel Excise Tax License DW0137: Aircraft Dealer Cancellation DW0139: Aircraft Dealer Renewal DW0173: OTP License Completion DW0174: Cigarette Distributor's Registration Certificate DW0181: OTP License Renewal DW0182: Renewal Reminder Letter DW0196: Propane Dealers License Application DW0197: Registering for GUT License DW0201: Zero Returns DW0204: MF Transporter Requirements DW0205: Special Fuel Transporter Requirements DW0207: Notice of License Cancellation DW0208: OB Inspection Distributor Permit	TR-030-050	V	Unable to inform the taxpayer their RST account is not in compliance, and account is closed. Unable to provide taxpayer their RRMC stating business is active.	None	Load balancing must occur to ensure even distribution of renewal issuances.	Addi
				Manage Case					

1	Case Acknowledgment	Acknowledgement of case creation (e.g., Appeals, Bankruptcy, TAO)	CRR348: Response to Liability Protest CRR412: Acknowledgement of Protest	MC-010-050	M	Required document(s) acknowledging taxpayer request- ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Valid
2	Information Request	Request for additional information or documentation to aid in case execution	CRR264: Copies of Canceled Checks Required CRR344: Additional Info Required for Correspondence CRR534: Refund Claim More Information Request Letter CRR203: Explanation of Gross Receipts Required CS0017: Audit IDR: Information / Document Request CRR232: Request Returns for Previous Year(s) CRR480: SIU Subpoena CRR481: SIU Returned Check Letter CRR532: Proportional Exemption for Vehicle (Unique/Not Unique) CR0017: DS/SC Skip Filer Letter CR025: DS/SC Tax Add Back/No Filer Letter DW005k: Request for Information DW0067: Bulk Fuel Supplier Request DW0068: Follow-up Alcohol Audit DW0069: Follow-up Supplier DW0070: Follow-up Upstream DW0072: Jewelry Survey DW0074: Data Request DW0389: Compromise Case Review DW0395: Additional Info Request Letter DW0396: Hardship Case Review	MC-020-030	M	Required document(s) to move case work along - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
3	Scheduling	Engagement letter for audit or scheduling of hearing	CRR326: Notice of Hearing Letter DW0070: Follow-up Upstream DW0079: Hearing Grant Contact (AUD template) Notice of audit selection and initial engagement	MC-020-030	M	Required document(s) - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required; correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
4	Notification	Notification of action that triggers case initiation or acknowledgement of receipt of correspondence that triggers case creation	CRR468: TAO – Accepted Letter CRR508: Cancellation of License Letter CRR104: DOR has no record of return CRR102: Unable to Locate return under SSN CRR469: Nonfiler Letter CRR435: Corporate Clearance Liability Letter CRR452: Temporary Hold Letter CRR462: SIU - Post a business Letter CRR106: DOR has requested return from records center CRR325: S1-200 Pending Appeal(s) DW0078: Hearing Grant Contact RCRRR069: PW Non Filer Letter CS0021: Audit Engagement Letter DW0055: Fraud Return - Contact Made with Other State Agency DW0056: Fraud Return - Refund Issued DW0057: ID theft victim letter DW0073: Statistical Sample Overview DW0075: Missing Return Letter DW0081: Reheating Denial DW0082: Reheating Grant Contact DW0376: Compromise Reset After Review DW0387: Payment Plan - New Liability DW0388: Payment Plan Final Reminder DW0394: Hardship case on Hardship Hold DW0586: Cover Letter for OIC with Down Payment DW0395: Hardship and OIC Packet DW0410: Refund Denial	MC-020-030	M	Required document(s) - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
5	Agreement to Extend Statute of Limitations	Form to extend statute of limitations, requiring signature of taxpayer and DOR auditor	Form AD-10	MC-020-030	M	Required document(s) - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
6	Audit Case Forms	Field Audit execution forms	Form AD-14, Notice of Non-compliance Form AD-70, Special Exemption Certificate Form AD-10A, Agreement to Project Audit Results FC-12, Audit Interoom Memo FC-50, Audit Data Change Request FC-32, Audit Recommendation CSD009: Case Status Report CSD010: Issue Alert Memo AD008, Affirmation of Explanation	MC-020-030	M	Required document(s) - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
7	Collections (See Collections Activities FRIC)	Collections case execution forms	N/A	MC-020-030	M	Required document(s) - ITS must include to properly track correspondence to case; separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres

5	Case Results	Notification of case outcomes (LOF or MOD/ODR)	CRR484: TAD - Hardship/OIC Request Rejected CRR486: TAD - Compromise Payment Agreement CRR345: Abatement Denied CRR445: Payment Plan Denied Letter CRR536: Reject Refund Letter CRR200: Refund Claim Denied Letter CRR288: Untaxy Sales Tax Exemption Letter CRR317: ST-109 Utility Exempt Certificate CRR324: ST-200 Blanket Exemption CRR420: Compromise CRR400: AR80 - Notice of Proposed Assessment (AUD, NONFILE) CS0012: Audit Report package- Including report summary, annotated results narrative, listing of adjustments, schedules, Form AD-8 (Affirmation of Explanation) CS0013: Letter of Pending - Legal letter CS0014: Memorandum of Decision - Legal letter CS0015: Order Denying Refund - Legal letter CS0016: Reverse Ruling - Policy DW0071: Special Tax Billing DW0078: Final Order Denying Refund DW0080: Memorandum of Decision DW0082: No Show Default DW0084: Letter of Pending DW0085: Supplemental Decision DW0375: Compromise Agreement DW0380: Case Closed per Bankruptcy DW0381: Cover Letter OIC for Full Payment DW0390: Compromise Denied DW0391: Compromise Denied, New Offer Requested DW0392: Compromise Agreement Payment Plan DW0393: Compromise Agreement Down Payment DW0397: Cover Letter - OIC on a Payment Plan DW0414: Refund Reduction, Non-Statute	MC-030-040	M	Required document(s) - ITS must include to properly track correspondence to case, separate solution would have to interface ITS	Separate solution would be required, correspondence is mandated by statutes	Required for case management function; templates must be added as case types go live	Case Exi addres
					Process Submissions				
1	FCEL (Form Calculation Error Letter)	Notifies taxpayer of discrepancy between filed return and DOR calculated figures - not a bill/notice at this point	CRR152: Form Calculation Error CRR281: COR / FIT Form Calculation Error Letter CRR144: 2003-2006 IT-40 Form Calculation Error CRR138: IT-40 Form Calculation Error CRR153: Credit Denied Letter CRR617: URT-1 Form Calc Error Letter CRR352: MVR-103 Form Calculation Error CRR134: IT-40 Form Calculation Error CRR139: 1999-2005 IT-40PNR Form Calculation Error CRR269: IT-20 Form Calculation Error Letter CRR270: IT-20S Form Calculation Error Letter CRR135: IT-40EZ Form Calculation Error CRR136: IT-40PNR Form Calculation Error CRR272: IT-20S Form Calculation Error Letter CRR341: WH-3 Discrepancy CRR127: IT-40 Form Calculation Error CRR276: IT-65 Form Calculation Error Letter CRR124: IT-40 Form Calculation Error CRR125: SC-40 Form Calculation Error CRR126: IT-40 Form Calculation Error CRR128: IT-40PNR Form Calculation Error CRR129: Reduction In Next Year's Estim Payment Allocation CRR209: 2220 Calculation Letter/Worksheet CRR246: 2220 Calculation Letter/Worksheet CRR247: 2220 Calculation Letter/Worksheet CRR257: FIT-20 Form Calculation Error Letter CRR268: 2000 FIT-20 Form Calculation Error Letter CRR271: IT-20NP Form Calculation Error Letter CRR273: IT-20SC Form Calculation Error Letter CRR280: IT-20NP 2003 Form Calculation Error Letter CRR351: ST-103 Form Calculation Error Letter CRR502: Adjustment Disallowed Letter CRR152: Form Calculation Error	PS-020-110	V	Taxpayer would not be provided an explanation error on return	None	Time from original form to modified form - tied to processing IND and COR income tax returns	Corresp Address - d on return
2	Request for Information/Documentation	Request for additional W-2s. Other information to process tax returns	CRR157: W2 Letter Verification DW0366 REQINFO2 DW0367 REQINFO3 DW0368 Request for Info: Lottery deduction DW0369 Request for info: OOS Credits DW0370 VERFYCTY: verify county of residence DW0364 NEED RET REQINFO1	PS-020-080	M	Taxpayer confusion, failure to provide instructions to the customer on how to respond to an inquiry	None	None - tied to processing IND returns	Corresp Address; rec without
3	Bill Form	Generated for taxpayer when a balance is owed to the State following a filing	CRR486: Outstanding Balance Due Letter CRR416: Notice of Balance Due (AR-BD) CRR120: Post-Filing Coupon - No Remit Received CRR119: Post-Filing Coupon - Some Remit Received CRR400: AR80 - Notice of Proposed Assessment CRR997A: Responsible Officer (AR-80) Notice CRR383: Streamline Post Filing Coupon	PS-030-050	C	Taxpayer would not be provided a statement or liability notice informing tax is due - this is statutory requirement	None	Time from generating correspondence to receiving correspondence (i.e., if payment is sent during this time and the system hasn't recognized it yet)	Corresp Address; respond to e
4	Estimated Payment Coupons	Generated for taxpayer for quarterly payments due in proceeding year	CRR283: IT-6WTH Coupon Requested by User CRR278: IT-6 Coupon Requested by User CRR131: IND Estimated Coupons Requested by User/System RCRRR298 URT-Q RCRRR240 FT-QP	PS-030-060	C	Taxpayer would not receive necessary coupons to remit tax due to the department	Taxpayer may pay via electronic method, however paper must remain an option to accommodate small business, religious beliefs, areas not with internet capabilities	Large batch leads to challenges for the print vendor to facilitate the process	Corresp Address: rec vou
5	FTP Acknowledgement Email	Generated to acknowledge the tax return or payment file submitted via FTP.	Email sent from the ERF system.	PS-010-230	S	Failure to communicate effectively with taxpayer, additional suspended items.	Work the form have it suspend and then have the system generated correspondence and	20,000 WH-3 processed in January 2017, 200 have issues	FTP sub
					Taxpayer Self Service				
1	Password/Username Info	System provides emails to retrieve username and reset password.	Password reset email, Username email	TS-020-020	M	Inability to reset password	Perform password reset via challenge questions and/or recovery text to phone number, etc.	Real time	Successful r completed.

2	Initial Password	System provides a temporary password via email	Password reset email	TS-020-020	M	This may be eliminated in the future state.	Set initial password as part of registration and then validate email for access. (More secure than email password in plain text)	Real time	Su ful r
3	Registration Letters	System mails a letter to the taxpayer acknowledging completion of various registrations/actions in the portal	RCRRR604 Successful INtax Registration Letter RCRRR605 Intax Activation Letter RCRRR608 Client Notification of Intax Client Registration RCRRR603 Intax USPS Verification Letter RCRRR602 Intax Failed Twice Registration Letter	TS-020-030	C	Potential security risk to taxpayers.	Allow the notifications to come via desired channels	Real time, perhaps with blackout periods for certain channels	Successful r completed.
4	User Account Change Notification	System will send out emails to notify taxpayers when key information has been changed on their account. For example: Username/Password, address change, bank info change, new users, change in privileges, etc.	None in current system	TS-010-090 TS-010-110	M	Potential security risk to taxpayers.	None	Real time, perhaps with blackout periods for certain channels	Successful r completed in changed fron information.
5	Notification of New Secure Messa	System will send out a notification when a new secure message has been delivered to a customer inbox. The messages themselves are currently free-form, and future state is covered in the customer service requirements	Intax message notification	TS-010-120	M	Unnecessary communication, poor customer service.	None	Real time, perhaps with blackout periods for certain channels	New messa added to onl
				Account Maintenance					
1	External Entity Notification	Notification to external entity that offset information has been uploaded to secure file transfer	ITD001 put_ofsl_new TANF Transfer Notification	AM-020-050	S	Agency may not load file/loss of potential revenue	Web services/automati	N/A	N/
2	Pending Offset Notification	Notification to taxpayer of pending offset	RCRRR463 - Refund Offset Notify	AM-020-140	C	Out of statute - Tax payer right to know and protest or injured spouse claims	N/A	N/A	Offset I
3	Offset Impact Notification	Notification to taxpayer of offset impacts	RCRRR116 - Refund Has Been Offset to External Agency RCRRR149 - Refund Has Been Offset to External Agency	AM-020-070, AM-070-070	C	Out of statute - Tax payer right to know and protest or injured spouse claims	N/A	N/A	Offset (
4	Missing Information Request	Request for information or documentation	DW0359 - IND Need Legible Copy DW0360 - IND Verify DW0361 - NOL Documentation Requested DW0362 - NOTFILE1	AM-030-070	S	Letter would not be tracked, inconsistency	N/A	N/A	Agent (
5	Penalty Notification	Notification to taxpayer of applied penalty	DW0005 - 2210 Penalty - why assessed DW0006 - 2210 Penalty - why penalty-only bill DW0091 - Penalty waiver denial DW0092 - Dup? DW0222 - Abated denied - Dup? DW0233 - $250 Penalty abatement denial DW0236 - $500 composite penalty abate denial DW0237 DW0240	AM-040-020	C	Letter would not be tracked, inconsistency	N/A	N/A	Taxpaye
6	Liability Available for Offset	Notification to taxpayer of liabilities available for offset to IRS TOPS	RCRR447 - FMS Certified Letter	AM-050-020	C	Unable to process offsets	N/A	Statutory in order to offset	Staged
8	Refund Request Denial Correspondence	DOR determines that no overpayment exists and no refund is due	DW0410	AM-070-060	C	Letter would not be tracked, inconsistency	N/A	N/A	Refund
9	Quiz Correspondence	Taxpayer correspondence detailing instructions on how to take quiz and information needed	RCRRR156 - Fraud Quiz Letter RCRRR158 - Fraud Quiz Reminder Letter RCRRR159 - RE34: Fraud Victim Letter #1 RCRRR160 - RE13, RE14: Fraud Victim Letter #2 RCRRR161 - RE45: Investigate Preparer Letter	AM-080-040	C	Identity protection program unable to operate.	N/A	Must print within 24 hours of selection	N/
10	Request for Information	Taxpayer correspondence requesting more information when conducting fraud analysis	RCRRR161 - RE45: Investigate Preparer Letter RCRRR239 - Request for Articles of Merger RCRRR244 - Confirmation of Change in FID	AM-080-080	C	Preparer investigation program unable to operate.	N/A	N/A	N/
11	Return Modification	Notification to taxpayer when figures are modified on their individual return after it was completely processed. Issued when an amended return completes processing, or DOR modifies the taxpayer's return.	None currently	AM-030-020	V	Lack of communication with taxpayer leads to confusion and/or additional phone calls.	N/A	N/A	N/
				Collections Activities					
1	Proposed Assessment Notice (currently AR-80/BIA)	This form launches the billing process for any liability that is eligible for protest. This notice is required by law and contains specific language based on reason for issuance; content is dynamic.	RCRRR 400	CA-010-160	V	Statutorily Required	None	Must be issued prior to expiration of statute of limitations.	DOR believ unde
2	Demand Notice for Payment (AR-40)	Bill issued when a liability is no longer protestable and is now due. This notice is required by law and contains specific language based on reason for issuance; content is dynamic.	RCRRR 401	CA-010-130	V	Statutorily Required	None	Must issue immediately upon billing due to 20 day expiration period for staging to further collections activities.	Previous AR:
3	Additional Outreach (tailored email/sms/letter)	Forms sent for specific purposes through the taxpayer's desired channels. Currently these types are handled through mail merge.	N/A	CA-010-150 CA-050-080	N/A	Additional phone calls, potential confusion	Manage content to minimize errors	Must be able to deliver quickly, sometimes within hours of issue identification	No
4	Notices of Proposed Enforcement Action(s)	Letter is issued to taxpayer to explain potential enforcement actions that can occur due to failure to resolve a deficiency.	N/A	CA-030-100	C, V	Potentially missing out on additional collections or having liabilities advance unnecessarily to warrant stage.	Rely on step by step collections notification	Must be carefully timed as to not interfere with statutory requirements for collection activities	Defined bil
5	Request for Garnishment	Letter issued to an employer requesting a wage garnishment to satisfy and outstanding deficiency.	RCRRR445 - Request for Garnishment	CA-030-020	C	All garnishment activity must remain at third party, inability for DOR to directly garnish entities.	Continue outsourcing all garnishment activities	Blackout periods during sensitive holiday periods, economic turmoil, etc.	Liability st wan
6	Request to Levy Bank Account	Letter to a bank requesting a levy in order to satisfy a taxpayer deficiency.	RCRRR444 - Notice of Levy	CA-030-030	C	All levy activity must remain at third party, inability for DOR to directly garnish entities.	Continue outsourcing all levy activities	Blackout periods during sensitive holiday periods, economic turmoil, etc.	Liability st wan
7	Notice of Upcoming Payment (includes balance of payment agreement)	Taxpayer is notified of upcoming payment due dates, or scheduled payment automatic payments. Delivered to taxpayer's preferred communication method, emphasizing the benefits of email/SMS.	RCRRR419 - Payment Plan Letter	CA-040-110	C	With a move toward warehousing and automatic debits this functionality will help avoid overdrafts and returned check bills.	Trust taxpayers to remember their scheduled payments without reminder	Must be triggered in time to allow action prior to due date passing.	Existing pa
8	Payment Confirmation Notice (includes balance of payment agreement) for Electronic Payments	Taxpayer is given confirmation of a payment successfully submitted	N/A	CA-040-110	C	Increase in customer inquiries to confirm receipt of payments.	Require taxpayers to login to portal to see payments.	Must be produced in near real time. Clarity as to initiation date, effective date, and estimated withdrawal date.	Payment p

	ayment Receipt Notice	Taxpayer is notified of a successfully received payment that has been applied to their account	N/A	CA-040-111	C	Increase in customer inquiries to confirm receipt of payments.	Require taxpayers to login to portal to see payments.	Must be assured that funds have actually been received from the bank	Payment
10	Notice of Non-compliance, tailored based on reason (i.e., missed payment, additional liability, etc.)	When a taxpayer currently under a payment agreement misses a payment or has additional liabilities added they will be contacted proactively to resolve the issue	N/A	CA-040-260	M	Additional defaults may occur. In particular, misapplied payments will be identified too late to resolve them prior to further collection action	Allow for additional automated collection activities without preempting them	Must correlate with varied due dates. Currently a manual process	Due date
11	Notice of Upcoming Liability Due Date	Taxpayer is sent a reminder notice prior to the due date.	Due date reminder emails (Gov Delivery)	CA-050-060	M	More obligations may become past due.	Leave the responsibility on the taxpayer to remember their obligation due dates	Must send with enough time to complete task by due date	Due date
12	Notice of Missed Filing or Estimated Payment	Taxpayer is notified early in the process of a failure to meet filing requirements	Pre-BIA emails (Gov Delivery)	CA-050-090	M	If taxpayers are not notified via a soft nudge, additional bills will result. This leads to additional expense and lack of clarity for the taxpayer.	Allow more bills to be issued.	Must allow time for processing to complete after the due date, and leave time after for resolution prior to additional billing activities	Should only l to taxpay received th reminder en
					Customer Service				
1	Physical correspondence mailer	Coversheet for internal requests of correspondence stored only in physical form due to size or impracticality of digital storage	Warehouse cover sheet	CS-020-030	M	Potential misrouting of warehouse requests.	None - this is an essential function.	Must transmit to warehouse user to pull efficiently.	System must the warehous
2	Archived correspondence mailer	Coversheet for internal requests of correspondence stored only in physical form. This documentation would normally be stored digitally, but due to date of receipt, retention policies, or other extenuating circumstances it is stored in physical form.	Warehouse cover sheet	CS-020-060	M	Potential misrouting of warehouse requests.	None - this is an essential function.	Must transmit to warehouse user to pull efficiently.	System must the warehous
3	Manage contact: Notification to taxpayer when item is received	Taxpayer will be notified when a new issue or work item has been received by the agency.	None	CS-030	M	Additional phone calls will be received to confirm receipt of requests.	Hire additional call center staff to confirm receipt of work items.	Limit emails/SMS to business defined hours adjusted to time zone.	System must appropriate t contact, and contact inforr current and u
4	Manage contact: Notification to taxpayer when item is closed (by preferred correspondence)	Taxpayer will be notified when a pending issue or work item has been resolved.	None	CS-030	M	Additional phone calls will be received to confirm completion of requests.	Encourage active portal use, or plan staffing for additional phone calls. Divert resources to completing work items very quickly to avoid follow-up instances.	Limit emails/SMS to business defined hours adjusted to time zone.	System must appropriate t contact, and contact inforr current and u
5	Survey: Survey to Taxpayers	The system will produce a communication via mail, email, sms, secure message offering a survey to the taxpayer.	None	CS-040	M	The agency will not receive timely feedback from customers, leading to a reduced ability to adhere to the continuous improvement model.	Survey data could be limited to real time only.	Limit emails/SMS to business defined hours adjusted to time zone	System must appropriate t contact, and contact inforr current and u
					Revenue Accounting and Distribution				
		Forms for Revenue Accounting are covered in other processes							
					Process Disbursements				
1	Check Delivery Failure	Contact entity for failed refund or disbursement	none	PD-020-030	M	taxpayer unaware of failure and resolution	no communication	contemporaneous with event; no point sending if already resolved	Refund chec DOR or direc failure
					Process Payments				
1	Payment Confirmation	Receipt of payment to payer for a successful payment	paper receipt for cash only	PP-010-040	M	lack of audit trail for cash payments; otherwise lack of confirmation to payer	none	none	payment rec
2	Deposit Confirmation	Receipt of electronic file for a successful deposit	third party confirmation to the tax payer	PP-010-060	M	communication to the taxpayer	none	none	Payment dep

#	Name	Description	Sub-Process ID	Legal, Regulatory, or Business Need?	Complexity (S, M, C, V)	Frequency	External Report Publishing Method	Distribution	Fields Required	OLAP Capabilities (Y/N)	Highly Formatted (Y/N)
		Summary & Ownership					**Report Specific Data**				
		Taxpayer Registration									
1	New County Businesses	The New County Businesses Report lists every new business in each county	TR-030	Legal	M	Annual	RPS	IN Counties (92)	Break on County, Legal Name, DBA Name, Address, TID, Registration Date	N	N
2	Licenses	The Licenses Report lists all licenses by tax type	TR-030	Legal	M	Monthly	RPE RPS	DOR website	Taxpayer Name, Location Address, License Type & Effective Date	N	N
3	Soon-to-Expire Licenses	The Soon-to-Expire Licenses Report lists licenses that are set to expire in the near future (Manual/auto generation – notice type)	TR-030	Business	M	Monthly	ATC	Special Tax Administration, Collections	Actual reports can be provided that are already tailored to meet the statutes.	N	N
4	Expired RRMC	The Expired Retail Merchant License Report lists merchants with delinquent sales tax debts	TR-030	Legal	M	Weekly	Query to IN.gov	DOR website	Legal Name, Common Name, Address, County	N	N
5	Exceptions	The Exceptions Report provides information that will highlight complexities in the registration process and measure the quality and timeliness of exception process handling	N/A	Business	C	Monthly	Analytics	Tax Admin Special Tax	Need registrant data as submitted and as posted to determine how to improve data collection	N	N
6	Online/Self-service	The Online/Self Service Report provides insight into the number of users leveraging online and self-service channels for registration and maintenance, as well as how they leverage online account management	N/A	Business	M	Monthly	Analytics	INBiz	Online counts compared to paper counts	N	N
7	Customer Service	The Customer Service Report provides insight to the quantity, quality, and timeliness of service provided to taxpayers	N/A	Business	C	Monthly	Analytics	Tax Admin Special Tax	To be determined - pending customer service session and/or report design to include the specified KPIs.	N	N
8	Licensing	The License Report provides insight to licensing and bonding activities and business rules	TR-030	Business	C	Monthly	Analytics	Tax Admin Special Tax	To be determined - pending customer service session and/or report design to include the specified KPIs	N	N
9	Quality Assurance	The QA Report will provide insight into risk scoring accuracy and effectiveness of operations	N/A	Business	C	Monthly	Analytics	Tax Admin Special Tax	To be determined - pending report design to include the specified KPIs	N	N
		Manage Case									
1	Audit Assessments	The Audit Assessments report provides insight into the annual assessments of audited dollars assessed	MC-020	Legal	M	Annual	PDF	Annual Report	Assessment Amount	N	Y
2	Case Execution	The Case Execution report provides insight into performance across all business units including: average length of time from case open to case closure, length of time to complete case activities, and caseworker efficiency	MC-020	Business	M	On Demand	PDF	Annual Report	Total Case Duration, Cumulative Work Activity Time, $ Assessed/$ Expended	Y	N
3	Customer Service	The Customer Service report measures customer service satisfaction and taxpayer patterns	MC-020	Business	C	On Demand	PDF	Annual Report	Survey Results	N	Y
4	Bankruptcy	The Bankruptcy report provides metrics on the efficiency of filing liabilities and case completion rate	MC-020	Business	M	On Demand	PDF	Annual Report	Number of liabilities Number of Cases Case status	N	Y
5	Protest Tracking	The Protest Tracking report provides metrics on the protest process including outcomes, successful hearings, and protest specific execution	MC-020	Business	M	On Demand	PDF	Annual Report	Number of Cases Resolution Codes	Y	N
6	Taxpayer Advocate	The Taxpayer Advocate report provides metrics on length of time for case to be resolved and percentage of cases ending in specific resolutions	MC-020	Business	M	On Demand	PDF	Annual Report	Number of Cases Case Duration Resolution Codes	Y	N
7	Audit	The Audit report provides metrics on audit collection including revenue collection, case selection, and audit specific execution	MC-020	Business	M	On Demand	PDF	Annual Report	Case Counts Section Criteria Code Revenue Generated	Y	N
		Process Submissions									
1	ERF to RPS Interface Log	The ERF to RPS Interface Log is used to confirm that returns submitted to ERF (Imaging/MeF/Bulk) were loaded into RPS	PS-010	Business	M	Daily	Email Distribution	ITD, RPO	Tax Type, Transaction Count, Number Submitted, Number Rejected	N	N
2	INTax to RPS Interface Log	The INTax to RPS Interface Log is used to confirm that returns submitted to INTax were directly loaded into RPS	PS-010	Business	M	Daily	Email Distribution	ITD	Log Format	N	N
3	INTax to ERF Interface Log	The INTax to ERF Interface Log is used to confirm returns submitted by INTax into ERF	PS-010	Business	M	Daily	Email Distribution	ITD	Log Format	N	N
4	Aging	An overview of the time RPC and return operations take to receive, post, and issue refunds or bills for documents received	PS-010 PS-030	Business	C	Daily	Email Distribution	RPO and Finance	DLN/PLN Input Channel Receipt Date Posting Date	N	N
5	Customer Needs	An overview to understand customer communication preferences	PS-010	Business	C	Daily	Email Distribution	RPO and Finance	TID Preference	N	N
6	Rejections	An overview to trace and understand where rejected returns originate and what tax types generate issues	PS-010	Business	M	Daily	Email Distribution	RPO and Finance	DLN/PLN Input Channel Receipt Date Reject Date	N	N
7	Exceptions	An overview to understand why and where work item exceptions originate, as well as the process to correct them.	PS-010 PS-020 PS-030	Business	M	Daily	Email Distribution	RPO and Finance	DLN/PLN Input Channel Receipt Date Posting Date	N	N
8	Intake	An overview of documents received by the department.	PS-010	Business	M	Daily	Email Distribution	RPO and Finance	DLN/PLN Input Channel Receipt Date	N	N
9	Financials	An overview of the financial impact of issued, pending, and other refunds and bills.	PS-030	Business	X	Daily	Email Distribution	RPO and Finance	DLN/PLN Amount	N	N
		Taxpayer Self Service									
1	User Errors	An overview of self service portal user errors. This report should help DOR understand where in the system users are having issues with the goal of continual self service portal improvement	TS-020 TS-030 TS-040 TS-050	Business	M	On Demand	Email	CS/Communications	User Type Transaction Error	N	Y

	User Habits	An overview of how self service portal users are engaging with the functionality available. This report should help DOR to understand where users spend their time and what functionality is most utilized and important for users.	TS-010 TS-040 TS-050	Business	S	On Demand	Email	CS/Communications	WebLog Analyzer	N	N
3	User Information	An overview of what individual and business segments are signing up for the self service portal. This report should help DOR to understand how its taxpayer outreach campaigns should be crafted.	TS-020 TS-030	Business	M	On Demand	Email	CS/Communications	User Type	N	Y
4	User Technology	An overview of what technologies users have to engage with the self service portal. This report should help DOR understand how to build self service functionality to best serve users.	TS-010 TS-020	Business	S	On Demand	Email	CS/Communications	WebLog Analyzer	N	N
				Account Maintenance							
1	Offset Management for External Entities Report	The Offset Management for External Entities Report provides insight into the offsets that are collected and distributed by DOR for approved external entities	AM-010 AM-020	Business	S	Weekly	PDF	Repository	Agency, $Owned, $Refund,, $Offset, Tax Payer	N	Y
2	DOR Liability Offset Requests Report	The Liabilities Offset Report provides insight into the liability offsets requested and collected by the IRS and/or Auditor of State on behalf of DOR	AM-050 AM-060	Business	S	Weekly	PDF	Repository	$Owed, TaxPayer, $Match by IRS/AOS, $Offset	N	Y
3	Account Error Resolution Report	The Account Error Resolution Report provides insight into the management of account postings, including, errors and special projects leading to updates to an entity's account.	AM-030	Business	M	Weekly	PDF	Repository	Tax Payer, $posted, account, period, corr account, period, date of corr transaction	N	Y
4	Penalty and Interest Report	The Penalty and Interest Report provides insight into the penalty and interests applied, forecasted and refunded	AM-030 AM-040	Business	S	Quarterly	PDF	Repository	Tax type, $penalty, $interest, date paid	N	Y
5	Refund Report	The Refund Report provides insight into refund status occurring from overpayment on an account.	AM-070	Business	S	Weekly	PDF	Repository	Tax Type, date posted, refund $, Refund date - check processed	N	Y
6	Fraud Activity and Analysis Report	The Fraud Activity and Analysis Report provides insight into how many activities are considered fraudulent, how long it takes to determine an activity as fraudulent, and how often decisions are overturned.	AM-080	Business	C	On Demand	PDF	Repository	Tax type, identified possible fraud flag date, identified fraud date	Y	N
				Collections Activities							
1	Collections Portfolio Report	The Collections Portfolio Report provides high-level insight into collections activities for a "snapshot" of the current status of collections	CA-010 CA-020 CA-030	Business	C	On Demand	PDF	Collections	1) Number and percentage of outstanding liabilities, by tax type and collections stage 2) Dollar value of outstanding liabilities, by tax type and collections stage 3) Average age of liabilities, by tax type and collections stage 4) Number and percentage of entities with multiple outstanding liabilities, by tax type and collections	Y	Y
2	Collections Correspondence	The Correspondence Report provides insight into the correspondence between DOR and entities as it relates to collecting revenues.	CA-010 CA-030 CA-050	Business	C	On Demand	PDF	Collections	1) Number and percentage of responses per correspondence type, by tax type, liability value and risk profile 2) Average time of response per correspondence type, by tax type, liability value and risk profile 3) Number and percentage of response outcomes (e.g., payment, payment plan, dispute, no response), by tax type, liability value and risk profile	N	Y
3	Enforcement Actions	The Enforcement Actions report provides insight into the efficacy of collections activities by enforcement actions	CA-020 CA-030	Business	C	On Demand	PDF	Collections	1) Number and percentage of outstanding liabilities aligned by enforcement action 2) Dollar value of liabilities aligned by enforcement action 3) Percentage of collectability per enforcement action by tax type, value, age and risk profile 4) Average return on investment (ROI) for collections per enforcement activity, by tax type 5) Number and percentage of liability allocation per TPCA by tax type, value, age and risk profile 6) Average return on investment (ROI) for collections per	N	Y

4	Payment Plans	The Payment Plan Report provides insight into payment plans between DOR and entities for collecting revenues	CA-020 CA-040	Business	C	On Demand	PDF	Collections	1) Number of payment plans by billing stage (i.e., non-deficient and collections stages) tax type and value 2) Average length of payment plans established by billing stage, tax type, and value 3) Number and percentage of payment plans established by geography (e.g., county, city) 4) Number and percentage of payment plans per demographics (e.g., gender, age, income) 5) Number and percentage of payment plans per payment channel.	N	Y
5	Collection Agent Statistics Report	Data for specific agent or all agents depending on query reflecting within a date range, resulting:, # warrants issued, $ amount of warrants issued, Non- direct collected amount, Direct-Pay collected amount, fees paid, warrants outstanding, and amount outstanding	CA-020	Business	C	On Demand	PDF	Collections	**Agent Type ID (sort field)**, Warrants Issued, Amount of Warrants Issued, Non-Direct Pay Amount Collected, Direct Pay Amount Collected, Fees Paid, Warrants Outstanding, Amount Outstanding **Tax Type (sort field)**, Warrants Issued, Amount of Warrants Issued, Non-Direct Pay Amount Collected, Direct Pay Amount Collected, Fees Paid, Warrants Outstanding, Amount Outstanding	N	Y
6	Unposted Clerk Voucher Report	Warrants assigned to county clerks for recording per statute. Warrants that are considered unposted due to either not received by county clerk for required recording or recording information not received back from county clerk successfully via DOR directory. This results in warrants being "stuck" in transmission and have not staged accordingly.	CA-030	Business	M	On Demand	PDF	Collections	Clerk ID, County Name, Generation Date, Seq number, Warrant Number, Name, Notice number, Print Status, Status, Type	N	Y
7	Warrant Inventory Report	Data for specific or individual agents. Summary of outstanding $ in liabilities and # qty of warrants assigned to agent(s)	CA-030	Business	M	On Demand	PDF	Collections	Notice Number, Warrant Number, Taxpayer Name, Warrant Amount, Warrant Date, Recall Date, Status	N	Y
8	Agents With Over Retained Fees	Agents that have over retained fees. Can query report for # of days last check was issued.	CA-020	Regulatory	C	On Demand	PDF	Collections	Agent type, Agent ID, Agent Name, Over-Retained Amount, Last Check Issued Date	N	Y
9	901 Outstanding Liability Spreadsheet	Balance for a particular liability period :Specific TID, Taxpayer name, address, tax types, outstanding $ amounts, A breakdown of fees, penalties, interest, clerk costs, and total amount due.	CA-010	Business	C	On Demand	Spreadsheet	Collections	Taxpayer name, taxpayer address, liability name, county, liability number, loc number, tax type, warrant number, war-c file date, liab stg, liab type, liab per, base tax bal, pen bal, interest bal, clerk costs, collect fee, atty dmgs, agcy dmgs, dept dmgs, per diem, bal to date, loc total base tax amt, loc total penalty amt, loc total interest amt, loc total clerk costs, loc total collect fee, local total atty damages, loc total agcy damages, loc total dep damages, loc total per diem, loc total amount due	Y	N
10	Statement of Account	A consolidated view for the taxpayer that breaks out all outstanding liabilities in an easy to understand way.	CA-010	Business	C	On Demand	PDF	Collections	Entity Name, Taxpayer ID, Current Date, Total amount due Sublist items: Tax Type, Tax Period, Base Tax, Penalties, Interest, Fees, Total	N	Y
11	"Query and Output" Capability	Gives business flexibility of easily developing and saving customizable and re-usable reporting with data integrity, timely, customizable and easily extractable.	CA-010 CA-020 CA-030 CA-040 CA-050	Business	V	On Demand	PDF	Collections	User Specified	Y	Y
						Customer Service					
1	Total correspondence received	Number of correspondence received (total)	CS-020	Business	M	On Demand	PDF	Operations	Sum of all correspondence received, channel agnostic, generally for annual report	N	N
2	Correspondence received by channel	Percentage of correspondence received by correspondence channel	CS-020	Business	M	On Demand	PDF	Operations	Sum of all correspondence received, broken out by channel	Y	Y

	sponses by channel	Percentage of responses by correspondence channel	CS-020	Business	V	On Demand	PDF	Operations	Number of attempted, number resolved % of attempted resolved, multi-channel use, first contact resolution rate.	Y	Y
4	Physical storage	Number of correspondence requiring physical storage	CS-020	Business	M	On Demand, Monthly, Annual	PDF	Operations	Number and size of items being sent to warehouse, by date.	N	N
5	Response by type	Number of responses by type	CS-020	Business	M	On Demand, Monthly, Annual	PDF	Operations	Responses broken out into response category.	Y	Y
6	Response by status	Number of responses by status	CS-020	Business	M	On Demand, Monthly, Annual	PDF	Operations	Responses broken out into current response status, inventory of unworked, awaiting supervisor review, completed, mailed, etc.	Y	Y
7	Interactions by channel	Number of interactions per channel	CS-040	Business	M	On Demand, Monthly, Annual	PDF	Operations	Interaction statistics, broken out by channel(phone, chat, SMS, etc.)	Y	Y
8	Interactions by type	Percentage of interactions by type	CS-040	Business	C	On Demand, Monthly, Annual	PDF	Operations	Summary of interactions by channel, with statistics on utilization, resolution rate, average wait, average handle, etc.)	Y	Y
9	Call closures by type	Percentage of call closures by reason code	CS-010	Business	C	On Demand	PDF	Operations	Summary of interaction statistics, grouped by interaction disposition code selected in the ITS and/or CIC system.	Y	Y
10	Total repeat contacts	Number of repeat interactions (total)	CS-010	Business	V	On Demand	PDF	Operations	Total number of repeat interactions logged for specified time period.	Y	N
11	Repeat contacts by type	Percentage of repeat interactions by reason code/channel type	CS-010	Business	V	On Demand	PDF	Operations	Repeat interaction statistics, broken out by communication channel and/or reason code.	Y	Y
12	Multiple touch points	Percentage of correspondence requiring multiple touch points	CS-010	Business	C	On Demand	PDF	Operations	% of correspondence work items accessed by multiple DOR representatives, escalated, re-assigned, reviewed.	N	Y
13	Misclassified or misdirected	Number of misclassified and/or misdirected, by input channel.	CS-020	Business	C	On Demand	PDF	Operations	Measurement of interactions accessed in ITS, and disposed with reason code indicating misdirected inquiry.	Y	Y
14	Time in queue	Time waiting in queue for customer service rep	CS-030	Business	V	On Demand	PDF	Operations	Channel agnostic measurement of wait time.	Y	Y
15	Time to scan/itemize	Time to scan/itemize correspondence	CS-020	Business	C	On Demand	PDF	Operations	Measurement of time to complete an initiated scan and/or sort function within the document repository.	Y	Y
16	Additional correspondence	Number of calls resulting in additional correspondence	CS-030	Business	C	On Demand	PDF	Operations	Measure the number and percentage of interactions that result in correspondence being issued from the ITS	Y	Y
17	Resolutions by topic	Percentage of resolutions by topic	CS-030	Business	C	On Demand	PDF	Operations	Percentage of first contact resolutions by topic.	Y	Y
18	Resolutions by case	Percentage of resolutions by cases viewed	CS-030	Business	C	On Demand	PDF	Operations	Percentage of first contact resolutions by case type.	Y	Y
19	Time to resolution	Time spent in work queue before resolution	CS-040	Business	C	On Demand	PDF	Operations	Total time to resolution for all channel types, broken out by channel. Differs from total queue wait by summing the wait time from all queues entered for an interaction.	Y	Y
20	First contact resolutions	Number of first contact resolutions	CS-040	Business	C	On Demand	PDF	Operations	Number of first contact resolutions	Y	Y
21	First call resolutions by channel	Percentage of first contact resolutions by channel	CS-040	Business	C	On Demand	PDF	Operations	% of first contact resolutions, displayed by channel	Y	Y
22	Customer service rep workload	Number of interactions taken by customer service rep (total)	CS-010	Business	C	On Demand	PDF	Operations	Number of interactions by channel taken by customer service reps, for a specified time period.	Y	Y
	Customer service rep losures	Percentage of customer rep closures by reason code	CS-010	Business	C	On Demand	PDF	Operations	Number of interactions by reason code taken by customer service reps, for a specified time period.	Y	Y

24	Response by customer service rep	Number of responses by customer service rep	CS-010	Business	C	On Demand	PDF	Operations	Total number of responses completed by service rep	Y	Y
25	Repeat callers by customer service rep	Number of repeat callers by customer service rep	CS-040	Business	C	On Demand	PDF	Operations	Number of repeat contacts, grouped by agent, with counts of encounters with the interaction prior to resolution	Y	Y
26	Resolution cost	Cost per resolved interaction	CS-020	Business	V	On Demand	PDF	Operations	Uses cost formulas specified by the agent utilization cost to calculate avg interaction cost. (Channel agnostic calculation)	Y	Y
27	Resolution cost by channel	Cost per resolved interaction by channel	CS-040	Business	V	On Demand	PDF	Operations	Uses cost formulas specified by the agent utilization cost to calculate avg interaction cost by resolution type, channel, date period, etc.	Y	Y
28	Interactions by time period	Number of interactions per channel by time period (e.g. day, week, month, time of day)	CS-040	Business	C	On Demand	PDF	Operations	Calculation of interactions by specified date/time period. Used heavily for forecasting, staffing needs and strategy discussions.	Y	Y
29	Walk-ins	Number of walk-ins (total)	CS-030	Business	C	On Demand	PDF	Operations	Uses disposition codes from walk-in type interactions logged in ITS.	Y	Y
30	Walk-ins by time	Percentage of walk-ins by time period (e.g., day, week, month, time of day)	CS-030	Business	C	On Demand	PDF	Operations	Uses start and end times gathered for walk-in type interactions from within the ITS.	Y	Y
						Revenue Accounting					
1	Net Tax Collection	Monthly reporting of Net Tax collection to be posted to the DOR Website Formalized report of revenue collected and distributed by Month, Calendar Year, Fiscal year, by account and by Fund, Tax type, and Tax category with comparison to prior year.	RA-070	Business	C	Monthly	WEB	Internal and External stakeholders, WEB	Accounts, Funds, Current period, Prior Period, Refunds, Calendar Year, Fiscal Year, Revenue Collected	N	Y
2	Annual report	IC 4-1-1-2 Annual report includes the Revenue collected and distributed. Formalized report of revenue collected and distributed by fiscal year, by fund, Account and grouping by tax type	RA-070	Business	S	Annual	WEB	Governor, Internal and External stakeholders, WEB	Accounts,5 Fiscal Years	N	Y
3	Mid Month Review	Monthly review after the primary due date of the 20th has deposited Review process is shared with our State Stakeholders, OMB, review to expectations	RA-060	Business	M	Monthly	Excel	Review committee, DOR, OMB	Accounts, Funds, Current period, Prior Period, Refunds, Calendar Year, Fiscal Year, Revenue Collected	Y	Y
4	Local Income Tax	LIT - Local Income Tax collected through the DOR withholding, and processed through the individual return to identify the county the Revenue is collected for, distributed by SBA	RA-070	Business	V	Annual	PDF	OMB/SBA	Counties, County Income Tax, cross check with rates which can change annually	N	Y
5	Reconciliation GL	Validation of People soft to ITS, to Bank . Process to view transactions posting between the ITS ,Internal GL and People soft - Account, Fund, Deposit date, transfer dates and bank activity Bank Recon, Holding account Recon, Transfer Recon, Refund Recon.	RA-050	Business	M	On Demand	Excel/ PDF report/ View	Internal Record	Accounts, Funds, Current period, Prior Period, Refunds, Calendar Year, Fiscal Year, Revenue Collected	N	Y
6	Reconciliation Distribution	Validation of ITS Business rules of distributions Verify account, percent, fund dollar amount and results are as expected. Recon, expectation to Indiana Code, % and $ thresholds.	RA-050	Business	M	On Demand	Excel/ PDF report/ View	Internal Record	Accounts, Funds, Current period, Prior Period, Refunds, Calendar Year, Fiscal Year, Revenue Collected	Y	Y
						Process Disbursements					
1	Disbursement Report	Refund or Disbursement Report provides insight to refunds and disbursements	PD-010	Business	S	Daily	System View/ pulled report	no	Taxpayer name, Dollar amount by tax type, Dollar value of disbursements by tax type, Time to disbursement, Average time from return received (postmark date) to disbursement	Y	Y
2	Disbursement Failure Report	Refund or Disbursement Failure Report provides high-level insight into failed refunds and disbursements	PD-020	Business	C	Daily	System View/ pulled report	no	Failures by payment type, Percentage of failed refunds or disbursements by payment type, ACH failures by input method, Percentage of failed ACH refunds or disbursements by input method (e.g., keyed, electronic, imaging), ACH failures by bank, Percentage of failed ACH refunds by bank, Check failures by return type, Percentage of failed checks (physical) by return type (e.g., incorrect name, incorrect address), Number of failures by time period, Number of failed refunds or	Y	Y
						Process Payments					

1	Payment Channel Report	Payment Channel Report provides insight into payment trends	PP-010	Business	C	On Demand	PDF	Finance, RPO	Payments by payment type, dollar value of payments by payment type, payments by time period, dollar value of payments by time period, payments by credit card company, dollar value of payments by third party credit card company	Y	Y
2	Suspense Account Inventory Report	Suspense Account Inventory Report provides insight into the volume of the suspense account	PP-020	Business	M	On Demand	PDF	Finance, RPO	Value of suspended payments, dollar value of suspense account, number of suspended payements, number of suspended payments by payment type in suspense account, age of suspended payments, age of suspended payments by payment type in suspense account	Y	N
3	Suspended Payments Worklist Report	Suspended Payments Worklist Report provides details on the Suspense Account worklist	PP-020	Business	S	On Demand	PDF	Finance, RPO	Payments in worklist, number of payments by payment channel in worklist, value of payments in worklist, dollar value of payments in worklist, age of payments in worklist, age of payments by payment channel in worklist, time to resolve suspense items, average time to resolution of worklist items	Y	Y

#	Name	Detail/Notes	Task Reference ID	Complexity (S, M, C, V)	Business Impact of not building this object	Affects/Effort/Workarounds (ONLY LOW VOLUME)	Timing Constraints	Dependencies	Trigger/Execution	Frequency	Source System	Target System	Direction	Asynchronous/ Partial
							Taxpayer Registration							
1	Electronic Returns Filer (ERF)*	Demographics (Personal Tax Information or PII)	TR-010-010	M	Standard interface for Returns and Transactions in RPS/RPE	All IND and COR-Passthrough returns flow through here Most WTH Returns flow through here Some RST returns flow through here All CIG returns flow through here	Straight through	May not be relevant based on future system boundaries	Filewatcher sees new file	Hourly	Imaging/SST/MITAS	RPS/RPE or replacement	One Way	A
2	Imaging	Demographics (Personal Tax Information or PII)	TR-010-015	M	Can't process paper returns in volume	Primary source for C COR returns Secondary source for IND and COR-Passthrough returns	Daily	N/A	Filewatcher sees new file	Daily	TMS or Fortis+	ERF or replacement, C COR & Estimated Payments (ES-40PT-40ES) returns interface directly to RPS	One Way	Asynchronous
3	Modernized E File (MEF)*	Demographics (Personal Tax Information or PII)	TR-010-010	M	Standard interface for Modernized eFile System	Primary source of IND and COR-Passthrough returns	Continuous (during tax season)	N/A	Poll of IRS MeF Site	Daily	IRS MeF Site	ERF or replacement	One Way	Asynchronous
4	INBiz	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-010-010	S	Interfaces through ERF for electronic BT-1 submission to BRS	Updated	On Demand	Successful Registration	Filewatcher sees new file	Daily	INBiz Web Site	ERF or replacement	Request/Reply	Synchronous
5	MotorCarrier	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-010-010	S	Interface to create entity when collection activities required	Updated	Daily	Custom Interface	Job Scheduler	Daily	OSE	RPS	One Way	Synchronous
6	Streamline Sales Tax*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-010-010	S	Standard interface for Streamlined Sales Tax	N/A	Continuous	May not be relevant based on future system boundaries	Poll of SST Clearinghouse	Daily	SST Clearinghouse	ERF or replacement	One Way	Asynchronous
7	Third-party validation*	Demographics (Personal Tax Information or PII); Keys: FEN, TID; License, Responsible Officers	TR-010-030	M	Web Service to RPS Entity	ID Validation	On Demand	Custom Interface	HTTPS Request	Daily	Any Registered System	ERF or replacement	Request/Reply	Synchronous
8	Third-party validation*	Demographics (Personal Tax Information or PII); Keys: FEN, TID; License, Responsible Officers	TR-020-040	M	Web Service to RPS Entity	ID Validation	On Demand	Custom Interface	HTTPS Request	Daily	Any Registered System	ERF or replacement	Request/Reply	Synchronous
9	3rd Party Address Standardization	Address standardization	TR-010-150	M	Credit Scoring	Fraud/Credit Scoring	On Demand	Custom Interface	Registration and renewal	Daily	Any Registered System	RPS	Request/Reply	Synchronous
10	3rd Party Address Standardization	Address standardization	TR-020-030	M	Credit Scoring	Fraud/Credit Scoring	On Demand	Custom Interface	Registration and renewal	Daily	Any Registered System	RPS	Request/Reply	Synchronous
11	3rd Party Credit Scoring	Credit scoring	TR-050-010	M	Credit Scoring	Fraud/Credit Scoring	On Demand	Custom Interface	Registration and renewal	Daily	Any Registered System	RPS	Request/Reply	Synchronous
12	Data warehouse*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-010-060	M	Combination of Home-grown and COTS (RSI PW)	Single source OFTP combined history	Constant update of shadow SOR Daily ETL of Processed data	May not be relevant based on future system boundaries	Data change in SOR Job Scheduler	Daily	RPS/RPE/Other Agency Feeds	Data Warehouse	One Way	Asynchronous
13	Data warehouse*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-020-120	M	Combination of Home-grown and COTS (RSI PW)	Single source OFTP combined history	Constant update of shadow SOR Daily ETL of Processed data	May not be relevant based on future system boundaries	Data change in SOR Job Scheduler	Daily	RPS/RPE/Other Agency Feeds	Data Warehouse	One Way	Asynchronous
14	Data warehouse*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-020-030	M	Combination of Home-grown and COTS (RSI PW)	Single source OFTP combined history	Constant update of shadow SOR Daily ETL of Processed data	May not be relevant based on future system boundaries	Data change in SOR Job Scheduler	Daily	RPS/RPE/Other Agency Feeds	Data Warehouse	One Way	Asynchronous
15	Data warehouse*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-030-180	M	Combination of Home-grown and COTS (RSI PW)	Single source OFTP combined history	Constant update of shadow SOR Daily ETL of Processed data	May not be relevant based on future system boundaries	Data change in SOR Job Scheduler	Daily	RPS/RPE/Other Agency Feeds	Data Warehouse	One Way	Asynchronous
16	Data warehouse*	Interface between keys, FEN, TID, License, Demographics, Responsible Officers	TR-030-110	M	Combination of Home-grown and COTS (RSI PW)	Single source OFTP combined history	Constant update of shadow SOR Daily ETL of Processed data	May not be relevant based on future system boundaries	Data change in SOR Job Scheduler	Daily	RPS/RPE/Other Agency Feeds	Data Warehouse	One Way	Asynchronous
17	Social Security	Demographics (Personal Tax Information or PII)	TR-020-140	S	ID Verification	Fraud/Credit Scoring	Batch	SSA Defined Interface	Registration and renewal	Daily	RPS/RPE/Other Agency Feeds	Future State ITS	Request/Reply	Sy
18	Third-party tax preparation	GIS Mapping	TR-010-110	C	Ability to Geo-code addresses.	Fraud	On Demand	Custom Interface	Registration and renewal	Daily	SOR GIS	Future State ITS	Request/Reply	Synchronous
19	License Revocation	Interfaces for license revocation	TR-050-070	C	Less people administration.	None	Batch	Custom Interface	Registration and renewal	Daily	INBiz Web Site	Future State ITS	One Way	Asynchronous
20	Hoosier Lottery	Interfaces with lottery retailers to determine whether they are registered for RST and other appropriate taxes.	TR-050-070	M	Data used to determine whether Lottery Retailers are registered for RST and other appropriate taxes.	Field Visit, Outside Lead	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	Hoosier Lottery	RPS/Future ITS	Request/Reply	Synchronous
21	Alcohol Beverage Commission	Interfaces with Alcohol Beverage Commission to review license renewals to block renewal until unpaid liabilities are satisfied. This can stop a licensee from doing business or from working in a licensed profession.	TR-050-070	M	Data used to block renewal until unpaid liabilities are satisfied. This can stop a licensee from doing business or from working in a licensed profession.	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	Alcohol Beverage Commission	RPS/Future ITS	Request/Reply	Synchronous
22	Bureau of Motor Vehicles	Interfaces with Bureau of Motor Vehicles to review lien satisfaction to determine if there is a current lien against a vehicle. BMV wants to know whether we will release a lien held against a vehicle so the owner can sell it. We will take priority position on the proceeds.	TR-050-070	M	Data used to determine if there is a current lien against a vehicle. BMV wants to know whether we will release a lien held against a vehicle so the owner can sell it. We will take priority position on the proceeds.	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	BMV	RPS/Future ITS	Request/Reply	Synchronous
23	Professional License Bureau	Interfaces with the Professional License Bureau to review license renewals to block renewal until unpaid liabilities are satisfied. This can stop a licensee from doing business or from working in a licensed profession.	TR-050-070	M	Data used to block renewal until unpaid liabilities are satisfied. This can stop a licensee from doing business or from working in a licensed profession.	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	PLA	RPS/Future ITS	Request/Reply	Synchronous
24	Indiana State University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license. They may not owe any IN tax liabilities, both income and Trust	TR-050-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
25	Ivy Tech University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license. They may not owe any IN tax liabilities, both income and Trust	TR-050-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous

25	Indiana University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license, they may not owe any IN tax liabilities, both Income and Trust	TR-030-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both Income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change.	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
	Purdue University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license, they may not owe any IN tax liabilities, both Income and Trust	TR-030-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both Income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
28	University of Southern Indiana	Interfaces with state universities to determine if IN contractor(s) hold RRMC license, they may not owe any IN tax liabilities, both Income and Trust	TR-030-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both Income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
29	Vincennes University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license, they may not owe any IN tax liabilities, both Income and Trust	TR-030-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both Income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
30	Ball State University	Interfaces with state universities to determine if IN contractor(s) hold RRMC license, they may not owe any IN tax liabilities, both Income and Trust	TR-030-070	M	Any IN contractor of a State University must hold a RRMC license and may not owe any IN tax liabilities, both Income and Trust	None	Monthly	Existing Flat File Interface. Partners may not be able to change	Calendar	Monthly	State Universities	RPS/Future ITS	Request/Reply	Synchronous
Manage Case														
1	Manual Interface	Interface with bankruptcy courts where data is manually keyed into a MS Excel file	MC-010-070	S	Proof of Claim	Replace with interface to PACER in #5	None	MOU	File received from PACER	Daily	PACER	ITS	One Way	Asynchronous
2	PACER	Interface with external court case system for case/party	MC-020-030	M	Proof of Claim	User Excel interface in #1	None	MOU	File received from PACER	Daily	PACER	ITS	One Way	Asynchronous
3	Bureau of Motor Vehicles	Interface with BMV to look into an individual assets (e.g., boats, motorhomes)	MC-020-030	M	Proof of Claim, Collections	Would not be able to do it	None	MOU	Collection case creation	Monthly	STARS	ITS	One Way	Asynchronous
4	LexisNexis	Interface with LexisNexis service to research individuals' assets	MC-020-030	M	Proof of Claim, Collections	Would not be able to do it	None	None	Collection case creation	On Demand	LexisNexis	ITS	One Way	Asynchronous
Process Submissions														
1	Interface between RPS and Post Mates	Interface between RPS and Post Mates	PS-010-090	V	Cannot print system-generated correspondence to Taxpayers	Low Volume	Constant/Batch	Print Queue Defined in Environment	RPS User/Process generates correspondence to Taxpayers	On Demand	RPS/RPE	Postmasters	One Way	Asynchronous
2	Interface between TransCentra and RPS (XML)	XML Return Interface between TransCentra and RPS	PS-010-230	V	Cannot submit Imaged Returns to ITS	Low Volume	Batch	Target Process Defined	End of Shift/End of Day Process Step	Daily	TMS	RPS	One Way	Asynchronous
3	Interface between TransCentra and RPS (Flat File)	Flat File Return Interface between TransCentra and RPS	PS-010-230	V	Cannot submit Imaged Returns to ITS	Low Volume	Batch	Target Process Defined	End of Shift/End of Day Process Step	Daily	TMS	RPS	One Way	Asynchronous
4	Interface between Fairfax and RPS (Flat File Payment)	Flat File Payment Interface between Fairfax and RPS	PS-010-230	V	Cannot submit Imaged Remittances to ITS	Low Volume	Batch	Target Process Defined	End of Shift/End of Day Process Step	Daily	Fairfax	RPS	One Way	Asynchronous
5	Interface between Fairfax and RPS (Flat File Return)	Flat File Return Interface between Fairfax and RPS	PS-010-230	V	Cannot submit Imaged Returns to ITS	Low Volume	Batch	Target Process Defined	End of Shift/End of Day Process Step	Daily	Fairfax	RPS	One Way	Asynchronous
Taxpayer Self Service														
1	WPCRegistrationInterface.job	Sends Wireless Prepaid registrations from INtax to the system which is typically well less than one hundred per day.	TS-020-010	Medium	No online presence for Business Taxpayer Service	None	1x day	None	INTax Job Scheduler	1x day	INTAX	RPS	One Way	Asynchronous
2	MessageInterface.job	Writes MailCarrier messages to correspondence in the system of record. Volume depends on taxpayer-initiated requests and how quickly the internal users reply. Should be normally less than one thousand	TS-030-220	Low	No online presence for Business Taxpayer Service	None	1x day	None	INTax Job Scheduler	1x day	INTAX	INTax	One Way	Asynchronous
3	BusinessInterface.job	For all businesses in INtax, brings over any number of changes to its accounts. Lots of things to check for. Takes several instances over an hour.	TS-010-100	High	No online presence for Business Taxpayer Service	None	1x day	None	INTax Job Scheduler	1x day	RPS	INTax	One Way	Asynchronous
4	EFTRegPushInterface.job	Updates RPS with new or updated EFT registration data for INtax account, which depends entirely on taxpayer activity	TS-010-100	Medium	No online presence for Business Taxpayer Service	None	1x day	None	INTax Job Scheduler	1x day	INTAX	RPS	One Way	Asynchronous
5	ProcessRegistration.job	Associates one business and all of its INtax-eligible accounts (1 to maybe hundreds) with an INtax user	TS-010-100	Medium	No online presence for Business Taxpayer Service	None	on demand	None	INTax Job Scheduler	on demand	RPS	INTax	One Way	Asynchronous
6	ProcessClientInterface.job	Associates one client business and all of the specified accounts with a service provider.	TS-010-100	Medium	No online presence for Business Taxpayer Service	None	on demand	None	INTax Job Scheduler	on demand	RPS	INTax	One Way	Asynchronous
7	PaymentInLieuOfReturnInterface.job	Interfaces any number of payments which are not associated with a return. Stub returns are created	TS-050-210	Medium	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
8	PaymentViaReturnInterface.job	Interfaces any number of payments which are directly associated with a return.	TS-050-210	Medium	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
9	DepositsInterface.job	Writes a row for each withdrawal request date (often one) and links all relevant payments to it		Low	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
10	EFTStatsInterface.job	Writes a few EFT Stats rows by service, payment type, number of payments by type and the sum of refunds	TS-050-210	Low	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
11	ReturnsInterface.job	Includes Remit and NoRemit. Anywhere from 100-30,000. Due Dates have higher volumes	TS-050-210	High	No online presence for Business Taxpayer Service	None	3x day	None	INTax Job Scheduler	3x day	INTAX	RPS	One Way	Asynchronous
12	PaymentInterface.job	Interfaces any number of payments. (tends to be highest mid-month)	TS-050-210	Medium	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous

13	TaxpayerInterfaceJob	Writes a row for each withdrawal request date (often one) and adds all relevant payments to it.	TS-050-210	Low	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
14	EFTStatusInterface.Job	Writes a couple of EFT Stats rows by payment type, number of payments by type and the sum of results	TS-050-210	Low	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	INTAX	RPS	One Way	Asynchronous
15	CaseDetails.ec	Interfaces any number of new or updated cases, which can have multiple liabilities. Payment plans can also be altered.	TS-050-210	Medium	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	RPS	INTax	One Way	Asynchronous
16	PaymentPlanFeeJob.job	Typically From 0-10. Depends on how many new payment plans taxpayers enter via the site	TS-050-200	Low	No online presence for Business Taxpayer Service	None	1x hour	None	INTax Job Scheduler	1x hour	INTAX	RPS	One Way	Asynchronous
17	PaymentInterfaceJob	Has been several hundred per job, but that could be because we just had an important due date. The volume going forward should be less until the next Estimated Due date.	TS-050-210	Medium	No online presence for Business Taxpayer Service	None	2x day	None	INTax Job Scheduler	2x day	DORPay	RPS	One Way	Asynchronous
						Account Maintenance								
1	DOR Lottery System Interface	Interface with IND Lottery system to put any winning to offset against debt	AM-010-030	S	Loss of source of funds to satisfy tax liability debts	None	None	None	Scheduled Batch Job	Daily	RPS	RPS	One Way	Asynchronous
2	Secure File Transfer	Secure File Transfer Process: Transferring other information to external entity from DOR	AM-000-050	M	Loss of source of funds to satisfy tax liability debts	None	None	None	Scheduled Batch Job	Daily	RPS	RPS	One Way	Asynchronous
3	Secure File Transfer	Secure File Transfer Process: Transferring DOR information to external entity, TOPS establish and vice versa.	AM-050-070, AM-050-080	M	Loss of source of funds to satisfy tax liability debts	None	None	None	Scheduled Batch Job	Daily	RPS	RPS	One Way	Asynchronous
4	Secure File Transfer	Receive and send offset file to the Auditor of State	AM-090-110, AM-090-120	M	Loss of source of funds to satisfy tax liability debts	None	None	None	Scheduled Batch Job	Daily	RPS	RPS	One Way	Asynchronous
5	Entity Identity Verification	3rd party conducts identity verification for entity requesting refund	AM-070-030	M	Loss of ability to screen tax returns for intentional identity fraud	None	None	None	Receipt of Tax Return	Daily	RPS	RPS	Request/Reply	Synchronous
6	LexisNexis	Interface for Victim Letter Generation and Sending	AM-080-060	M	Loss of ability to screen tax returns for intentional identity fraud	None	None	None	Receipt of Tax Return	Daily	RPS	RPS	One Way	Asynchronous
7	LexisNexis	Interface for Identity Confirmation Quiz Context	AM-080-050	M	Loss of ability to screen tax returns for intentional identity fraud	None	None	None	Receipt of Tax Return	Daily	RPS	RPS	Request/Reply	Synchronous
8	Military Service - Due Dates	Potential Federal notification file with the IRS loaded monthly. Statewide collection effort on active duty in combat zones	AM -030-020	M	Loss of ability to review military help status to the IRS information available to DOR	None, Accept Risk	None	None	Scheduled Batch Job	Monthly	RPS	RPS	One Way	Asynchronous
						Collections Activities								
1	Secure file transfer to third party collection agency	Interface to TPCA to be able to send and receive filedata for third party collections	CA-020-160, CA-020-170, CA-020-190, CA-020-210	C	We can't send referrals to TPCA	none	none	outstanding liabilities exist	Scheduled	Daily	RPS	TPCA	Request/Reply	Asynchronous
2	Web-service call to third party collection agency	Interface to TPCA to be able to send/receive data in real time	CA-020-170, CA-020-190	N/A	This does not exist now	This does not exist now	none	outstanding liabilities exist	On Demand	On Demand	TPCA	User Interface	Request/Reply	Parallel
3	Electronic Warrant Exchange Program (County Clerks, Sheriff)	ATWS - Liebermann Technologies	CA-020-170, CA-020-190	C	We can't file warrants without going in person to county courthouse	none	none	outstanding liabilities exist	Scheduled	Daily	RPS	County Clerk System	One Way	Asynchronous
4	Indiana Department of Labor	Employment history	CA-030-010	N/A	This does not exist now	This does not exist now	none	outstanding liabilities exist	Scheduled	Daily	DOL System	ITS	Request/Reply	Parallel
5	Indiana Department of Workforce Development	Employment status/unemployment history	CA-030-010	N/A	This does not exist now	This does not exist now	none	outstanding liabilities exist	Scheduled	Daily	DWD System	ITS	Request/Reply	Asynchronous
6	Indiana Bureau of Motor Vehicles	License(s)	CA-030-010	N/A	This does not exist now	This does not exist now	none	outstanding liabilities exist	Scheduled	Daily	BMV System	ITS	Request/Reply	Asynchronous
7	Bank Consortium (e.g. FIDM)	Bank Levy	CA-030-010	N/A	We don't levy accounts ourselves	Have TPCA levy accounts	none	outstanding liabilities exist	N/A	Daily	BankFirst	ITS	Request/Reply	Asyr
8	LexisNexis - Enforcement	Various demographic data available to validate addresses, existence of business operations, open/close dates, property ownership, etc	CA-030-010	C	We can expand our usage of the LexisNexis Service to include this	Manual lookup in LexisNexis web interface	none	outstanding liabilities exist	N/A	Daily	LexisNexis	ITS	Request/Reply	As
9	Secretary of State - Enforcement / Non-Deficiency Dunning	Data from SOS linked to taxpayer registration data - used to verify business location address and business operation dates	CA-030-010	C	We will have access to better Business Registration data through INBiz and could possibly have POC made an interface/web service to use this data	Access SOS public business registration system (powered by INBiz)	none	outstanding liabilities exist	N/A	Daily	SOS Registration	ITS	Request/Reply	Asynchronous
10	Utility Companies: Non-Deficiency Dunning	Data from utility providers used to verify business location address and business operation dates	CA-030-010	N/A	We would need statutory authority to request this data	Publicly available manual searches	none	outstanding liabilities exist	Scheduled	Daily	Private company data repository	ITS	Request/Reply	Asynchronous
11	Alcohol/Tobacco Commission	Data from/to ATC - DOR records ATC license data linked to taxpayer registration; can recommend revocation or protest renewal of ATC licenses if outstanding tax liabilities exist	CA-030-010	C	We have an interface to dispute Liquor/Bartender licenses at their renewal	Current state	none	outstanding liabilities exist	Scheduled	Daily	ATC System	ITS	Request/Reply	Asynchronous
12	Lottery Commission	Data from/to Lottery Commission - DOR records lottery license info, revocation of lottery license may be requested if outstanding liabilities exist	CA-030-010	C	We have an interface to intercept winnings	Current state	none	outstanding liabilities exist	Scheduled	Daily	Lottery Commission System	ITS	Request/Reply	Asynchronous
13	Professional Licensing Agency	PLA interface involves renewals for certain licenses (medical, contractors, etc.) - license renewals, protested by DOR if outstanding tax liabilities exist	CA-030-010	C	We have an interface to dispute professional licenses at their renewal	Current state	none	outstanding liabilities exist	Scheduled	Daily	PLA System	ITS	Request/Reply	Asynchronous
14	Secretary of State - Enforcement	SOS Motor Vehicle Dealer registration; renewals of dealer license can be protested by DOR if outstanding tax liabilities exist	CA-030-010	C	We have an interface to dispute other licenses at their renewal	Manual lookup/Current State	none	outstanding liabilities exist	Scheduled	Daily	SOS Dealer Licensing	ITS	Request/Reply	Asynchronous
						Customer Service								
1	LexisNexis	Interface to vendor providing Identity Verification services	CA-010-020	M	Can't do Taxpayer Identity Verification	none	None	None	On-Demand	On-Demand	ITS	LexisNexis	Request/Reply	Asynchronous
2	Service Center Kiosk interaction	Interface to power website-like functionality from an in-office display device	CS-030-	V	We don't have this now	none	None	We would have to provide a service portal for Individual Taxpayers.	On-Demand	On-Demand	ITS	Kiosk	Request/Reply	Parallel
3	Knowledge resources, INBiz	Interface to interrogate SOS Registration system about Business Registration and named officers	CS-010-	V	We don't have this now	Call SOS or do manual lookup on their Business Registration Website	n/a	We would need SOS to buy in and provide the services we would require to interrogate their system and see information beyond what is publicly available	On-Demand	On-Demand	ITS	SOS Registration System	Request/Reply	Parallel

4	Knowledge resources Knowledge "hub"	Interface to TaxWeb or similar knowledge management repository	CS-030-	M	We don't have this now	TaxWeb is a standalone internal website that can be access by any DOR employee who is logged into the state network	n/a	Determine where best to manage information	On-Demand	On-Demand	ITS	TaxWeb	Request/Reply	Asynchronous
5	Knowledge resources - DORStor	Interface to allow seamless access to DORStor repository using information from the ITS screen	CS-030	M	We don't have this now	Users copy the data required to access DORST or from a separate browser session	n/a	Determine where best to manage information	On-Demand	On-Demand	ITS	DORStor	Request/Reply	Asynchronous
							Revenue Accounting							
1	PeopleSoft	GL transfer to PeopleSoft JE	RA-010 RA-020 RA-030 RA 060	M	Manual process - Personnel need, and Error Risks	Manual accounting transactions or excel upload	Daily by 4PM	ITS Tax payer accounts and ITS GL data	Tax Payer Activity	Daily	ITS	People Soft	One Way	Parallel
2	Auditor of State	Report of Collections (ROC) deposit GL posting	RA-060	C	Manual process - Personnel need, and Error Risks	Manual accounting transactions or excel upload reflecting daily bank deposits 45+ Bank accounts	Daily by 2PM	Bank Deposits Reflective ITS Tax payer cashier transactions and distribution data	Bank Transactions	Daily	Bank/ ITS	People Soft	One Way	Parallel
3	Electronic Bank Statement	Daily Bank Statement Files to ITS	RA-060	M	Manual process - Personnel need, and Error Risks	Manual daily pull and file data load to ITS. currently 45+ Bank accounts	Daily by 12PM	Bank Deposits, Bank use and individual postings dates, descriptions	Bank Transactions	Daily	Bank	ITS	One Way	Asynchronous
							Process Disbursements							
1	Auditor of State	Interface with AOS to receive disbursement execution file data to update taxpayer accounts	PD-010-040	M	Loss of efficiency, added employee and higher risk of errors, recon and security issues	Manual file load from AOS to each Tax payer account	consistent daily task by 3 pm	Refund checks had been requested	check number, check cashed date, check re-issued,	daily	People soft	RPS	One Way	Asynchronous
2	Banks	Interface with bank for ACH distributions	PD-010-040	M	Loss of efficiency, added employee and higher risk of errors, recon and security issues	Manual file load	consistent daily linked with AOS check process to fund the bank	Refund checks had been requested	DOR funding of bank to post ACH refunds to tax payers	daily	Bank	RPS	One Way	Asynchronous
3	Auditor of State	Update status of check if check is deemed no longer valid by supervisor ("queue up check")	PD-020-070	M	Loss of efficiency, and security risk	Manual process	consistent daily task by 3 pm	Refund checks had been requested	Check in possession of DOR need to process the check to be canceled	daily	People soft	RPS	One Way	Asynchronous
4	Banks	Receipt of electronic file from banks that includes failed ACH refunds or disbursements	PD-020-020	M	Loss of efficiency	Manual review	consistent daily task by 3 pm	Refund checks had been requested	ACH failed transaction - need to review funds back to the state and update the tax payer account to re-over paid again	daily	Bank	RPS	One Way	Asynchronous
5	External entities with taxpayer addresses	Interface to check for additional entity addresses (BMV, USPS, etc.)	PD-020-030	C	Loss of a validation rule, incorrect mailing risk or no customer feed back on error	risk acceptance to remain or customer issues	consistent daily task by 3 pm	Refund checks had been requested	system check on accounting the check process to ensure a valid address is used	daily	BMV, USPS	RPS	Request/Reply	Parallel
6	Auditor of State	Interface with AOS for Check Distributions	PD-010-040	M	Loss of efficiency, and higher risk of errors, recon and security issues	Manual file load to AOS	consistent daily task by 3 pm	Refund checks had been requested	DOR post of refunds to Tax payers through the AOS A/P check process	daily	RPS	People Soft	One Way	Asynchronous
7	Barcode Scanner	Symbol P300 Pro – Model P304PRO-3100 is used to scan barcodes on refund checks issued by the Auditor of State	PD-020-010	M	Business user would have to hand key all returned refund checks into the ITS	Business user hand keys status into ITS	Business user must acknowledge receipt of returned check in order to attempt refund	Workflow process in ITS to mark check as returned	On-Demand	On-Demand	RPS	RPS	One Way	Parallel
							Process Payments							
1	Fairfax Imaging	Interface with Fairfax for check processing	PP-010-040	C	Posting of every payment manually to bank and to the tax payer accounts	Manual work and error/timing risk	None	None	Tax Payer Payment	Daily	Fairfax	RPS	One Way	Asynchronous
2	Third Party Credit Card Processor	Receipt of electronic file from third party credit card company that includes payments	PP-010-050	M	Posting of every payment manually to bank and to the tax payer accounts	Manual work and error/timing risk	None	None	Tax Payer Payment	Daily	Third Party Bank	RPS	One Way	Asynchronous
3	Bank(s)	Interface with DOR-specified banks for deposit	PP-010--60	M	Posting of deposit closure manually	Manual work and error/timing risk	None	None	Tax Payer Payment	Daily	Third Party Bank	RPS	One Way	Asynchronous
4	Indiana Treasurer of State	Receipt of electronic file from Treasurer of State with exception data	PP-020-080	M	Manual posting of tax payer correcting entries and reversals of deposits	Manual work and error/timing risk	None	TOS GL Posting process	Rejected payment- cause for reversal	Daily	TOS owned Third Party bank data	RPS	One Way	Asynchronous
5	Indiana Office of Technology	Receipt of electronic file from Indiana Office of Technology with exception data	PP-020-080	M	Manual posting of tax payer correcting entries and reversals of deposits	Manual work and error/timing risk	None	IOT GL Posting Process	Rejected payment- cause for reversal	Daily	IOT owned Third Party data	RPS	One Way	Asynchronous

TR - Taxpayer Registration

Defines the activities to create and maintain taxpayer registrations, as well as licensing and bonding, for all tax types.
- Register Taxpayer: Defines the activities to receive and process new taxpayer registrations, create temporary and permanent taxpayer master data records, and develop and distribute initial taxpayer correspondence with filing and account maintenance information.
- Manage Taxpayer Registration: Defines the activities to receive and process updates to existing taxpayer master data records, including proof of identity confirmation, location, filing obligation, and/or relationship information across all DOR channels.
- Manage Taxpayer Licensing: Defines the activities to determine bonding requirements, monitor expiring license and/bonds, and revoke licenses.

#	Name	Description	Task Reference ID	Response Code
		"Register Taxpayer" Functional Requirements		
TR-1	Interface Validation	System shall validate interface format prior to processing	TR-010-010	
TR-2	Automated Registration Processing	System shall support automated processing of taxpayer registration data	TR-010-010	
TR-3	Manual User Interface	System shall provide a user interface for manual taxpayer registration	TR-010-010	
TR-4	Address Standardization	System shall support automated address standardization	TR-010-150	
TR-5	Duplicate Check	System shall support automated checks for duplication of data items, including: FEIN, SSN, TID, ITIN, email, and address	TR-010-020	
TR-6	Potential Duplicate Listing	System shall provide an automated listing of potential duplicate entity accounts before creating new taxpayer profiles	TR-010-020	
TR-7	Fuzzy Matching--Name	System shall allow for approximate string matching of names	TR-010-020	
TR-8	Fuzzy Matching--Address	System shall allow for approximate string matching of addresses	TR-010-020	
TR-9	Third-party Validation	System shall support automated validation of registration data with third-party provider	TR-010-030	
TR-10	External ID	System shall capture external identification numbers in the entity profile	TR-010-030	
TR-11	Unique Identification	System shall support automated creation of a unique identification number upon initiation of registration process	TR-010-040	
TR-12	Registration Source	System shall support automated recording of source data by which an entity is registered	TR-010-070	
TR-13	Non-taxpayer Entities	System shall allow registration for non-taxpayer entities, including service providers	TR-010-070	
TR-14	Create Tax ID	System shall support automated assignment of a unique tax identification number	TR-010-070	
TR-15	Demographics	System shall record entity demographics, including: name, address, contact info, and tax identification number	TR-010-070	
TR-16	Temporary Suspension	System shall allow for temporary filers to be placed on hold for a specified period of time based on business rules	TR-010-070	
TR-17	Seasonal Filing	System shall allow for seasonal filers to be placed on hold a specified period of time based on business rules	TR-010-070	
TR-18	Seasonal Address	System shall allow for the use of seasonal addresses, including manual entry of start and end dates	TR-010-070	
TR-19	Filing Start Dates	System shall enforce that start dates are applied to all filings	TR-010-070	
TR-20	Filing End Dates	System shall enforce that end dates are applied to all filings	TR-010-070	
TR-21	Entity Start Dates	System shall enforce that start dates are applied to all entities associated with the FEIN or SSN	TR-010-070	
TR-22	Entity End Dates	System shall enforce that end dates are applied to all entities associated with the FEIN or SSN	TR-010-070	
TR-23	Multiple Names	System shall allow for different names for the same FEIN or SSN	TR-010-070	
TR-24	Multiple Address Types	System shall record different address types, including: physical, mailing by tax types, and corporate	TR-010-070	
TR-25	Fiscal Year Status	System shall record fiscal year status for entities	TR-010-070	
TR-26	Channel Preference	System shall record entity communication channel preference if available	TR-010-070	
TR-27	Bank Account Information	System shall record entity bank account information	TR-010-070	
TR-28	IP Address Capture	System shall record IP address entity used to register	TR-010-070	
TR-29	Military Addresses	System shall allow record of military addresses	TR-010-070	
TR-30	Foreign Addresses	System shall allow record of non-US addresses	TR-010-070	
TR-31	Flags and Codes	System shall maintain a number of flags and codes of various lengths across tax types in the entity profile based on business rules	TR-010-070	
TR-32	NAICS Codes	System shall allow for capture of NAICS Codes	TR-010-070	
TR-33	SIC Codes	System shall allow for capture of SIC Codes	TR-010-070	
TR-34	Start Dates	System shall enforce that start dates are applied to all registration items, including: address, filing obligations, and responsible officers	TR-010-070	
TR-35	End Dates	System shall enforce that end dates are applied to all registration items, including: address, filing obligations, and responsible officers	TR-010-070	
TR-36	Entity Without Nexus	System shall allow denotation on the entity's profile that the entity does not have nexus for a given period	TR-010-070	
TR-37	Entity Type	System shall support automated recording of entity type based on business rules	TR-010-080	
TR-38	Register Tax Type	System shall support automated registration of entity for appropriate tax type(s) based on business rules	TR-010-110	
TR-39	Multiple Tax Types	System shall allow registration of an entity for multiple tax types	TR-010-110	
TR-40	GIS Location Services	System shall support automated third-party geographic information system (GIS) verification	TR-010-110	
TR-41	GIS Information Storage	System shall store data provided by a third-party geographic information system (GIS)	TR-010-110	
TR-42	Multiple Locations	System shall allow registration of an entity conducting business from multiple locations	TR-010-110	
TR-43	Location Tax Types	System shall allow registration of each entity location for one or more tax types	TR-010-110	
TR-44	Location Activities	System shall allow registration of each entity location for one or more activities per tax type	TR-010-110	
TR-45	Consolidated Location Tracking	System shall support automated consolidation of locations based on business rules	TR-010-110	
TR-46	Parent-Child Relationships	System shall capture parent-child relationships	TR-010-120	
TR-47	Contact Persons	System shall record contact persons and associated roles	TR-010-120	
TR-48	Business to Business	System shall establish business-to-business relationships	TR-010-120	
TR-49	Responsible Officers to Business Entity	System shall support automated linking of responsible officers to business entity	TR-010-120	
TR-50	Business Entity to Responsible Officers	System shall support automated linking of business entity to responsible officers	TR-010-120	
TR-51	Multiple Contacts--Entity	System shall allow data entry of information for multiple contacts at the entity level	TR-010-120	
TR-52	Multiple Contacts--Tax Type	System shall allow data entry of information for multiple contacts at the tax type level	TR-010-120	
TR-53	Multiple Contacts--Location	System shall allow data entry of information for multiple contacts at the location level	TR-010-120	
TR-54	Multiple Contacts--License Permit	System shall allow data entry of information for multiple contacts at the license permit level	TR-010-120	
TR-55	Contact Start Dates	System shall enforce that start dates are applied to contacts	TR-010-120	
TR-56	Contact End Dates	System shall enforce that end dates are applied to contacts	TR-010-120	
TR-57	Filing Frequency	System shall support the automated recording of entity filing frequency based on tax type business rules, including: monthly, annual, and ad hoc frequencies	TR-010-120	
TR-58	Form Type	System shall support automated identification of appropriate form types for filing based on tax type business rules	TR-010-120	
TR-59	Online Account	System shall support automated establishment of an online account for registrant based on tax type business rules	TR-010-090	
TR-60	Generate Registration Packet	System shall support automated generation of registration packets based on business rules	TR-010-100	
		"Manage Taxpayer Registration" Functional Requirements		
TR-61	Proof of Identity	System shall support automated confirmation of identity method associated with ITIN	TR-020-010	
TR-62	Notify Downstream Processes	System shall allow notification to other processes that may be impacted by a change in master data	TR-020-020	
TR-63	Disallow Changes	System shall disallow updates to certain data fields, such as first name, based on business rules	TR-020-020	
TR-64	Determine Updates	System shall determine necessary updates to master data record automatically based on incoming inputs and business rules	TR-020-020	
TR-65	Risk Scoring	System shall support automated assignment of a risk score based on business rules for use in registration maintenance	TR-020-020	
TR-66	Deceased Flagging	System shall capture and flag information related to taxpayers that are deceased, including date of death	TR-020-070	
TR-67	Entity Type Change	System shall allow for changes to be made to entity type	TR-020-070	
TR-68	Version History	System shall capture all versions of entity profile information by maintaining historical data and tracking changes	TR-020-070	
TR-69	Manual Merger	System shall allow for the manual account mergers	TR-020-070	
TR-70	Manual Separation	System shall allow for the manual processing of account separations	TR-020-070	
TR-71	Automatic Merger	System shall support automated account mergers based on business rules	TR-020-070	
TR-72	Automatic Separation	System shall support automated account separations based on business rules	TR-020-070	
TR-73	Different Names--FEIN	System shall maintain different names for the same FEIN	TR-020-070	

TR-74	Different Names--SSN	System shall maintain different names for the same SSN	TR-020-070		
TR-75	Inactive Taxpayer	System shall allow designation of an entity as inactive	TR-020-070		
TR-76	Inactive Account	System shall allow designation of an account as inactive	TR-020-070		
TR-77	Period of Inactivity	System shall allow designation of the period of inactivity for an inactive account or entity	TR-020-070		
TR-78	Reinstate Registration	System shall allow reinstatement of an entity's registration	TR-020-070		
TR-79	End-date Assignment	System shall allow for end-date assignment to tax type or entity type based on business rules	TR-020-150		
TR-80	Retroactive Tax Type Updates	System shall allow for retroactive tax type updates	TR-020-150		
TR-81	Future Tax Type Updates	System shall allow for future tax type updates	TR-020-150		
TR-82	Duplicate Accounts/Addresses	System shall support automated identification of possible duplicate accounts or locations based on business rules	TR-020-080		
TR-83	Duplicate Deletion	System shall allow for deletion of duplicates	TR-020-080		
TR-84	Duplicate Modification	System shall allow for modification of duplicates	TR-020-080		
TR-85	Undeliverable Address Flagging	System shall allow flagging a specific address as undeliverable or invalid based on business rules	TR-020-080		
TR-86	Seasonal Filers	System shall allow for multi-year seasonal filers with varying obligation periods per year	TR-020-090		
TR-87	Filing Frequency Changes	System shall support automated updates to filing frequency based on business rules	TR-020-090		
TR-88	Consolidated Filers	System shall allow for consolidated filers	TR-020-090		
TR-89	Consolidated Filer Maintenance	System shall allow for edits of existing locations under consolidated filers	TR-020-090		
TR-90	Filing Status Changes	System shall allow for edits to a taxpayer's filing status	TR-020-090		
TR-91	Maintain Relationships - Edit	System shall allow for edits to business relationships	TR-020-100		
TR-92	Maintain Relationships - Add	System shall allow for added business relationships	TR-020-100		
TR-93	Maintain Relationships - Delete	System shall allow for deleted business relationships	TR-020-100		
TR-94	Entity-level Relationships	System shall specify relationships at the entity level	TR-020-100		
TR-95	Tax type-level Relationships	System shall specify relationships at the tax type level	TR-020-100		
TR-96	Return-level Relationships	System shall specify relationships at the return level	TR-020-100		
TR-97	Non-taxpayer Entities	System shall allow maintenance of relationships for non-taxpayer entities, including tax preparers	TR-020-100		
TR-98	Business Merger	System shall allow for linked history of businesses that have merged to form a new entity	TR-020-100		
TR-99	Automatic Correspondence	System shall support automated generation of notifications to confirm updates to entity accounts	TR-020-120		
		"Bonding" Functional Requirements			
TR-100	Bonding Start Date Determination	System shall support automated determination of required bond start dates based on business rules	TR-030-010		
TR-101	Bonding End Date Determination	System shall support automated determination of required bond end dates based on business rules	TR-030-010		
TR-102	Bond Value Requirement	System shall support automated determination of required bond value based on business rules	TR-030-010		
TR-103	Manual Bond Record Updates	System shall provide a user interface for manual updates to entity bonding record	TR-030-030		
TR-104	Bond Start Dates	System shall enforce that start dates are applied to bonds	TR-030-030		
TR-105	Bond End Dates	System shall enforce that end dates are applied to bonds	TR-030-030		
TR-106	Bond Value	System shall record bond value automatically based on data received	TR-030-030		
TR-107	Bond Agent History	System shall record bonding agent history automatically based on data received	TR-030-030		
		"Manage Existing Licensing and Bonding" Functional Requirements			
TR-108	Monitor Bond Dates	System shall support automated monitoring of bond renewal dates	TR-040-010		
TR-109	Monitor License Dates	System shall support automated monitoring of license renewal dates	TR-040-010		
TR-110	Monitor Bond Value Requirements	System shall support automated monitoring of entity risk score to determine adjustment of bond values based on business rules	TR-040-010		
TR-111	Revised Bond Renewal	System shall support automated determination of bond requirements (e.g., requirement, value, duration) based on business rules	TR-040-040		
TR-112	Bond Renewal Notification	System shall support automated generation of bond renewal notifications	TR-040-040		
TR-113	Generate License Renewal Notification	System shall support automated generation of license renewal notification based on business rules	TR-040-020		
TR-114	License Fee Determination	System shall support automated determination of license fee based on business rules	TR-040-020		
TR-115	Confirmation Notification Generation	System shall support the automated generation of a successful license renewal notification based on business rules	TR-040-030		
		"Revoke License" Functional Requirements			
TR-116	Manual License Revocation	System shall provide a user interface for manual updates to process license revocations	TR-050-050		
TR-117	Revocation Data	System should capture revocation data based on data received	TR-050-050		
TR-118	Update Filing Obligations	System shall support automated updates to filing obligation end date based on license revocation business rules	TR-050-070		
TR-119	Flagging	System shall support automated flagging of account with revoked license	TR-050-070		
TR-120	License Revocation Notification	System shall support automated generation of license revocation notification based on business rules	TR-050-080		

CO - Correspondence

Defines the activities to generate and contact taxpayers regarding the status of their accounts and to track the history of correspondence between DOR and the taxpayer.

#	Name	Description	Task Reference ID
		"Generation" Functional Requirements	
CO-1	Auto-Generated Correspondence--Create Business Rules	System shall support automated generation of correspondence based on business rules	Auto-Generate - Fixed
CO-2	Auto-Generated Correspondence--Create Business Events	System shall support automated generation of correspondence based on business events	Auto-Generate - Fixed
CO-3	Auto-Generated Correspondence--Edit	System shall allow for the manual editing of automatically generated correspondence (e.g., changing text field or free form box)	Auto-Generate - Fixed
CO-4	Auto-Generated Correspondence--Data Elements	System shall support automated generation of correspondence that includes specific data elements	Auto-Generate - Fixed
CO-5	Auto-Generated Correspondence--Page Designation	System shall support automated generation of correspondence with specific page designations	Auto-Generate - Fixed
CO-6	Auto-Generated Correspondence--Individual	System shall support automated generation of documents individually (such as licenses, exemption letters, notices, custom and canned correspondence)	Auto-Generate - Fixed
CO-7	Auto-Generated Correspondence--Generate Bulk	System shall support automated generation of documents in bulk, such as licenses, exemption letters, notices, custom and canned correspondence	Auto-Generate - Fixed
CO-8	Auto-Generated Correspondence--Generate Bulk in Real Time	System shall support automated generation of documents in real time, such as licenses, exemption letters, notices, custom and canned correspondence	Auto-Generate - Fixed
CO-9	Auto-Generated Correspondence--Reason Code	System shall support automated generation of tailored correspondence based on unique reason codes	Auto-Generate - Dynamic
CO-10	Auto-Generated Correspondence--Demographics	System shall support automated generation of correspondence based on demographic data	Auto-Generate - Dynamic
CO-11	Auto-Generated Correspondence--Business Rules	System shall support automated generation of correspondence based on notification type as defined by business rules	Auto-Generate - Dynamic
CO-12	Manual-Generated Correspondence--Create Business Rules	System shall allow for the manual generation of correspondence based on business rules	Manual-Generate - Triggered
CO-13	Manual-Generated Correspondence--Edit (Triggered)	System shall allow for personalization of manually generated correspondence triggered during a specific step in the work flow	Manual-Generate - Triggered
CO-14	Manual-Generated Correspondence--Data Elements	System shall allow for the manual generation of correspondence that includes specific data elements	Manual-Generate - Triggered
CO-15	Manual-Generated Correspondence--Page Designation	System shall allow for the manual generation of correspondence that includes specific page designations	Manual-Generate - Triggered
CO-16	Manual-Generated Correspondence--Individual	System shall allow for the manual generation of documents individually, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered
CO-17	Manual-Generated Correspondence--Generate Bulk	System shall allow for the manual generation of documents in bulk, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered
CO-18	Manual-Generated Correspondence--Generate Bulk in Real Time	System shall allow for the manual generation of documents in real time, such as licenses, exemption letters, notices, custom and canned correspondence	Manual-Generate - Triggered
CO-19	Manual-Generated Correspondence--Create Business Events	System shall allow for the manual generation of correspondence based on business events	Manual-Generate - Selected
CO-20	Manual-Generated Correspondence--Demographics	System shall allow for the manual generation of correspondence based on demographic data	Manual-Generate - Selected
CO-21	Manual-Generated Correspondence--Business Rules	System shall allow for the manual generation of correspondence based on notification type as defined by business rules	Manual-Generate - Selected
CO-22	Manual-Generated Correspondence--Multi-Level Criteria	System shall provide for DOR-categorized mailings using multi-level criteria (e.g., sending notices to accounts with balances due that are greater than $500)	Manual-Generate - Selected
CO-23	Manual-Generated Correspondence--Reason Code	System shall allow for the manual generation of tailored correspondence based on unique reason codes	Manual-Generate - Dyna
CO-24	Manual-Generated Correspondence--Pre-Defined by Business Rules	System shall allow for the manual generation of correspondence with pre-defined text alternatives, based on business rules	Manual-Generate - Dynamic
CO-25	Manual-Generated Correspondence--Pre-Defined by Business Events	System shall allow for the manual generation of correspondence with pre-defined text alternatives, based on business events	Manual-Generate - Dynamic
CO-26	Manual-Generated Correspondence--Pre-Defined Editable	System shall allow for the manual generation of correspondence with pre-defined text alternatives that are editable	Manual-Generate - Dynamic
CO-27	Manual-Generated Correspondence--Pre-Defined Noneditable	System shall allow for the manual generation of correspondence with pre-defined text alternatives that are not editable	Manual-Generate - Dynamic
CO-28	Manual-Generated Correspondence--Free Form	System shall allow for the manual generation of correspondence that includes free form text fields	Manual-Generate - Free-Format
CO-29	Notification Generation	System shall support automated generation of notification to external agency upon file upload	Generate - Miscellaneous
CO-30	Automatic Correspondence	System shall support automated generation of notifications to confirm updates to entity accounts	Generate - Miscellaneous
CO-31	Standardization	System shall generate standard or customizable notices, forms, and correspondence according to DOR-defined business rules	Generate - Miscellaneous
CO-32	Correspondence--Templates	System shall provide templates for automated correspondence	Generate - Miscellaneous
CO-33	Correspondence--Personalize	System shall provide action item notifications for manually personalized correspondence templates	Generate - Miscellaneous
CO-34	Correspondence--Free Form	System shall provide for free form field entry on automated correspondence	Generate - Miscellaneous
CO-35	Manual Voucher Generation	System shall allow for the manual generation of account vouchers, including: tax type, penalty, interest, and year	Generate - Miscellaneous
CO-36	Auto-Population	System shall support automated population of entity information into manually personalized correspondence	Generate - Miscellaneous
CO-37	System Calculations	System shall support automated calculations of information such as interest, penalties, or fees in correspondence	Generate - Miscellaneous
CO-38	Types of Entries	System shall provide for combinations of database variables, shell text, variable paragraphs, and free form text in correspondence	Generate - Miscellaneous

#	Name	Description	Task Reference ID
CO-39	Display--Auto-Generated Correspondence	System shall display auto-generated correspondence as it would appear to recipient	Generate - Miscellaneous
	Display--Manual Generated Correspondence	System shall display manually generated correspondence as it would appear to recipient	Generate - Miscellaneous
	Display--Correspondence	System shall provide central repository of correspondence (e.g., templates, unpopulated forms)	Generate - Miscellaneous
CO-42	Confirmation--Auto-Generated Correspondence	System shall provide confirmation to DOR employee of auto-generated correspondence submission	Generate - Miscellaneous
CO-43	Confirmation--Manual Generated Correspondence	System shall provide confirmation to DOR employee of manually generated correspondence submission	Generate - Miscellaneous
CO-44	Language--Multiple	System shall provide for correspondence to be generated in different language(s)	Generate - Miscellaneous
CO-45	Language--Bilingual	System shall provide for correspondence to be generated with two languages (e.g., English and Spanish)	Generate - Miscellaneous
CO-46	Spell Check	System shall provide spelling check capabilities equivalent to the spell check capabilities in software products such as the Microsoft Office suite	Generate - Miscellaneous
CO-47	Grammar Check	System shall provide grammar checking capabilities equivalent to the grammar check capabilities in software products such as the Microsoft Office suite	Generate - Miscellaneous
CO-48	Character Validation	System shall provide real-time character validation for free form text fields (such as character limits or alpha/numeric-only fields)	Generate - Miscellaneous
CO-49	User Creation--With Pre-Population	System shall support automated pre-population of DOR-specific information based on user (e.g., department contact information)	Generate - Miscellaneous
CO-50	User Creation--Without Pre-Population	System shall allow for the manual override of DOR-specific information based on user (i.e., not include department-specific information)	Generate - Miscellaneous
CO-51	Mail Merge	System shall provide for the capability to auto-generate bulk correspondence through mail merge	Generate - Miscellaneous
CO-52	Employee Notification of Correspondence	System shall support automated employee alerts for the generation of high volume taxpayer correspondences based on business rules	Generate - Miscellaneous
CO-53	Formatting Based on Method	System shall adhere to formatting correspondence based on USPS guidelines (e.g., size, markings), with correspondence originating in U.S.	Generate - Miscellaneous
CO-54	Auto-Generated Correspondence--Suspend	System shall provide for the capability to suspend auto-generated correspondence for an entity (i.e., suspend due to lien, default, etc.)	Generate - Miscellaneous
		"Fulfillment" Functional Requirements	
CO-55	Print Preview--Entity-Specific Information (Manual)	System shall provide print preview for manually personalized correspondence with entity-specific information	Fulfillment - Print/Process
CO-56	Print Preview--No Entity-Specific Information (Manual)	System shall provide print preview for manually personalized correspondence without entity-specific information	Fulfillment - Print/Process
CO-57	Print Preview--Entity-Specific Information (Automated)	System shall provide print preview for automatically generated correspondence with entity-specific information	Fulfillment - Print/Process
CO-58	Print Preview--No Entity-Specific Information (Automated)	System shall provide print preview for automatically generated correspondence without entity-specific information	Fulfillment - Print/Process
CO-59	Print Preview--Entirety	System shall provide for the ability to view complete packages (including letters, notices, and other related documents) online, before and after printing, in their entirety	Fulfillment - Print/Process
CO-60	Print--Bulk	System shall provide for printing correspondence in bulk	Fulfillment - Print/Process
CO-61	Print--Desktop	System shall provide for desktop printing	Fulfillment - Print/Process
CO-62	Print--Limited (User Type)	System shall provide limited desktop printing by user type	Fulfillment - Print/Process
CO-63	Print--Limited (Correspondence Type)	System shall provide limited desktop printing by correspondence type	Fulfillment - Print/Process
CO-64	Print--Choose Printing Method	System shall provide for the ability for DOR employee to choose printing method (e.g., fulfillment center, locally)	Fulfillment - Print/Process
CO-65	Forecasting	System shall provide for print forecasting dashboard for fulfillment of bulk orders	Fulfillment - Print/Process
CO-66	Folding and Packaging	System shall provide for enclosure printing, folding, and packaging	Fulfillment - Print/Process
CO-67	Multiple Page Printing	System shall provide for printing multiple-page documents with formatting that varies for each page	Fulfillment - Print/Process
CO-68	Alternative Printing Methods	System shall provide alternative printing options, such as printing locally	Fulfillment - Print/Process
CO-69	Print Outcomes	System shall provide tracking of printing outcomes (e.g., stopped, deleted, in-process, processed)	Fulfillment - Print/Process
CO-70	Automated Inline Mailing System (AIMS) Marks	System shall provide automated inline mailing system marks (AIMS)	Fulfillment - Print/Process
	Print Queues	System shall provide correspondence print queues based on business rules	Fulfillment - Print/Process
CO-72	Print Queue--Prioritization	System shall provide differing correspondence print queue timelines based on business rules (e.g. time-sensitive correspondence, black-out dates, triggered by defined date)	Fulfillment - Print/Process
CO-73	Document Locator Number	System shall provide the capability to print a document locator number on all generated correspondence	Fulfillment - Print/Process
CO-74	Fulfillment Center--Print	System shall interface with fulfillment center for the purpose of processing bulk processing, printing, and mailing	Fulfillment - Print/Process
CO-75	Fulfillment Center--Status	System shall interface with fulfillment center to provide a work order dashboard (e.g., print jobs, print history, etc.)	Fulfillment - Print/Process
CO-76	Notification--General	System shall support automated notification(s) of pending printing jobs based on business rules (e.g., color, large quantity)	Fulfillment - Print/Process
CO-77	Notification--Confirmation	System shall support automated confirmation notification(s) of completed printing jobs	Fulfillment - Print/Process
CO-78	Notification--Unsuccessful	System shall support automated notification(s) of unsuccessful printing jobs	Fulfillment - Print/Process
CO-79	Correspondence Channels	System shall provide ability to send correspondence by preferred correspondence channel based on business rules (e.g., mail, email, self-service portal message)	Fulfillment - Print/Process
CO-80	Reduced Suspends	System shall minimize the quantity of correspondence sent to entity by collating notifications based on business rules	Fulfillment - Print
CO-81	Generate Spool	System shall provide for generation of correspondence sent to a print spool where correspondence is printed in bulk	Fulfillment - Print
CO-82	USPS "Bulk Mail" Discount	System shall provide for sending correspondence in bulk using USPS "bulk mail" discount	Fulfillment - Print
CO-83	Alternative Fulfillment Methods	System shall provide alternative delivery mechanisms (e.g., fax, certified mail, overnight)	Fulfillment - Print
CO-84	Bulk Print Alert	System shall send alert to DOR employees when correspondences are printed based on business rules (i.e. some may generate department wide alerts)	Fulfillment - Print
		"Archiving" Functional Requirements	
CO-85	Business Reply--Tracking	System shall provide for the use of business reply mail in order to track mailing	Management
CO-86	Business Reply--Confirmation	System shall provide for the use of business reply mail in order to confirm mailing	Management

#	Name	Description	Task Reference ID
CO-87	DLN Unique Identifier	System shall assign a unique, searchable internal identifier number to each taxpayer for tracking correspondence, such as Document Locator Number (DLN) or Correspondence Locator Number (CLN)	Archiving - Document Management
CO-88	Automated Correspondence Tracking	System shall support automated tracking of correspondence by internal identifier number	Archiving - Document Management
CO-89	Manual Correspondence Tracking	System shall allow for the manual tracking of correspondence by internal identifier number	Management
CO-90	Customer Contact History	System shall provide access to customer contact thread history	Management
CO-91	Customer Contact History--Interface	System shall interface with content management system to provide customer contact history	Management
CO-92	Link Correspondence	System shall support automated linking of correspondence across correspondence channels in customer contact history (e.g., email, mail, phone, secure messaging through portal)	Archiving - Document Management
CO-93	Link Attachments	System shall support automated linking of correspondence attachments across correspondence channels (e.g., documents, images)	Management
CO-94	Customer Contact History--Filter	System shall provide filtering of customer contact history in viewable list based on business rules (e.g., entity, date, case)	Management
CO-95	Image Record	System shall support automated image recording of system-generated correspondence	Management
CO-96	Image Access	System shall provide access to images of system-generated correspondence from within correspondence history	Management
CO-97	Scanned Images	System shall provide storage for scanned correspondence	Management
CO-98	Scan Lines	System shall provide correspondence with scan lines and/or bar codes to provide for tracking	Management
CO-99	Correspondence Information	System shall display taxpayer correspondence history	Management
CO-100	Correspondence--Tracking by Message	System shall create a contact record when correspondence is sent	Management
CO-101	Correspondence--Document Tracking	System shall provide ability to track the fulfillment of correspondence by DLN	Management
CO-102	Correspondence--Throttling	System shall provide ability to designate correspondence throttling based on business rules	Management
CO-103	Effective Dates	System shall create effective dates for all data elements including: tax types, filing frequencies, and addresses	Management
CO-104	Expiry Dates	System shall create expiry dates for all data elements including: tax types, filing frequencies, and addresses	Management
CO-105	Correspondence History	System shall store correspondence received history based on business rules	Management
CO-106	Return Tracking	System shall provide for tracking of USPS returned/undeliverable mail	Management
CO-107	Address--Updates	System shall support automated address update based on USPS returned/undeliverable mail	Management
CO-108	Flag Correspondence	System shall provide for flagging of correspondence to be removed from discovery	Management
CO-109	Correspondence--Regeneration (Employee)	System shall allow for the manual exact re-generation of correspondence (e.g. dates, DLN#) by employee	(Publish/Confirm/Edit)
CO-110	Correspondence--Reproduction (Employee)	System shall allow for the manual editing of previously sent correspondence (e.g. dates, DLN#) by employee to created a correspondence reproduction	(Publish/Confirm/Edit)
CO-111	Correspondence--Regeneration (Taxpayer)	System shall allow for the manual exact re-generation of correspondence (e.g. dates, DLN#) by taxpayer	(Publish/Confirm/Edit)
CO-112	Branding	System shall provide correspondence with DOR-specific branding	(Publish/Confirm/Edit)
CO-113	Special Characters	System shall provide the use of graphics, electronic signatures, or special characters	(Publish/Confirm/Edit)
CO-114	Quality Control--Ability	System shall provide quality control mechanisms based on business rules (e.g., spot checks)	(Publish/Confirm/Edit)
CO-115	Address--Undeliverable	System shall support automated identification of undeliverable or invalid addresses by the United States Postal Service (USPS) for future correspondence	(Publish/Confirm/Edit)
CO-116	Address--Change of Address (Bulk)	System shall interface with National Change of Address in bulk	(Publish/Confirm/Edit)
CO-117	Address--Change of Address (Real-Time)	System shall interface with National Change of Address in real-time	(Publish/Confirm/Edit)
CO-118	Address--Change of Address History	System shall support automated notification of undeliverable or invalid addresses in self service profile (if applicable)	(Publish/Confirm/Edit)
CO-119	Address--Validation	System shall validate city and state based on entry of a zip code entered	(Publish/Confirm/Edit)
CO-120	Address--Validation by Zip	System shall validate city and state based on entry of a zip code by displaying a selection of cities valid for the zip code	(Publish/Confirm/Edit)
CO-121	Address--Assign	System shall support automated identification of the correct zip code based on entry of a street, city, and state address	Archiving - Maintenance (Publish/Confirm/Edit)
CO-122	Address--Non-Traditional	System shall provide for correspondence to be sent to non-traditional addresses (e.g. foreign, military, etc.)	Archiving - Maintenance (Publish/Confirm/Edit)
CO-123	Address--Manual Override	System shall provide for employees to override address standardization changes based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)
CO-124	Address--Special Attention	System shall provide for a "special attention" line in the address format	Archiving - Maintenance (Publish/Confirm/Edit)
CO-125	Address--Select	System shall support automated selection of correspondence address based on business rules when multiple addresses exist on the account	(Publish/Confirm/Edit)
CO-126	Name Change--Flagging	System shall support automated flagging of name changes	Archiving - Maintenance (Publish/Confirm/Edit)
CO-127	Name Change--Tracking	System shall support automated tracking of entity name changes in self service profile	Archiving - Maintenance (Publish/Confirm/Edit)
CO-128	Correspondence--Follow-Up	System shall support automated flagging of an account for follow-up correspondence based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)
CO-129	Correspondence Holds	System shall support automated account hold on entity correspondence based on business rules	Archiving - Maintenance (Publish/Confirm/Edit)

AM - Account Maintenance

Defines the activities to manage account correspondence, to load and process external offsets (e.g. unemployment, child support, or comptroller offsets), to manually post adjustments and perform clearance of open items, and to process penalties and interest. Also defines the activities to review and approve overpayment and to process fraudulent activity. Finally, also defines the activities to manage postings on an entity's account.

- Load External Offsets: Defines activities to load external offsets from various external agencies and appropriately update taxpayer accounts.
- Process External Offsets: Defines activities to process external offsets and determine any debt hierarchy to be followed in clearing process.
- Manage Account Postings: Defines activities to make financial adjustments to payments or liabilities to correct taxpayer accounts and returns ensuring minimal downstream impact.
- Process Penalty and Interest: Defines activities to identify eligible items for penalty and interest, and calculate and post any penalties and interest to a taxpayer's account.
- Transmit Liabilities to IRS for External Offset: Defines the activities to transmit open liabilities to external agencies and to notify taxpayers that their account has been reported to these external agencies.
- Perform Clearing: Defines activities to identify liabilities and credits at the taxpayer account period to clear liabilities.
- Overpayment Review/Approval: Defines activities to review and approve overpayments made by taxpayers before issuance of refunds.
- Process Fraud Activity: Defines activities to process and escalate fraudulent taxpayer activity.

#	Name	Description	Task Reference ID
		"Load External Offsets" Functional Requirements	
AM-1	External Offset File Acceptance	System shall allow for offset files to be accepted from approved external entities	AM-010-010
AM-2	External Entity Addition	System shall allow for the manual addition of an external entity to the system	AM-010-010
AM-3	File Validation	System shall support automated file validation based on business rules	AM-010-010
AM-4	File Record Validation	System shall support automated file record validation based on business rules	AM-010-010
AM-5	Automated Format Error Identification	System shall support automated file rejection based on business rules	AM-010-020
AM-6	Error Reason Code	System shall support automated generation of rejection reason code	AM-010-020
AM-7	Automated Offset Upload	System shall support automated loading of offset data, including: name, SSN, FEIN, address, offset amount	AM-010-030
AM-8	External Entity Log	System shall allow for logging of external offset data, including: multiple external entity aliases, case number, and expiration dates	AM-010-030
AM-9	Offset Refresh--Update	System shall allow for refresh of offset details through update based on business rules	AM-010-030
AM-10	Offset Refresh—Replacement	System shall allow for refresh of offset details through replacement based on business rules	AM-010-030
AM-11	Debt Expiration Check	System shall support automated check of debt expiration date against current date	AM-010-050
AM-12	Refund to Offset Check	System shall support automated check for matching accounts eligible for refund to offset data, including: name, SSN, FEIN, address, alias	AM-010-040
AM-13	Taxpayer Address Matching	System shall support automated matching of taxpayer address from refund to offset data based on business rules	AM-010-040
AM-14	Phonetic Name Variations	System shall integrate with a tool that provides phonetic spelling for creation of alternate names	AM-010-040
AM-15	Name Logic Matching	System shall support automated matching of first name / last name logic from refund to offset data	AM-010-040
AM-16	Scoring of Matching	System shall support automated scoring of data matching based on business rules	AM-010-040
AM-17	Refund Hold	System shall support automated refund holds based on business rules	AM-010-040
AM-18	Account Flagging—Offsets	System shall support automated flagging of accounts held for offset	AM-010-040
AM-19	Account Notes--Offsets	System shall provide details of refund hold in taxpayer account based on entity that originated the offset	AM-010-040
		"Process External Offsets" Functional Requirements	
AM-20	External Offset Allocation	System shall support automated offset of refund based on defined offset debt prioritization	AM-020-060
AM-21	Offset Prioritization Definition	System shall allow for offset debt prioritization based on business rules, including: entity type, debt age, debt amount, application date	AM-020-060
AM-22	Partial Offset	System shall support automated partial offset of refund to external debt based on defined prioritization	AM-020-060
AM-23	Refund Holding	System shall support automated hold of refund based on pending offset amount	AM-020-040
AM-24	Refund Disbursement	System shall allow non-pending portion of refund offset to continue through the refund process	AM-020-040
	Account Note Update	System shall support automated update of offset details in taxpayer account based on entity that originated offset	AM-020-040
	Refund Hold Updates	System shall support automated updates to refund hold details in taxpayer account based on updates from originating entity requesting offset	AM-020-040
AM-27	Apply Offset	System shall support automated application of offset to taxpayer account based on business rules	AM-020-100
AM-28	Pending Offset File	System shall support automated generation of a file to a designated entity containing pending offset details, including: taxpayer ID, external agency case number, taxpayer name, offset amount	AM-020-050
AM-29	Automated Push Notifications	System shall support automated push notifications to external entity after successful file upload	AM-020-050
AM-30	Hold Release—No Response	System shall support automated release of refund hold due to lack of response from entity requesting offset based on business rules	AM-020-050
AM-31	Hold Release--Approved	System shall support automated release of refund hold once pending offset is approved	AM-020-050
AM-32	Hold Release—Reject	System shall support automated release of refund hold once pending offset is rejected	AM-020-050
AM-33	Rejection Details	System shall support automated posting of rejection details and reason code to taxpayer account	AM-020-050
AM-34	Account Flag Clearing	System shall support automated removal of pending offset notification flag	AM-020-090
AM-35	Pending Offset Removal	System shall support automated removal of pending offset refund hold based on business rules	AM-020-090
AM-36	Manual Adjustments to Offset	System shall support manual employee adjustments of external debt amounts available for offset	AM-020-080
AM-37	Manual Adjustments Approval	System shall support approval process of manual adjustments based on business rules, including: threshold amount and entity type	AM-020-080
AM-38	Supervisor Review	System shall support automated push of manual offset revisions to supervisor for review	AM-020-150
AM-39	Manual Offset Revision Adjustment	System shall support automated push of manual offset revision for adjustment if supervisor rejects	AM-020-150
		"Manage Account Postings" Functional Requirements	
AM-40	Open Error--Log	System shall log open taxpayer account errors, including: events, date of identification, and error type based on business rules	AM-030-010
AM-41	Open Error—Reporting	System shall provide general error reporting for open taxpayer account errors based on business rules	AM-030-010

#	Name	Description	Task Reference ID
AM-42	Open Error--Performance Management	System shall provide analytical reports (e.g., trend, aging, type, etc.) for open taxpayer account errors based on business rules	AM-030-010
AM-43	Open Error View	System shall allow employee to view open errors in taxpayer account summary	AM-030-010
AM-44	Error Reason Codes	System shall allow for reason code(s) to be applied to an error	AM-030-010
AM-45	View--Account Summary	System shall allow employee to view taxpayer account summary data	AM-030-010
AM-46	View--Entity	System shall allow employee to view entity-level data	AM-030-010
AM-47	View--Account Summary	System shall allow employee to view account-level data	AM-030-010
AM-48	View--Transactions	System shall allow employee to drill-down on fields within account summary to view transaction-level data	AM-030-010
AM-49	Online Report/View	System shall allow employee to generate online reports/views with specified account summary data, including: date, type, and amount	AM-030-010
AM-50	Sorting	System shall allow employee to sort fields within account summary data, including: date, type, and amount	AM-030-010
AM-51	Filtering	System shall allow employee to filter account summary data based on fields, including: date, type, and amount	AM-030-010
AM-52	Account Summary Print	System shall allow employee to print account summary data	AM-030-010
AM-53	Transaction Notes	System shall allow for notes to be included against manual transactions (e.g., adjustments, postings, etc.).	AM-030-010
AM-54	Transaction Notes--Lock	System shall not allow for updates to be made on existing notes	AM-030-010
AM-55	Root Cause	System should provide list of frequent root causes by error type based on business rules	AM-030-010
AM-56	Assisted Navigation	System shall provide hyperlinks to frequent actions to error codes to assist navigation for users within system	AM-030-010
AM-57	Payment Search	System shall support search capability for specific payment data, including: dollar amount, routing number, and channel	AM-030-010
AM-58	Imaging--Physical	System shall provide links to images (e.g., scanned documents) in account summary for specific transactions	AM-030-010
AM-59	Fuzzy Matching	System should support search capability for approximate string matching, including: name and address	AM-030-010
AM-60	Multiple Account View	System shall allow employee to view multiple taxpayer accounts at the same time (e.g., split screens)	AM-030-010
AM-61	Return Search	System shall support search capability for available payment data, including: date received, SSN, payment amount, and FEIN	AM-030-010
AM-62	Relationships	System shall display all linkages between known relationships	AM-030-010
AM-63	Relational Graph	System should display all entity relationships graphically	AM-030-010
AM-64	Search	System shall support search of entity information, including: Payment Locator Number (PLN), warrant numbers, and liability numbers	AM-030-010
AM-65	NOL Carry Forward	System shall support automated carry forward of Net Operating Loss (NOL) from previous period(s)	AM-030-010
AM-66	Resolution Management	System shall provide descriptions for reason codes	AM-030-010
AM-67	Thresholds	System shall enforce supervisor review for financial impact of posting based on business rules	AM-030-010
AM-68	Automated Error Adjustment	System shall support automated adjustments to transactions/postings based on business rule	AM-030-010
AM-69	Bulk Fix	System shall allow for errors to be corrected in bulk based on business rules	AM-030-020
AM-70	Bulk Fix--Selection	System shall allow for transactions logs to be filtered for bulk fix	AM-030-020
AM-71	Bulk Fix--Highlight	System should highlight bulk updates that will result in significant errors based on business rules	AM-030-020
AM-72	Informational Returns	System shall allow for informational returns to post based on business rules.	AM-030-020
AM-73	Process--Missing Voucher	System shall provide a process to accommodate for entities with a missing voucher based on business rules	AM-030-020
AM-74	Process--Money Transfer	System shall provide a process to transfer money between accounts based on business rules	AM-030-020
AM-75	Process--Return Transfer	System shall provide a process to transfer returns between accounts based on business rules	AM-030-020
AM-76	Process--Refund Transfer	System shall provide a process to transfer refunds between accounts based on business rules	AM-030-020
AM-77	Process--Payment Postmark Adjustment	System shall provide a process to adjust payment postmarks based on business rules	AM-030-020
AM-78	Process--Return Postmark Adjustment	System shall provide a process to adjust return postmarks based on business rules	AM-030-020
AM-79	Process--Adjustments by Period	System shall provide a process to adjust transactions by period based on business rules	AM-030-020
AM-80	Process--Redeposit Dates	System shall provide a process to accommodate for missed redeposit dates based on business rules	AM-030-020
AM-81	Process--Payment Reallocation	System shall provide a process to reallocate payments based on business rules	AM-030-020
AM-82	Process--Reverse Offset	System shall provide a process to reverse offsets based on business rules	AM-030-020
AM-83	Process--Liability Creation	System shall provide a process to create liabilities based on business rules	AM-030-020
AM-84	Process--Liability Cancellation	System shall provide a process to cancel liabilities based on business rules	AM-030-020
AM-85	Process--Liability Satisfaction	System shall provide a process to satisfy liabilities based on business rules	AM-030-020
AM-86	Process--Penalty Adjustment	System shall provide a process to adjust penalties based on business rules	AM-030-020
AM-87	Process--Interest Adjustment	System shall provide a process to adjust interest based on business rules	AM-030-020
AM-88	Process--Agent Collection Date	System shall provide a process to adjust agent collections date based on business rules	AM-030-020
AM-89	Process--Delinquency Clearance	System shall provide a process to clear delinquencies based on business rules	AM-030-020
AM-90	Process--Batch Correction	System shall provide a process to make batch corrections based on business rules	AM-030-020
AM-91	Process--SOL	System shall provide a process to maintain compliance within Statute of Limitations based on business rules	AM-030-020
AM-92	Process--Entity Merges	System shall provide a process to merge entities' transaction data, including: postings, and returns based on business rules	AM-030-020
AM-93	Process--Form Line-Item Adjustments	System shall provide a process to adjust form line-item data based on business rules	AM-030-020
AM-94	Process--Abatement Penalty	System shall provide a process to apply abate penalties on an account period	AM-030-020
AM-95	Process--Abatement Interest	System shall provide a process to abate interest on an account period	AM-030-020
AM-96	Process--Disaster	System shall provide a process to lock tax account periods to accommodate disaster relief scenarios by account summary data, including: zip code, NAICS/SIC code, and	AM-030-020

#	Name	Description	Task Reference ID
AM-97	Process–Disaster Penalty Postponement	System shall provide a process to postpone calculation date for penalty based on application of disaster relief scenario.	AM-030-020
	Process–Disaster Interest Postponement	System shall provide a process to postpone calculation date for interest based on application of disaster relief scenario.	AM-030-020
	Process–Military Due-Date	System shall provide a process to adjust due-dates for military professionals based on business rules	AM-030-020
AM-100	Process–Expungements	System shall provide a process to automatically trigger expungements (i.e., erasure of previous incident such as warrants and liens) based on business rules	AM-030-020
AM-101	Process–Split Payments	System shall provide a process to split a payment during a payment transfer based on business rules	AM-030-020
AM-102	Simulation	System shall support simulation of processes (e.g., Missing Voucher, Money Transfer, Return Transfer, etc.) to determine potential outcomes of actions	AM-030-040
AM-103	Financial Impacts	System shall support automated calculation of financial impact to account transactions and balances for simulations	AM-030-040
AM-104	Transaction Reversal	System shall allow for the reversal of transactions based on business rules	AM-030-050
AM-105	Prior Financial Impact	System shall support automated adjustments to all impacted tax account periods (including previous periods and other tax accounts) resulting from an adjustment to t	AM-030-050
AM-106	Prior Financial Impact–Relationships	System shall include the financial impact to previous periods from related entities when posting account updates	AM-030-050
AM-107	Future Period Impact	System shall support automated carry forward of account data to future financial periods based on business rules	AM-030-050
		"Process Penalty and Interest" Functional Requirements	
AM-108	Event Identification	System shall support automated identification of events eligible for penalty based on business rules	AM-040-010
AM-109	Liability Identification	System shall support automated identification of outstanding liabilities eligible for interest based on business rules	AM-040-010
AM-110	Amnesty	System shall provide capabilities to support amnesty	AM-040-010
AM-111	Penalty Calculation	System shall support automated calculation of penalties based on business rules	AM-040-020
AM-112	Penalty Determination	System shall support automated use of historical data to determine penalty	AM-040-020
AM-113	Penalty Application - Reason Code	System shall support automated application of penalty based on selected reason code	AM-040-020
AM-114	Penalty Calculation	System shall support calculation of penalty, including: flat rates, percentage of transaction based on business rules	AM-040-020
AM-115	Penalty Rounding Up	System shall support automated rounding up of applicable penalties to predetermined penalty floor based on business rules	AM-040-020
AM-116	Penalty Write Off	System shall support automated write off of penalties below a predetermined threshold based on business rules	AM-040-020
AM-117	Supervisor Review - Penalty	System shall support automated triggering of supervisor approval for penalty above a threshold based on business rules	AM-040-020
AM-118	Penalty Block	System shall allow for blocking penalty at entity tax account period	AM-040-020
AM-119	Interest Calculation	System shall support automated calculation of interest based on business rules	AM-040-040
AM-120	External Rate	System shall support calculation of interest based on external rates	AM-040-040
AM-121	Reverse Interest Rate	System shall allow for determination of a DOR incurred rate of interest based on business rules	AM-040-040
AM-122	Decoupling Interest Rate	System shall allow for decoupled interest rates for applied and incurred	AM-040-040
AM-123	Rate Percentage	System shall support calculation of interest rate as a percent of transaction for a specific time period	AM-040-040
AM-124	Compound Interest Rate	System shall support calculation of compound interest rate for a specific time period	AM-040-040
AM-125	Simple Interest Rate	System shall support calculation of simple interest rates for a specific time period	AM-040-040
AM-126	Forecasted Interest to Taxpayer Bill	System shall support calculation of forecasted interest for specific time periods based on business rules	AM-040-040
AM-127	Interest Block	System shall allow for blocking interest at entity tax account period	AM-040-040
AM-128	Post Penalty	System shall support automated posting of penalty to taxpayer account period	AM-040-050
AM-129	Post Interest	System shall support automated posting of interest to taxpayer account period	AM-040-050
AM-130	Batch Posting of Penalty	System shall support periodic batch posting of penalty	AM-040-050
AM-131	Batch Posting of Interest	System shall support periodic batch posting of interest	AM-040-050
		"Transmit Liabilities to IRS for External Offset" Functional Requirements	
AM-132	Eligible Debt Identification	System shall support automated identification of outstanding liabilities eligible for offset based on business rules	AM-050-010
AM-133	Correspondence Allocation	System shall support automated correspondence applied to relevant liability(ies) based on business rules	AM-050-020
AM-134	Tracking Details	System shall track correspondence details (e.g., date, type, document locator number, etc.) based on business rules	AM-050-020
AM-135	Entity Response Tracking	System shall support automated tracking of the number of days between sending entity correspondence and response from entity	AM-050-020
AM-136	TOPs Requirements	System shall produce an offset request file that conforms with TOPs published guidelines	AM-050-070
AM-137	Offset Request File Update	System shall support automated update to TOPs offset request file with new liabilities based on business rules	AM-050-070
AM-138	TOPs Offset Refresh	System shall support automated refresh of TOPs offset request file details through update based on business rules	AM-050-070
AM-139	Offset Refresh	System shall support automated refresh of TOPs offset request file details through replacement based on business rules	AM-050-070
AM-140	Offset File Updates	System shall support automated sending of an offset request file to TOPs based on business rules	AM-050-070
AM-141	Name Logic Matching	System shall allow for the capture multiple name variances per entity based on business rules	AM-050-070
AM-142	Variances in File	System shall support automated inclusion of all name variances in TOPs offset request file	AM-050-070
AM-143	Third Party Alias Software	System should allow third party software to determine name variations, including: additional aliases, common misspellings	AM-050-070
AM-144	Add Aliases	System shall allow for manual addition of name variations based on business rules	AM-050-070
AM-145	Offset File Receipt	System shall support automated upload of TOPs offset file via secure file transfer	AM-050-090
AM-146	Reinstate Liability	System shall support automated reinstatement of a liability to TOPs offset file for reversal process	AM-050-090
AM-147	Redistribute Funds	System shall support automated distribution of funds back to TOPs based on business rules	AM-050-090
AM-148	Partial Match Report–TOPS	System shall support automated generation of a report of partial matches based on TOPS offset file received	AM-050-100
AM-149	Match SSN/FEIN	System shall enable a matching algorithm for data from vendor payment file and eligible liabilities for offset	AM-050-150

#	Name	Description	Task Reference ID
AM-150	Offset File Generation	System shall support automated generation of vendor payment offset file with complete matches, including: details of match, amount of offset	AM-050-120
AM-151	Offset File Sent to State Auditor	System shall support automated sending of vendor payment offset file to Auditor of State based on business rules	AM-050-120
AM-152	Partial Match Report—Vendor	System shall support automated generation of a report of partial matches based on vendor offset file received	AM-050-140
		"Perform Clearing" Functional Requirements	
AM-153	Obligation Identification	System shall identify obligations posted within the tax account period at the transaction level	AM-060-010
AM-154	Credit Identification	System shall identify credits posted within the tax account period	AM-060-020
AM-155	Payment Identification	System shall identify payments posted within the tax account period	AM-060-020
AM-156	Eligibility	System shall determine eligibility of clearing (e.g., payment type, date, status) based on business rules	AM-060-030
AM-157	Account Clearing	System shall calculate the tax account period balance by comparing eligible credits against associated obligations at the transaction level	AM-060-030
AM-158	Order of Precedence	System shall apply eligible credits to associated obligations at the transaction level in order of precedence (i.e., penalty being cleared before interest and then base tax)	AM-060-030
AM-159	Updated Balance	System shall post updated balance within the tax account period based on results of clearing	AM-060-030
AM-160	Transaction History	System shall log history of clearing at the transaction level within the tax account period	AM-060-030
		"Overpayment Review/Approval" Functional Requirements	
AM-161	Payment Amount Validation	System shall validate amount due on tax return against the amount paid by entity	AM-070-010
AM-162	Multiple Payment Type Validation	System shall validate payments that include multiple payment types (e.g., checks, EFT, etc.)	AM-070-010
AM-163	Payment Source	System shall log the sources of payment used by each entity	AM-070-010
AM-164	Payment Tracking	System shall track payment due dates based on business rules	AM-070-010
AM-165	Payment Date	System shall log the date a payment is made	AM-070-010
AM-166	Past-due Payment Interest	System shall apply interest on payments that are made after their due date based on business rules	AM-070-010
AM-167	Statute of Limitations Validation	System shall validate overpayments against Statute of Limitations rules based on business rules	AM-070-010
AM-168	Suspended Return Validation	System shall validate overpayments against suspended returns from previous tax account periods	AM-070-010
AM-169	Refund Amendment Validation	System shall validate refunds against amendments made within the current tax account period	AM-070-010
AM-170	Tax Credit Offset	System shall allow for issuance of tax credits for overpayments	AM-070-010
AM-171	Overpayment Source	System shall log the source of overpayment (e.g., Audit, Legal, etc.)	AM-070-010
AM-172	Overpayment Notes	System shall allow for notes to be included against overpayment	AM-070-010
AM-173	Tax Type Log	System shall log the tax type from which the taxpayer is requesting a refund	AM-070-030
AM-174	ID Verification	System shall verify identification of taxpayer for refund requests	AM-070-030
AM-175	Power of Attorney Verification	System shall verify identification of power of attorney for refund requests	AM-070-030
AM-176	ID Verification—Third Party	System shall allow for third party identification verification	AM-070-030
AM-177	Refund Request Notes	System shall allow for notes to be included against refund requests	AM-070-030
AM-178	File Attachments—Refund Request	System shall allow for file attachments to be included against refund requests	AM-070-030
AM-179	Distribution	System shall allow for distribution of refund request to appropriate employee(s)	AM-070-030
AM-180	Data Capture	System shall enforce sufficient information is captured from refund request form	AM-070-030
AM-181	Request Receipt Acknowledgment	System shall allow for acknowledgment of refund request receipt	AM-070-030
AM-182	Request Receipt Channels	System shall accept refund requests through multiple channels (e.g., online, physical documentation, etc.)	AM-070-030
AM-183	Sign-off	System shall validate sign-off of work item closure	AM-070-060
AM-184	Bulk Review	System shall provide the ability to review work items in bulk based on business rules	AM-070-060
AM-185	Bulk Approval	System shall provide the ability to approve changes to work items in bulk based on business rules	AM-070-060
AM-186	Bulk Reassignment	System shall provide the ability to reassign work items in bulk based on business rules	AM-070-060
AM-187	Work Item Age	System shall track the age of work items in queue	AM-070-060
AM-188	Online Report/View	System shall allow employee to generate dynamic reports/views with specified work item data including: date, type, and age	AM-070-060
AM-189	Sorting	System shall allow employee to sort fields within work item data including: date, type, and age	AM-070-060
AM-190	File Attachments—Work Item	System shall allow for file attachments to be included against work items	AM-070-060
AM-191	Queue Case Generation	System shall allow for the creation of a case from the work item queue based on business rules	AM-070-060
AM-192	Thresholds	System shall maintain dollar amount thresholds by tax type based on business rules	AM-070-020
AM-193	Threshold Recognition	System shall allow for recognition of refund requests below minimum dollar amount thresholds	AM-070-020
AM-194	Prioritization--Overpayment	System shall prioritize processing of overpayments based on business rules	AM-070-020
AM-195	Line-item Comparison	System shall support automated line-item comparison against normalized range based on business rules	AM-070-020
AM-196	Suspended Refund	System shall allow for refunds to be put into suspense based on business rules	AM-070-020
AM-197	Random Review	System shall support random review of refund requests based on business rules	AM-070-020
AM-198	Overpayment Reason Codes	System shall allow for reason code(s) to be applied to an overpayment	AM-070-020
AM-199	Overpayment Offset	System shall allow for overpayment offset of liabilities	AM-070-020
AM-200	Cross-TAP Application	System shall allow for overpayment offset across different tax account periods	AM-070-020
AM-201	Overpayment Transfer	System shall allow for overpayments to be transferred between taxpayer account periods based on business rules	AM-070-020
AM-202	Injured Spouse	System shall allow for identification of an injured spouse	AM-070-020

#	Name	Description	Task Reference ID
AM-203	Injured Spouse--Accommodation	System shall accommodate for injured spouse based on business rules	AM-070-020
4	Offset Details	System shall provide detailed description of how refunds are offset and applied to entity based on business rules	AM-070-020
5	Appeal--Refund Denial	System shall allow for appeal of refund denial	AM-070-020
AM-206	Appeal--Refund Offset	System shall allow for appeal of refund offsetting	AM-070-020
AM-207	Donations	System shall allow for donation of refund based on business rules	AM-070-020
AM-208	System Override	System shall allow system override of processing refund	AM-070-020
AM-209	Overpayment Application Hierarchy	System shall enforce hierarchy of overpayment application (i.e., offsetting before refunding)	AM-070-020
AM-210	Taxpayer Adjustment Correspondence	System shall support automated generation of correspondence to taxpayer via taxpayer's desired channel informing them of adjustments to their return	AM-070-070
		"Process Fraud Activity" Functional Requirements	
AM-211	Document Retrieval	System shall support employee ability to manually retrieve an archived suspected or confirmed fraud document by unique identification number	AM-080-070
AM-212	Archive Document	System shall support the ability to automatically archive a document for potential fraudulence based on business rules	AM-080-070
AM-213	Unarchive Document	System shall support the ability to manually unarchive a document that had been archived for potential fraudulence	AM-080-070
AM-214	Reason Code	System shall support automated assignment of fraud reason code to a document prior to archiving	AM-080-070
AM-215	Fraud Analysis vs Audit Analysis	System shall automatically make recommendation for case action (creation of SIU or audit case) based on business rules	AM-080-090
AM-216	Fraud Score Creation	System shall create a fraud score, indicating likelihood of fraud, for each return based on business rules (e.g., examining trends and historical information, using externa	AM-080-090
AM-217	Similar Fraud Return Display	System shall display returns that correlate with the fraudulent tax return under review based on business rules (e.g. taxpayer demographics, fraud score)	AM-080-090
AM-218	Implicit Registration Prevention	System shall support safeguards preventing returns suspended for potential fraudulence do not trigger the creation of implicit taxpayer registration	AM-080-080
AM-219	Customized Views - Analyst	System shall support customized views of entity data for fraud analysts based on fraud analyst input	AM-080-030
AM-220	Dynamic Views - Analyst	System shall support dynamic views of entity data for fraud analysts based on entity demographics	AM-080-030
AM-221	Entity Data View	System shall display entity data in fraud analyst view(i.e. ISP address, PTIN, return account, filing history, W2 data from employer, Responsible Officer classification, SSN	AM-080-030
AM-222	Standardization Comparison	System shall automatically assign a return a fraud score by utilizing historical return data (i.e., withholding amount for gross income, refund claim for number of claime	AM-080-030
AM-223	Remove Fraud Manually	System shall support fraud analyst marking a return as not fraudulent	AM-080-030
AM-224	Log Fraud Removal Info	System shall automatically support logging information about removing fraud flag, including: time, date, worker ID, document ID	AM-080-030
AM-225	Blocked Refund	System shall support fraud analyst blocking a refund from processing at any point in the process	AM-080-030
AM-226	Blocked Refund Details	System shall automatically support logging information about blocking a refund from processing including: time, date, worker ID, document ID	AM-080-030
AM-227	Unique Identification Number - Assignment	System shall automatically assign unique numeric identification number to each identity quiz	AM-080-040
AM-228	Entity Account Quiz Date	System shall automatically update entity account with the date the identify quiz was mailed	AM-080-040
AM-229	Entity Account Quiz Status	System shall automatically update entity account with the identity quiz status (e.g., passed, failed, not taken)	AM-080-040
AM-230	Log Entity Online Quiz Info	System shall log information entered by entity in response to the online identity quiz, including: unique identification number, tax year, and refund amount entered	AM-080-060
AM-231	Log Entity Phone Quiz Info	System shall provide call center employee with the ability to log information supplied by entity, including: unique identification number, tax year, and refund amount	AM-080-060
AM-232	Quiz Administration	System shall support identity quiz administration via online or by call center	AM-080-060
AM-233	Custom Views - Phone Representative	System shall support custom views of entity data for a phone representative administering an identity quiz based on business rules	AM-080-060
AM-234	Spouse Attempt	The system shall allow joint filers to select which spouse is taking the quiz and adapt the quiz to the specific taxpayer	AM-080-060
AM-235	Load Data for Quiz Content	System shall automatically receive and load data for identity quiz questions from third party	AM-080-060
AM-236	Error Messages	System shall display identity quiz outcome messages as needed (e.g., to entity if administered online or to call center employee if taken on phone) for quiz results	AM-080-060
AM-237	Manual Quiz Need Override	System shall support the ability to manually override the requirement for an entity to take an identity quiz	AM-080-100
8	Manual Quiz Need Override Log	System shall automatically support logging information about waiving a quiz, including: time, date, worker ID, document ID	AM-080-100
9	Manual Results Override	System shall support the ability to manually override identity quiz results	AM-080-100
AM-240	Manual Results Override Log	System shall automatically support logging information about overriding quiz results, including: time, date, worker ID, document ID	AM-080-100
AM-241	Exception Processing - No Response	System shall support the ability for employee to manually enter identity quiz result notes against entity	AM-080-100
AM-242	Exception Processing - No Quiz	System shall support the ability for employee to manually flag entity as fraud candidate that cannot be given an identity quiz	AM-080-100
AM-243	Exception Processing - Failing Score	System shall automatically create work item for fraud analyst based on results of an identity quiz	AM-080-100
AM-244	Exception Processing Application	System shall support automated routing of fraud work items to fraud analyst work queues based on business rules	AM-080-100
AM-245	Fraud Flag Removal	System shall automatically remove fraud review flag after registering a passing identity quiz score	AM-080-050
AM-246	Fraud Flag Removal Info	System shall automatically log key information when removing a fraud flag (e.g. time, date, employee ID, quiz ID)	AM-080-050
AM-247	Account Notes Maintenance	System shall log all fraud-related notes within entity account history	AM-080-050
AM-248	Fraudulence Marking	System shall support ability to manually re-flag a return as requiring fraud review at any point in the process	AM-080-050

RA - Revenue Accounting

Defines the activities to create distribution rules, to process estimated and final distributions, to make accounting transfers and adjustments, to create and maintain General Ledger master data and bank master data and to reconcile these balances, and to perform closing.
- Create and Maintain GL Master Data: Defines the activities to approve and review the chart of accounts and to determine whether a general ledger account needs to be created or maintained.
- Create and Maintain Bank Master Data: Defines the activities to load and reconcile bank deposits (inflows) and disbursements (outflows).
- Transfer and Reconciliation of Account Activity: Defines the activities to process the transfer of data from the sub-ledger to the general ledger and to resolve exceptions.
- Manage Distribution Rules: Defines the activities to create master data and rules associated with revenue distribution.
- Process Distributions: Defines the activities to allocate funds, calculate revenue distribution, identify revenue distribution exceptions, and post account entries in the sub-ledger
- Reconcile Bank Deposits: Defines the activities to load and reconcile bank deposits (inflows) and disbursements (outflows).
- Perform Closing: Defines the activities to execute period end closing activities (e.g., maintaining closing schedules, generating reports, reconciling activities, etc.).

#	Name	Description	Task Refere
		"Create and Maintain GL Master Data" Functional Requirements	
RA-1	Report Generation	System shall support automated generation of chart of accounts report	RA-010-(
RA-2	Partial Reports	System shall allow employee to generate customized chart of accounts report	RA-010-(
RA-3	Sorting	System shall allow employee to sort data fields when generating chart of accounts report data	RA-010-(
RA-4	Filtering	System shall allow employee to filter data fields when generating chart of accounts report data	RA-010-(
RA-5	Updates	System shall log updates to chart of accounts, including: user, date, and time	RA-010-(
RA-6	Allocations--GL	System shall provide daily batch reporting of total amount of money allocated to the general ledger	RA-010-(
RA-7	Allocations--Sub-ledger	System shall provide daily batch reporting of total amount of money allocated to sub-ledgers	RA-010-(
RA-8	Allocations--Transaction	System shall track the total, up-to-date amount of money allocated to designated transactions	RA-010-(
RA-9	Refund Tax Type	System shall log refund amounts by tax type	RA-010-(
RA-10	Transaction Mapping--Transaction to GL	System shall map transaction data to state general ledger data	RA-010-(
RA-11	Transaction Mapping--GL to Transaction	System shall map state general ledger data to transaction data	RA-010-(
RA-12	Transaction Mapping--Tax Type to GL	System shall map tax type data to state general ledger data	RA-010-(
RA-13	Transaction Mapping--GL to Tax Type	System shall map state general ledger data to tax type data	RA-010-(
RA-14	Transaction Mapping--Account to GL	System shall map account data to state general ledger data	RA-010-(
RA-15	Transaction Mapping--GL to Account	System shall map state general ledger data to account data	RA-010-(
RA-16	Parent-Child Relationship--Update	System shall enforce parent-child relationship rules for updating chart of accounts details	RA-010-(
RA-17	GL Update--Reason Code	System shall allow for manual assignment of reason codes for updating chart of account details	RA-010-(
RA-18	GL Update--Note	System shall enforce logging of notes when employees update chart of accounts details	RA-010-(
RA-19	Account Creation	System shall allow for the manual creation of a new account within the chart of accounts based on business rules	RA-010-(
RA-20	Account Creation--Drop Down	System shall provide drop down capability to populate designated account data fields	RA-010-(
RA-21	Account Creation--Freeform	System shall provide standard format to populate freeform text based on business rules	RA-010-(
RA-22	Thresholds	System shall define threshold amounts for general ledger data fields based on business rules	RA-010-(
RA-23	Duplicate Account Search	System shall support automated search for duplicate accounts	RA-010-(
RA-24	Duplicate Account Prevention	System shall prevent creation of duplicate accounts	RA-010-(
RA-25	Account--Start Dates	System shall enforce that start dates are applied to chart of accounts	-(
RA-26	Account--End Dates	System shall enforce that end dates are applied to chart of accounts	-(
		"Create and Maintain Bank Master Data" Functional Requirements	
RA-27	Bank Account List	System shall display list of all active bank accounts	RA-020-(
RA-28	Master Data Log	System shall allow for manual logging of bank account master data (e.g., name, account type, amount, etc.)	RA-020-(
RA-29	Partial Reports	System shall allow employee to generate customized bank master data report	RA-020-(
RA-30	Sorting	System shall allow employee to sort data fields when generating bank master data	RA-020-(
RA-31	Filtering	System shall allow employee to filter data fields when generating bank master data	RA-020-(
RA-32	Searching	System shall allow employee to search data fields when generating bank master data	RA-020-(
RA-33	Data Update	System shall allow employee to update bank account master data based on business rules	RA-020-(
RA-34	Update Log	System shall log all updates made to bank account master data	RA-020-(
RA-35	Update Note	System shall enforce logging of notes when employees update bank data fields	RA-020-(
RA-36	Duplicate Account Search	System shall support automated search for duplicate accounts	RA-020-(
RA-37	Duplicate Account Prevention	System shall prevent creation of duplicate accounts	RA-020-(
RA-38	Account Merging	System shall provide a process to merge bank account master data based on business rules	RA-020-(
RA-39	GL Mapping	System shall map bank accounts to the general ledger	RA-020-(
RA-40	Bank Account Mapping	System shall map the general ledger to bank accounts	RA-020-(

#	Name	Description	Task Refere
RA-41	Master Data Creation	System shall allow for manual creation of bank account master data based on business rules	RA-020-(
	Open Date--Creation	System shall allow for manual creation of bank account open dates	RA-020-(
	Close Date--Creation	System shall allow for manual creation of bank account close dates	RA-020-(
RA-44	Holding	System should suspend posting bank account updates based on business rules	RA-020-(
RA-45	Thresholds	System shall establish thresholds for bank account master data fields based on business rules	RA-020-(
		"Transfer and Reconciliation of Account Activity" Functional Requirements	
RA-46	GL Posting	System shall post sub ledger transactions to the general ledger at the appropriate level	RA-030-(
RA-47	Taxpayer Posting Enforcement	System shall enforce that each transaction is created by an underlying accounting event	RA-030-(
RA-48	1:1 Posting Enforcement	System shall enforce each taxpayer posting result in a financial transaction at the sub ledger level	RA-030-(
RA-49	Credit Or Debit Enforcement	System shall enforce standard account functions for each debit or credit transaction	RA-030-(
RA-50	GAAP Compliant	System shall use GAAP-compliant, fund revenue accounting standards	RA-030-(
RA-51	GASB Compliant	System shall use GASB-compliant, fund revenue accounting standards	RA-030-(
RA-52	Transaction Mapping	System shall enforce each transaction to map to a COA allocation	RA-030-(
RA-53	Clawback	System shall allow for the manual reversal of a transaction (clawback) posted to the State's financial hub via an additional posting in the negative amount	RA-030-(
RA-54	Sub Ledger Synchronization	System shall reconcile across all accounts to assure that sub ledgers are synchronized and in balance with the general ledger.	RA-030-(
RA-55	Manual Transaction Review	System shall allow for the manual review of each transaction transferred to the GL based on key criteria (e.g., date, entity, dollar amount)	RA-030-(
RA-56	Manual PLN Review	System shall allow for the manual review of the Payment Locator Number (PLN) associated with each transaction	RA-030-(
RA-57	Manual Transfer Reports	System shall allow for the manual generation of transfer reports (from sub ledger to general ledger) based on input (e.g. date, entity, period)	RA-030-(
RA-58	Create COA Schema	System shall allow for the manual creation of a payment outbound interface of DOR allocation (to match COA)	RA-030-(
RA-59	Edit COA Schema	System shall allow for the manual altering of a payment outbound interface of DOR allocation (to match COA)	RA-030-(
RA-60	Manual Transaction Reports	System shall allow for the manual creation of custom transaction reports with filters (e.g., date, taxpayer, PLN)	RA-030-(
		"Manage Distribution Rules" Functional Requirements	
RA-61	Rules Save	System shall save distribution rules	RA-040-(
RA-62	Multiple Account Distribution	System shall allow for manual selection of multiple accounts to apply distribution calculation	RA-040-(
RA-63	Updates	System shall log updates to distribution rules, including: user, date, and time	RA-040-(
RA-64	Reconciliation	System shall confirm that the distribution rules equal 100% for the account	RA-040-(
RA-65	Varying Rules—Account	System shall allow for varying distribution rules by account	RA-040-(
RA-66	Conflict	System shall monitor for conflicting distribution rules	RA-040-(
RA-67	Distribution Rule Execution	System shall execute distribution rules based on payment date	RA-040-(
RA-68	Distribution—Dollar Amount	System shall support distributions by dollar amounts	RA-040-(
RA-69	Distribution—Percentage	System shall support distributions by percentages	RA-040-(
RA-70	Start Dates	System shall enforce that start dates are applied to distribution rules	RA-040-(
RA-71	End Dates	System shall enforce that end dates are applied to distribution rules	RA-040-(
	Distribution—Internal Data	System shall support automated use of internal data for distribution calculations	RA-040-(
	Distribution—External Data	System shall support automated use of external data for distribution calculations	RA-040-(
RA-74	Distribution--Multiple	System shall support distributions by multiple parameters (i.e., dollar amounts and percentages)	RA-040-(
RA-75	Order of Operations	System shall enforce order of operations to dynamic distributions	RA-040-(
RA-76	Anomaly Detection	System shall identify possible data anomalies (e.g., outliers, errors, etc.)	RA-040-(
RA-77	Proposed Against Historical	System shall provide comparison of proposed distribution calculation against historical data	RA-040-(
RA-78	Calculation Save	System shall allow user to save proposed distribution calculation	RA-040-(
RA-79	Comparison	System shall provide side-by-side view to compare multiple scenario analyses at once	RA-040-(
		"Process Distributions" Functional Requirements	
RA-80	GL Fund Balance	System shall support automated check of GL funds for positive balance	RA-050-(
RA-81	Distribution Calculation	System shall calculate distributions based on business rules	RA-050-(
RA-82	Execute Distribution -- Receive Date	System shall allow for the ability to execute rules against distribution from the date funds were received	RA-050-(
RA-83	Execute Distribution -- Current Date	System shall allow for the ability to execute current rule set against distribution	RA-050-(
RA-84	Compile Pre-distribution Report	System shall support automated generation of pre-distribution report	RA-050-(
RA-85	Sum Distributions	System shall sum all cash distributions and allocations due to the State, localities, or other programs	RA-050-(
RA-86	Reconcile GL	System shall match total cash distributions against the GL positive fund balance	RA-050-(
RA-87	Identify Discrepancies	System shall identify discrepancies between the sums of the distributions and GL balance	RA-050-(
RA-88	Reconcile Discrepancies	System shall identify distribution discrepancies by fund or account	RA-050-(

#	Name	Description	Task Refere
RA-89	Manual Override Posting	System shall allow for manual posting of distributions (e.g., even if there is an existing reconciliation discrepancy)	RA-050-(
RA-90	Post to PeopleSoft	System shall support automated posting of distribution data to PeopleSoft based on business rules	P '0-(
RA-91	Identify Failed Postings	System shall identify failed postings using unique identifiers (e.g., deposit identification, transactional identification)	-(
RA-92	Adjustable Posting—Frequency	System shall allow for adjustable frequency posting to PeopleSoft	RA-050-(
RA-93	Adjustable Posting—Time	System shall allow for adjustable time posting to PeopleSoft	RA-050-(
RA-94	Mid-day Posting	System shall allow for mid-day (during business hours) posting to PeopleSoft	RA-050-(
RA-95	Identify Distributions	System shall allow updates to fund distributions in certain accounts that have already been posted via distribution rules	RA-050-(
RA-96	Distribution Rules	System shall allow distribution based on established or new distribution rules	RA-050-(
RA-97	Save Distribution Rules	System shall archive distribution rules aligned to tax type, account type, or other indicator to be used in the future	RA-050-(
		"Reconcile Bank Deposits" Functional Requirements	
RA-98	EBS Acceptance	System shall allow for electronic bank statement to be accepted from the bank	RA-060-(
RA-99	EBS Manual Upload	System shall allow for manual upload of electronic bank statement	RA-060-(
RA-100	File Validation	System shall support automated EBS validation based on business rules	RA-060-(
RA-101	File Record Validation	System shall support automated EBS record validation based on business rules	RA-060-(
RA-102	Automated EBS Upload	System shall support automated loading of EBS data, including: date, bank account details, payment transaction details	RA-060-(
RA-103	Automated Format Error Identification	System shall support automated EBS rejection based on business rules	RA-060-(
RA-104	Error Reason Code	System shall support automated generation of rejection reason code	RA-060-(
RA-105	Summary Comparison	System shall support automated comparison of the transaction detail from DOR's ITS and the EBS	RA-060-(
RA-106	Payment Transaction Details	System shall support automated comparison of payment transaction details (i.e., routing number, account number, dollar amount) from DOR's ITS and the EBS	RA-060-(
RA-107	Transaction Discrepancies	System shall identify discrepancies in payment transaction details from DOR's ITS and the EBS	RA-060-(
RA-108	Drill Down--Summary	System shall allow employee to drill-down into payment transaction-level data fields	RA-060-(
RA-109	Static Reporting	System shall generate summary report based on manually selected dates	RA-060-(
RA-110	Reconciliation Tracking	System shall generate a finalized reconciliation report	RA-060-(
RA-111	Reconciliation Tracking Export	System shall allow users to export finalized reconciliation report to an Excel file	RA-060-(
RA-112	Transaction-Level--Payment	System shall provide transaction-level detail from all payment channels (e.g., cash, check, EFT, etc.)	RA-060-(
RA-113	Transaction-Level--Imbalance	System shall provide DOR imbalances at the transaction-level	RA-060-(
RA-114	Drill Down—Imbalance	System shall allow employee to drill-down into imbalance transaction-level data fields	RA-060-(
		"Perform Closing" Functional Requirements	
RA-115	Determine period	System shall provide ability to define a fiscal calendar	RA-070-(
RA-116	Adjust period	System shall allow for ability to define period beginning and period end dates for each period within a fiscal calendar	RA-070-(
RA-117	Overlap period	System shall allow for multiple fiscal/accounting periods to be open concurrently based on DOR-specified criteria	RA-070-(
RA-118	Create closing checklist module	System shall provide closing module to facilitate the period end closing process	RA-070-(
RA-119	Create closing checklist	System shall allow for the creation of closing checklists within the closing module based on DOR-defined criteria	RA-070-(
RA-120	Edit closing checklist	System shall provide ability to edit closing checklists based on DOR-defined criteria	P '0-(
RA-121	Assign checklist	System shall support automated assigning of closing checklist to a fiscal/accounting period based on DOR-specified criteria	-(
RA-122	Checklist functionality	System shall provide checklist functionality, such as: ability to define dependencies between checklist items, monitor task progress, clarify task owners, and monitor cou	RA-070-(
RA-123	Alert notifications	System shall support automated alerts based on DOR-defined rules (e.g. thresholds, incomplete checklist items)	RA-070-(
RA-124	Identify corrections	System shall identify and highlight potential anomalies on preliminary reports based on DOR-defined rules	RA-070-(
RA-125	Re-Identify corrections	System shall identify corrected anomalies on preliminary reports after corrections process	RA-070-(
RA-126	Configurable reports	System shall allow preliminary reports to be configurable based on DOR-defined criteria	RA-070-(
RA-127	Multiple versions	System shall provide the ability to produce multiple versions of preliminary report(s)	RA-070-(
RA-128	Test corrections	System shall provide ability to view corrections using tools such as side-by-side comparison (e.g., before/after corrections, comparisons of corrected results to benchma	RA-070-(
RA-129	Verify corrections	System shall provide the ability to update the corresponding closing checklist item as closing activities are completed	RA-070-(
RA-130	Close period	System shall allow for the manual closing of a fiscal/accounting period	RA-070-(
RA-131	Open period	System shall allow for the manual opening of a fiscal/accounting period	RA-070-(
RA-132	Closing report	System shall support automated generation of final closing report	RA-070-(
RA-133	Edit closing report features	System shall provide ability to edit the structure of final closing report	RA-070-(

TS - Taxpayer Self Service

Defines the activities for entity self-service through profile log-in and account maintenance after online registration (the activities for which are also defined in this process). Also defines activities that an entity can complete through online self-service: online filings, online payments, and viewing history.
- Login, Profile Maintenance, Activity Help: Defines the activities to login, view and maintain online and taxpayer profile information, and seek help.
- Manage Online Registration: Defines the activities to create online taxpayer registration and maintain taxpayer registration.
- Employer Reporting: Defines the activities to report employer data as a bulk file upload, through online data entry, or via Mapped Data Upload functionality.
- Online Return, Abatement, Extension Filing: Defines the activities to file amended returns, vouchers, and extensions online.
- Online Payments: Defines the activities to make payments online, edit payment details or cancel a payment after the payment has been submitted online, and create a payment agreement.

#	Name	Description	Task Reference ID
		"Login, Profile Maintenance, Activity Help" Functional Requirements	
TS-1	Unique Usernames	System shall enforce unique user IDs	TS-010-010
TS-2	Email Username	System shall support email addresses to be used for a self service portal username	TS-010-010
TS-3	Sole Proprietors--View	System shall support automated linking of entity self service portal accounts into a single view for individuals who also operate sole proprietorships	TS-010-010
TS-4	Solve Proprietors--Individual View	System shall require user logged into self service portal via Sole Proprietor account to reauthenticate with individual taxpayer credentials to view individual taxpayer account	TS-010-010
TS-5	Hidden Characters	System shall support automated password hashing with set character during password keying	TS-010-010
TS-6	Upper Username Characters	System shall support account usernames that contain lowercase characters	TS-010-010
TS-7	Lower Username Characters	System shall support account usernames that contain special characters	TS-010-010
TS-8	Special Username Characters	System shall support account usernames that contain uppercase characters	TS-010-010
TS-9	Upper Password Characters	System shall support account passwords that contain lowercase characters	TS-010-010
TS-10	Lower Password Characters	System shall support account passwords that contain special characters	TS-010-010
TS-11	Special Password Characters	System shall support account passwords that contain uppercase characters	TS-010-010
TS-12	Username Length	System shall enforce a minimum number of characters for account usernames based on business rules	TS-010-010
TS-13	Password Length	System shall enforce a minimum number of characters for account passwords based on business rules	TS-010-010
TS-14	Username Change	System shall allow entity to change username	TS-010-010
TS-15	Password Change--User Initiated	System shall support entity password changes	TS-010-010
TS-16	Bulk Password Change	System shall support administrative, bulk password changes for a selectable set of entities	TS-010-010
TS-17	Password Login Attempts	System shall support automated tracking of number of unsuccessful login attempts per user ID	TS-010-010
TS-18	Mobile and Tablet Access	System shall support self service portal access for mobile and tablet device browsers	TS-010-010
TS-19	Mobile Application	System should allow for creation of mobile apps	TS-010-010
TS-20	Time-outs	System shall support automated login page time-out based on business rules	TS-010-010
TS-21	Authentication--Email	System shall support multi factor authentication through authentication code sent via email	TS-010-010
TS-22	Authentication--SMS	System shall support multi factor authentication through authentication code sent via SMS	TS-010-010
TS-23	Authentication--Shared Secret	System shall support user login after correctly answered shared secrets	TS-010-010
TS-24	Authentication--Website	System should allow for integration with State single sign on page	TS-010-010
TS-25	Captcha Usage	System shall utilize captchas for human authentication	TS-010-010
TS-26	Multi-factor Authentication Bypass	System should allow entity to bypass multi-factor authentication for future logins	TS-010-010
TS-27	Failed Consecutive Login--Lock Out	System shall support automated locking of an account due to multiple failed logins based on business rules	TS-010-010
[illegible]	Personalized Home Page	System should allow users to customize the layout of home page within self service portal	TS-010-010
[illegible]9	Password Expiration	System shall support automated password expiration based on business rules	TS-010-010
TS-30	Expiring Passwords--Tracking	System shall support automated tracking of password expiration dates	TS-010-010
TS-31	Temporary Passwords	System shall allow creation of temporary passwords based on business rules	TS-010-110
TS-32	Temporary Password Confirmation	System shall support automated correspondence following creation of temporary password	TS-010-110
TS-33	Temporary Password Deletion	System shall support automated time-out of temporary passwords based on business rules	TS-010-110
TS-34	Expiring Passwords--Update Correspondence	System shall generate automated notification of pending business events such as expiring passwords	TS-010-110
TS-35	Password Reset Correspondence	System shall generate automated notification following successful password reset	TS-010-110
TS-36	Rules-based Alerts--Audience	System shall allow creation of alerts for specific users based on business rules	TS-010-120
TS-37	Export Account Summary	System shall allow users to export account financial transaction data to an Excel file	TS-010-120
TS-38	Alerts Reception--Email	System shall allow users to receive alerts or notifications through email	TS-010-120
TS-39	Alerts Reception--SMS	System shall allow users to receive alerts or notifications through SMS text message	TS-010-120
TS-40	Alerts Reception--Portal	System shall allow users to receive alerts or notifications through self service portal message	TS-010-120
TS-41	Alert--Due Dates	System shall support automated alerts for upcoming action item due dates	TS-010-120
TS-42	Alert--Message Response	System shall support automated email notification for non-email based notification	TS-010-120
TS-43	Alert--Liabilities	System shall support automated alerts when an entity's account has outstanding liabilities	TS-010-120
TS-44	Alert--Payment Accepted	System shall support automated alerts when an entity's payment has been accepted by DOR	TS-010-120
TS-45	Alert--Zero Based Return	System shall support automated alerts for returns that do not meet financial thresholds and thus will not issue a refund or bill	TS-010-120
TS-46	Alert--Legislative Change	System shall support automated alerts based on user demographics	TS-010-120

#	Name	Description	Task Reference ID
TS-47	Bulk Alerts	System shall support alerts to be sent in bulk to users on an ad-hoc basis by business users	TS-010-120
TS-48	Ad-hoc Alerts	System shall support ad-hoc alerts to be sent to individuals or in bulk based on business rules	TS-010-120
TS-49	Help Chat	System shall support secure, online messaging platform between DOR and self service portal user	TS-010-020
TS-50	Real-time Chat	System shall support in-portal, real-time secure chat functionality	TS-010-020
TS-51	Assisted Navigation	System shall provide a frequent actions dropdown with hyperlink paths to assist navigation of within self service portal	TS-010-020
TS-52	Frequent User Navigation	System shall provide a webpage bookmarking capability within self service portal	TS-010-020
TS-53	Keyword Search	System shall support keyword search to navigate self service portal	TS-010-020
TS-54	Frequently Asked Questions	System shall provide a frequently asked questions section on the self service portal	TS-010-020
TS-55	Video Tutorials	System shall provide ability to embed video files into webpages within self service portal	TS-010-020
TS-56	Video Tutorials--Linking	System shall provide ability to link to video files on other websites	TS-010-020
TS-57	Screen Sharing	System shall provide screen sharing between user and employee based on business rules	TS-010-020
TS-58	User Role Stratification	System shall confirm profile information at specified intervals through specified user roles	TS-010-020
TS-59	Account Balance--Time	System shall display account balance history by tax period	TS-010-080
TS-60	License Status	System shall display the license status of licenses associated with the account	TS-010-080
TS-61	License Type Display	System shall display license types that are applicable to the business type of the user account based on business rules	TS-010-080
TS-62	License Status History	System shall display license status history of all active and inactive licenses	TS-010-080
TS-63	Address History	System shall display user address history	TS-010-080
TS-64	Undelivered Mail History	System shall display addresses that caused undeliverable mail	TS-010-080
TS-65	Address History Acquisition	System shall display updated user addresses from USPS address return history	TS-010-080
TS-66	Image Viewing	System shall allow users to view imaged correspondences sent to the user via mail	TS-010-080
TS-67	Bond--History	System shall maintain record of user bond-related activities, including: bond type, date received, and expiration date	TS-010-080
TS-68	Bond--Display	System shall display user bond information, including: bond type, locality, and expiration date	TS-010-080
TS-69	Bond Status	System shall display user bond status	TS-010-080
TS-70	Bond Type	System shall display user bond types	TS-010-080
TS-71	Bond Expiry	System shall display user bond expiration dates	TS-010-080
TS-72	Correspondence History--Date	System shall display correspondence history by date	TS-010-080
TS-73	Correspondence History--IN DOR	System shall display correspondence history by IN DOR document locator number	TS-010-080
TS-74	Correspondence History--Content	System shall display correspondence history by type/content	TS-010-080
TS-75	Account Summary--Time	System shall generate account summary across specified time periods	TS-010-080
TS-76	Account Summary-- Statuses	System shall display account status summary across specified tax types	TS-010-080
TS-77	Account Summary-- Open Liabilities	System shall display all open liabilities in viewable list based on business rules (e.g. tax type, amount, due date)	TS-010-080
TS-78	Account Summary-- Filters	System shall provide filtering of liabilities in viewable list based on business rules (e.g. tax type, amount, due date)	TS-010-080
TS-79	Print Account Summary	System shall allow users to print account summary	TS-010-080
TS-80	Survey	System shall allow customer feedback surveys to be triggered based on business rules	TS-010-080
TS-81	Survey Completion	System must provide customer feedback survey in self service portal	TS-010-080
TS-82	Survey CRM Integration	System shall support data analysis/analytics against survey results	TS-010-080
TS-83	User Access and Privileges	System shall establish designated self service portal user access with varying level of access (e.g. "administrator", "Power of Attorney", "view-only")	TS-010-070
TS-84	Account Deactivation	System shall support automated deactivation of account based on user request or life event such as death	TS-010-070
TS-85	Practitioner View	System shall allow practitioners to view all clients, in list format, who have granted filing access	TS-010-070
TS-86	User Access Administration	System shall allow users to administer access levels	TS-010-090
TS-87	Display Access	System shall display users and access privileges	TS-010-090
TS-88	Revoke Access	System shall allow users to revoke user access privileges	TS-010-090
TS-89	Notify of Access Change	System shall notify administrator and user of access change	TS-010-090
TS-90	Divide User Privileges	System shall allow company administrators to set user privileges to allow for roles-based access for specific business needs	TS-010-090
TS-91	Delegate User Privileges	System shall allow company administrators to delegate user privileges to allow for specific business needs	TS-010-090
TS-92	Audit Security Logs	System shall support audit logs of user actions taken in self service portal	TS-010-090
TS-93	Audit Security Log Availability	System shall make audit logs of user action available to administrator	TS-010-090
TS-94	Communication Preference--Type	System shall allow for users to select communication preference by type	TS-010-100
TS-95	Communication Preference--Frequency	System shall allow for users to select communication preference by frequency	TS-010-100
TS-96	Personal Address	System shall allow users to update physical personal address based on business rules	TS-010-100
TS-97	Business Address	System shall allow users to update physical business address based on business rules	TS-010-100
TS-98	Address Change Notification	System shall notify taxpayer via taxpayer's channel of choice once an address change has been submitted	TS-010-100
TS-99	Personal Telephone	System shall allow users to update personal telephone number	TS-010-100
TS-100	Business Telephone	System shall allow users to update business telephone number	TS-010-100
TS-101	Season Periods	System shall allow users to change seasonal periods	TS-010-100

#	Name	Description	Task Reference ID
TS-102	NAICS Codes--Edit	System shall allow users to edit their business North American Industry Classification System (NAICS) codes	TS-010-100
TS-[illegible]	Rules-Based Questions	System shall allow users to update answers to shared secrets	TS-010-100
[illegible]	DBA Name	System shall allow users to change "doing business as" (DBA) name	TS-010-100
TS-105	Linked Account Updates	System should update linked business account information when personal account information is updated (vice versa) based on business rules	TS-010-100
		"Manage Online Registration" Functional Requirements	
TS-106	Validate Registration	System shall require self service portal registration with a unique user ID, not already in use	TS-020-010
TS-107	Dynamic Help	System shall support dynamic help options for users based on business rules	TS-020-010
TS-108	Page-level Help	System shall support help options relevant to page subject matter (page level help)	TS-020-010
TS-109	Unique User	System shall require one user ID per self service portal registration	TS-020-010
TS-110	Link Accounts	System shall allow users to link multiple accounts under one user ID	TS-020-010
TS-111	Single Account Registration	System shall enforce users to register as a single entity	TS-020-010
TS-112	Linked Account Access	System shall allow users to access multiple accounts under one user ID	TS-020-010
TS-113	Language Support	System shall support multiple languages for user interface	TS-020-010
TS-114	Language Selection	System shall allow end users to select their language of choice	TS-020-010
TS-115	Remember Language	System shall display selected language for future user visits	TS-020-010
TS-116	Access Code	System shall support automated generation of access code for first-time self service portal access	TS-020-020
TS-117	Correspondence for Access Code	System shall support distribution of access code to user through correspondence	TS-020-020
TS-118	User Acknowledgements	System shall prompt user to electronically sign acknowledgement for self service portal registration	TS-020-020
TS-119	3rd Party Identity Proofing	System shall accommodate identity proofing through third party service	TS-020-020
TS-120	3rd Party Identity Proofing Integration	System shall provide identity proofing through third party service	TS-020-020
TS-121	Shared Secret Creation	System shall allow user to select answers to shared secret questions	TS-020-020
TS-122	Re-Authentication	System shall require user to re-authenticate identity based on access to specified business transactions	TS-020-020
TS-123	Levels of Authorization	System shall support multiple levels of authorized access to users based on business events	TS-020-020
TS-124	Contact Email	System shall require user to specify contact email	TS-020-030
TS-125	Double Verify Email	System shall require user to confirm email through double entry	TS-020-030
TS-126	Contact Phone Number	System shall require user to specify contact phone number	TS-020-030
TS-127	Double Verify Phone Number	System shall require user to confirm contact phone number through double entry	TS-020-030
TS-128	Initial Password	System shall require user to specify initial login password	TS-020-030
TS-129	Double Verify Initial Password	System shall require user to confirm initial login password through double entry	TS-020-030
TS-130	Communication Preferences--Identify	System shall allow user to select communication preferences based on correspondence type	TS-020-030
TS-131	Communication Preferences--Generate	System shall support automated generation of correspondence according to user's preferred correspondence selection	TS-020-030
TS-132	Communication Preferences--Override	System shall support automated override of preferred correspondence type based on business rules	TS-020-030
TS-133	Alert Preferences--Identify	System shall allow user to select alert preferences based on alert type	TS-020-030
TS-134	Alert Preferences--Generate	System shall support automated generation of alert according to user's preferred alert selection	TS-020-030
TS-135	Access Portal	System shall allow user to access self service portal directly following portal registration without re-authentication	TS-020-040
TS-136	Push to Homepage	System shall push user to desired page directly following self service portal registration based on business rules	TS-020-040
		"Employer Reporting" Functional Requirements	
[illegible]7	XML Test Schema	System shall verify XML file transmission follows DOR test file schema (e.g. format, summing of form totals)	TS-030-260
TS-138	Transmission Response	System shall support automated response in .ack format following SFTP transmission	TS-030-260
TS-139	Transmission Status	System shall include status (such as 'processed successfully') of transmission in .ack message	TS-030-260
TS-140	Transmission Errors	System shall display file process error codes with corresponding error explanation in .ack format	TS-030-260
TS-141	Certification Status Tracking	System shall support automated tracking of entity certification status in self service portal	TS-030-260
TS-142	Certification Status Tracking--Entity	System shall provide visual status tracker updates for entity of certification status in self service portal	TS-030-270
TS-143	Certification Status Updates	System shall update visual status tracker of certification status based on test file submissions received	TS-030-270
TS-144	Certification Status Reset	System shall enforce reset of entity certification status from approved to unapproved based on business rules (annually, bi-annually)	TS-030-270
TS-145	Certification Status Admin	System shall provide an administrator entity certification status page	TS-030-270
TS-146	Certification Status Admin Status	System shall provide text search capability on entity certification status page	TS-030-270
TS-147	Certification Status Admin Dashboard	System shall provide an administrator dashboard of entity certification status page	TS-030-270
TS-148	Certification Status Export	System shall provide option for exportable, customized test file submission status reports	TS-030-270
TS-149	XML Production Schema	System shall verify XML file transmission follows DOR production file schema (e.g. format, summing of form totals)	TS-030-160
TS-150	File Status Tracking	System shall update XML file submission status in self service portal	TS-030-240
TS-151	File Status Error Codes	System shall display XML file validation error codes in self service portal	TS-030-240
TS-152	File Status Error Explanation	System shall display error explanation with error code in self service portal	TS-030-240
TS-153	XML Record Schema	System shall verify XML records in file transmission follow DOR production record schema (e.g. format, summing of form totals)	TS-030-170
TS-154	Record Parsing	System shall support validation of individual records in XML submission based on business rules	TS-030-170

#	Name	Description	Task Reference ID
TS-155	Record Flagging	System shall support flagging of individual records in XML submission based on business rules	TS-030-170
TS-156	Record Tracking	System shall support tracking of flagged record error codes in self service portal	TS-030-220
TS-157	Record Error Codes	System shall support display of flagged record error codes in self service portal	TS-030-220
TS-158	Record Error Code Explanation	System shall support display of record error code explanation text in self service portal	TS-030-220
TS-159	Submissions--Duplicate	System shall recognize duplicate data during submission	TS-030-190
TS-160	Submissions--Informational	System shall designate duplicate data as informational based on business rules	TS-030-190
TS-161	Manual Entry Form	System shall provide a standard withholding web form for data entry by user	TS-030-190
TS-162	Manual Entry	System shall allow for the manual entry of withholding information (such as withholding total) in self service portal	TS-030-190
TS-163	Mapped Data Upload	System shall allow for a mapped data upload (flat file) of filing information in self service portal	TS-030-190
TS-164	Uploads--Updated	System shall recognize updated data and amend based on business rules	TS-030-190
TS-165	Uploads--Updated Posting	System shall use amended data during calculations/posting	TS-030-190
TS-166	Bulk Reverse Upload	System shall provide capability to reverse bulk uploads (e.g. incorrect file upload)	TS-030-190
TS-167	Bulk Reverse Upload--Designation	System should allow manual designation for allowing user-initiated bulk upload backouts	TS-030-190
TS-168	Local Jurisdiction Total	System shall enforce manual entry of total county/local jurisdiction withholding totals	TS-030-190
TS-169	State Total	System shall provide capability to designate mandatory manually entered fields for comparison to data uploads (e.g. manually keyed WH3 vs. W2 data)	TS-030-190
TS-170	Return Filings Total	System shall enforce manual entry of total W2s being filed	TS-030-190
TS-171	Validate Local Withholding	System shall validate entry of total county/local jurisdiction withholding against calculated total from returns in submission	TS-030-190
TS-172	Validate State Withholding	System shall validate entry of total state withholding against calculated total from returns in submission	TS-030-190
TS-173	Errors--Identify	System shall identify submission discrepancies between manually entered and calculated data based on business rules	TS-030-250
TS-174	Errors--Report Error Code	System shall provide a display of submission error codes, specifying location of errors	TS-030-250
TS-175	Errors--Report Error Code Explanation	System shall provide a display of submission error code explanations	TS-030-250
TS-176	Errors--Report Error Code	System shall provide an exportable file of submission error codes, specifying location of errors	TS-030-250
TS-177	Errors--Report Error Code Explanation	System shall provide an exportable file of submission error code explanations	TS-030-250
TS-178	Errors--Manual Override	System shall allow for entity to manually override error(s) to process submission based on business rules	TS-030-250
TS-179	Errors--Acknowledgement	System shall provide acknowledgement process for manual override of submission error via preferred notification channel	TS-030-250
TS-180	Errors--DOR Override	System shall allow DOR to manually override submission errors	TS-030-250
TS-181	Display Balance	System shall display remittance balance against vouchers	TS-030-200
TS-182	Contest Balance	System shall allow for entity return to data entry screen following remittance balance display	TS-030-200
TS-183	Confirmation--File Acceptance	System shall provide entity with confirmation of file submission by preferred correspondence channel	TS-030-180
TS-184	Confirmation--Printing	System shall allow entity to export file submission confirmation from self service portal	TS-030-180
		"Online Return, Abatement, Extension Filing" Functional Requirements	
TS-185	Functionality--Tax Type	System shall display selectable dropdown with allowable tax types based on registration, profile and historical filing data (e.g. sales tax filing, tobacco tax filing)	TS-040-080
TS-186	Functionality--Filing Period	System shall display selectable dropdown with allowable tax periods (as applicable)	TS-040-080
TS-187	Guided or Facsimile Form Entry	System shall prompt user to select guided or non-guided form entry	TS-040-080
TS-188	Form Entry--Guided	System shall support guided form entry (e.g. "interview" questions)	TS-040-090
TS-189	Form Entry--Form Facsimile	System shall support return facsimile form entry (e.g. "non-interview" questions)	TS-040-090
TS-190	Allowable Tax Type	System shall display selectable dropdown with tax forms (e.g. IT-40, IT-40X)	TS-040-090
TS-191	Miscellaneous Tax Documents	System shall display selectable dropdown with non-tax type documents (e.g. GA-110L, POA-1)	TS-040-090
TS-192	Pre-Populate Fields--Profile Info	System shall pre-populate form fields using entity profile information (e.g. address, business name)	TS-040-090
TS-193	Pre-Populate Fields--Historical Info	System shall pre-populate form fields using historical information (e.g. SSN, previous year's income)	TS-040-090
TS-194	Pre-Populate Fields--Manual Override	System shall support manual override of pre-populated form fields by user based on business rules	TS-040-090
TS-195	Manual Entry	System shall support data entry of tax form fields	TS-040-090
TS-196	Form Completion Status	System shall provide high-level form navigation status (i.e. "breadcrumbs")	TS-040-090
TS-197	Form Navigation	System shall provide high-level form completion status expressed as a percentage (i.e. progress meter)	TS-040-090
TS-198	Keyboard Tab Navigation	System shall support user navigating from field to field using keyboard (i.e. tabbing)	TS-040-090
TS-199	Mouse Select Navigation	System shall support user navigating from field to field using mouse and selecting	TS-040-090
TS-200	Real Time Field Calculation	System shall support real time calculation of certain fields based on the entry of other fields (i.e. adjusted gross income)	TS-040-090
TS-201	Character Validation	System shall provide real-time character validation (i.e. character limits or alpha/numeric-only fields)	TS-040-090
TS-202	Required Fields	System shall require completion of specific form fields based on business rules (mandatory fields)	TS-040-090
TS-203	Partial Completion	System shall support saving partially completed forms	TS-040-090
TS-204	Partial Completion--Resume	System shall support the user resuming partially completed forms	TS-040-090
TS-205	Partial Completion--Edit	System shall support manual editing of partially completed forms	TS-040-090
TS-206	Validation--Real Time	System shall provide real-time validation of field entries for certain business rules	TS-040-100
TS-207	Validation--Identifier	System shall validate form by entity identifier (i.e. FEIN, SSN, TID)	TS-040-100

#	Name	Description	Task Reference ID
TS-208	Validation--Attachments	System shall perform validation that tax documents requiring attachments have attachments in correct file format based on business rules	TS-040-100
TS-209	Validation--Interest Rate Matrix	System shall use current system interest rate to calculate tax fields	TS-040-100
[illegible]	Validation--Tax Rate Matrix	System shall use current system tax rates to calculate tax fields	TS-040-100
[illegible]1	Calculate Results	System shall calculate results of amended returns in real time	TS-040-110
TS-212	Calculate Results--Display	System shall display calculated results of amended returns	TS-040-110
TS-213	Amended Return Form Pre-population	System shall support automated pre-population of amended form with original filing values	TS-040-110
TS-214	Extension Filings	System shall allow for multiple extension filings in a given time period	TS-040-110
TS-215	Errors--Call Out (In-Text)	System shall highlight form errors	TS-040-110
TS-216	Errors--Call Out Descriptions (In-Text)	System shall display form error explanation for a given highlighted error field	TS-040-110
TS-217	Errors--Descriptions (In-Text)	System shall provide error code descriptions for in-text form errors	TS-040-110
TS-218	Errors--Error Summary	System shall collate identified errors into error summary	TS-040-110
TS-219	Errors--Descriptions (Error Summary)	System shall provide error code descriptions for error summary	TS-040-110
TS-220	Errors--Real Time Processing	System shall process corrected errors in real time	TS-040-110
TS-221	Corrected Form--Submission	System shall allow for resubmission of corrected form	TS-040-110
TS-222	Multiple Amended Returns	System shall allow for processing of multiple amended returns for an entity in a given time period	TS-040-110
TS-223	Same Rules Validation	System shall enforce same validation rules against forms submitted online as forms submitted through other channels	TS-040-110
TS-224	Display--Paper Form Resemblance	System shall display processed form that mimics paper form	TS-040-160
TS-225	Display--Watermark	System shall include watermark on processed form (e.g. "CREATED ONLINE - NOT FOR SUBMISSION")	TS-040-160
TS-226	Display--Document Locator Number	System shall support automated labeling of document locator numbers on forms	TS-040-160
TS-227	Display--Save (Personal)	System shall allow entity to export form in readable format from self service portal	TS-040-160
TS-228	Submission--Review	System shall require form details to be reviewed prior to submission (e.g. scroll to bottom, click through pages)	TS-040-160
TS-229	Submission--Acknowledgement	System shall prompt user to electronically indicate acknowledgement for form submission	TS-040-160
TS-230	Submission	System shall allow for submission of completed form	TS-040-160
TS-231	Submission--Confirmation	System shall display submission confirmation	TS-040-160
TS-232	Notification	System shall generate notification of submission via taxpayer's preferred channel	TS-040-160
		"Online Payments" Functional Requirements	
TS-233	EFT Payment	System shall provide for payment by Electronic Funds Transfer (EFT)	TS-050-210
TS-234	ACH Credit	System shall provide for payment by Automated Clearing House (ACH) credit	TS-050-210
TS-235	ACH Debit	System shall provide for payment by Automated Clearing House (ACH) debit	TS-050-210
TS-236	EFT Account Information	System shall require user to key in relevant payment information for EFT payment (e.g., account number, routing number, name on the account)	TS-050-210
TS-237	ACH Credit Account Information	System shall require user to key in relevant payment information for ACH credit payment (e.g., account number, routing number, name on the account)	TS-050-210
TS-238	ACH Debit Account Information	System shall require user to key in relevant payment information for ACH debit payment (e.g., account number, routing number, name on the account)	TS-050-210
TS-239	EFT Validation	System shall support automated validation of direct deposit EFT account information	TS-050-210
TS-240	ACH Credit Validation	System shall support automated validation of direct deposit ACH credit account information	TS-050-210
TS-241	ACH Debit Validation	System shall support automated validation of direct deposit ACH debit account information	TS-050-210
TS-242	EFT Confirm	System shall require user to confirm account information fields for EFT payments through double entry (e.g. account number, routing number)	TS-050-210
[illegible]3	ACH Credit Confirm	System shall require user to confirm account information fields for ACH credit payments through double entry (e.g. account number, routing number)	TS-050-210
[illegible]	ACH Debit Confirm	System shall require user to confirm account information fields for ACH debit payments through double entry (e.g. account number, routing number)	TS-050-210
TS-245	Disabled Copy and Paste	System shall not enable copy and paste functionality in fields	TS-050-210
TS-246	Credit Card	System shall interface with point of sale (POS) vendor for the purpose of processing payments by credit card	TS-050-210
TS-247	Credit Card Account Information	System shall require user to key in relevant account information for credit card (e.g. card number, expiration, CVV code)	TS-050-210
TS-248	Credit Card Validation	System shall support automated validation of credit card account information (e.g. correct account number format, validate expiration)	TS-050-210
TS-249	Credit Card VISA PABP	System shall comply with VISA Payment Application Best Practices (PABP)	TS-050-210
TS-250	Credit Card PCI Security Standards	System shall comply with Payment Card Industry (PCI) Data Security Standards	TS-050-210
TS-251	Debit Card	System shall provide payment by debit card	TS-050-210
TS-252	Debit Card Account Information	System shall require entering relevant account information for debit card (e.g. card number, expiration, CVV code)	TS-050-210
TS-253	Debit Card Validation	System shall support automated validation of debit card account information (e.g. correct account number format, validate expiration)	TS-050-210
TS-254	Bank Lockbox	System shall allow payments by bank lockbox	TS-050-210
TS-255	Foreign Bank	System shall provide checkbox to indicate if payment originates from a foreign bank	TS-050-210
TS-256	Pre-Population	System shall support automated pre-population of profile information, where applicable (e.g. stored contact information-address, email address)	TS-050-210
TS-257	Account Registration	System shall enable the manual registration of a new user account using the payment method information to pre-populate fields (e.g. address, email)	TS-050-210
TS-258	Payment Storage--Credit Card	System shall provide for the capability to store credit card numbers captured from credit card payments, if logged into self service portal	TS-050-210
TS-259	Payment Storage--Usage	System shall provide for use of stored payment methods through a drop-down menu, if logged in to self service portal	TS-050-210
TS-260	Payment Storage--Select	System shall provide for selecting of stored payment methods for payment(s), if logged in to self service portal	TS-050-210
TS-261	Payment Storage--Select (Future)	System shall provide for selecting of stored payment methods for scheduled payment(s), if logged in to self service portal	TS-050-210

#	Name	Description	Task Reference ID
TS-262	Payment Storage--Rename	System shall provide for naming of stored payment method information (e.g. "John Smith's Checking Account" as a nickname for the payment method), if logged into self service portal	TS-050-210
TS-263	Payment--Restrictions	System shall restrict payment method options based on business rules (e.g. user payment history, type of payment)	TS-050-210
TS-264	Debit Block	System shall process ACH debit block payments using authorized debit block code	TS-050-210
TS-265	Bulk Payments	System shall process bulk payments	TS-050-210
TS-266	Bulk Payments--Identify Duplicates	System shall support automated identification of duplicate bulk payment records	TS-050-210
TS-267	Bulk Payments--Remove Duplicates	System shall support automated removal of duplicate bulk payment records	TS-050-210
TS-268	Bulk Payments--Processing Status	System shall display bulk payment processing status (e.g., progress bar, percentage completed)	TS-050-210
TS-269	Exceptions--Identify	System shall support automated identification of payment exceptions based on business rules (e.g., unable to make payment using certain payment methods based on liability type, license)	TS-050-330
TS-270	Exceptions--Correct	System shall support automated determination of disposition for payment (e.g., sent to problem resolution, set flags, and/or generated automatic correspondence/notices) based on business rules	TS-050-330
TS-271	Notification of Exception	System shall support automated notification of identified payment exceptions	TS-050-330
TS-272	Exceptions--Call Out (In-Text)	System shall highlight payment exceptions	TS-050-330
TS-273	Exceptions--Call Out Descriptions (In-Text)	System shall display form of payment exception explanation for highlighted exception fields	TS-050-330
TS-274	Exceptions--Descriptions (In-Text)	System shall provide exception code descriptions for in-text payment exceptions	TS-050-330
TS-275	Exceptions--Error Summary	System shall collate identified payment exceptions into a summary	TS-050-330
TS-276	Exceptions--Descriptions (Error Summary)	System shall provide error code descriptions for payment exception summary	TS-050-330
TS-277	Exceptions--Real Time Processing	System shall process corrected payment exceptions in real time	TS-050-330
TS-278	Corrected Payment Plan--Re-submission Payment Method	System shall provide for resubmission of corrected payment method	TS-050-330
TS-279	Corrected Payment Plan--Re-submission Payment Details	System shall provide for resubmission of corrected payment details	TS-050-330
TS-280	Exceptions--Report Error Code	System shall provide an exportable file of submission exception codes, specifying location of payment exceptions	TS-050-330
TS-281	Exceptions--Report Error Code Explanation	System shall provide an exportable file of payment exception code explanations	TS-050-330
TS-282	Exceptions--Manual Override	System shall provide for entity to manually override exceptions to process payment based on business rules	TS-050-330
TS-283	Exceptions--Acknowledgement	System shall provide acknowledgement process for manual override of payment exceptions by preferred correspondence channel	TS-050-330
TS-284	Exceptions--DOR Override	System shall provide for DOR to manually override payment exceptions	TS-050-330
TS-285	Payment--Multiple Liabilities	System shall provide for a single payment to apply to multiple outstanding liabilities	TS-050-250
TS-286	Liability--Multiple Payments	System shall provide for a single outstanding liability to be paid by multiple payments	TS-050-250
TS-287	Liability--Multiple Payment Methods	System shall provide for a single outstanding liability to be paid by multiple payment methods	TS-050-250
TS-288	Payment--Tax Type	System shall provide for a single payment to be applied to outstanding liabilities owed across multiple tax types	TS-050-250
TS-289	Payment--Tax Period	System shall provide for a single payment to be applied to outstanding liabilities owed across multiple tax periods	TS-050-250
TS-290	Payment--Specify Payment	System shall allocate a payments received to tax, penalties and interest based on business rules	TS-050-250
TS-291	Payment Storage--EFT/ACH	System shall provide for the capability to store bank routing and account numbers captured from EFT or ACH payments	TS-050-250
TS-292	Payment Storage--Restrictions	System shall limit warehousing of payments based on business rules (e.g., payment history, type of liability)	TS-050-250
TS-293	Payment--Void	System shall provide DOR with the ability to manually void payments (e.g. void electronic payments) based on business rules	TS-050-250
TS-294	Payment--Reversal	System shall reverse all transactions made when a payment is not honored by a financial institution (e.g., insufficient funds, outdated account information)	TS-050-250
TS-295	Credit Card Threshold	System shall enforce a credit card maximum transaction amount	TS-050-250
TS-296	Payment--Selection	System shall provide for selection of payment method for different liabilities (e.g., ability to select credit card for liability #1 and EFT for liability #2)	TS-050-250
TS-297	Partial Payments	System shall provide for ability to make partial payments	TS-050-250
TS-298	Warehouse Payment--Date	System shall support automated processing of payments on a date entered by the user	TS-050-250
TS-299	Warehouse Payment--Recurring	System shall support automated processing of payments on a recurring schedule	TS-050-250
TS-300	Warehouse Payment--Expiry	System shall provide payment schedule expiry date	TS-050-250
TS-301	Warehouse Payment--Amount	System shall provide future payment amounts to be specified by payment date	TS-050-250
TS-302	Display--Processing Fees	System shall display relevant payment processing fees (when applicable)	TS-050-250
TS-303	Notification--Post-Due	System shall support automated generation of alerts if a scheduled payment is to be processed after due date (e.g., pop-up notification)	TS-050-250
TS-304	Notification--Expired Stored Payment	System shall support automated generation of notifications of expired stored payment methods (e.g., credit card expiration date)	TS-050-250
TS-305	Notification--Pre-Payment Processing	System shall support automated generation of notifications of scheduled payment processing date (e.g., scheduled payment to be processed in next business day)	TS-050-250
TS-306	Notification--Post-Payment Processed	System shall support automated generation of notifications of processed payments	TS-050-250
TS-307	Acknowledgement--Submitting Payment	System shall provide acknowledgement of payment terms prior to submitting payments	TS-050-250
TS-308	Acknowledgement--Scheduling Payment	System shall provide acknowledgement of payment terms prior to scheduling payments	TS-050-250
TS-309	Protest Payments	System shall provide for payments made under protest, accounting for protest payments separately from other payments based on business rules	TS-050-250
TS-310	Real-Time Payment Calculations	System shall provide for real-time payments on the adjusted amount (i.e. the adjustment does not have to process overnight before a payment can be applied to the new balance)	TS-050-250
TS-311	Payment Storage--Expiry	System shall provide payment method storage expiry date based on business rules (e.g. tax type, taxpayer risk profile)	TS-050-250
TS-312	Warehouse Payment--Restrictions	System shall process scheduled payments for users logged in to the self service portal based on business rules	TS-050-250

#	Name	Description	Task Reference ID
TS-313	Past Due Payment	System shall support automated generation of alerts if liability are past due (e.g. pop-up notification)	TS-050-250
TS-314	PLN--Payment	System shall support automated generation of Payment Locator Number (PLN) for immediate payments	TS-050-270
[illegible]	PLN--Scheduled Payment	System shall support automated generation of Payment Locator Number (PLN) per scheduled payment	TS-050-270
[illegible]	Confirmation Number--Payment	System shall support automated generation of confirmation number per immediate payment	TS-050-270
TS-317	Display--Tax Type	System shall display amount paid per tax type on confirmation	TS-050-270
TS-318	Display--Charge Fees	System shall display amount paid in charge fees on confirmation	TS-050-270
TS-319	Display--Tax Period	System shall display amount paid per tax period on confirmation	TS-050-270
TS-320	Display--Enter Name	System shall provide unauthenticated user ability to enter name to display on confirmation	TS-050-270
TS-321	Display--Payment Submitter	System shall display the user's name on confirmation	TS-050-270
TS-322	Display--Processing Timeline	System shall support automated calculation of processing times (e.g. initiation date, withdrawal date, modification date)	TS-050-270
TS-323	Display--Initiation Date	System shall display processing time for initiation date	TS-050-270
TS-324	Display--Withdrawal Date	System shall display processing time for withdrawal of payment date	TS-050-270
TS-325	Display--Modification Date	System shall display processing time for modification of payment date	TS-050-270
TS-326	Display--Payment Voucher	System shall display payment voucher	TS-050-270
TS-327	Print--Payment Confirmation	System shall provide for printing of payment submission confirmation (including PLN and confirmation number)	TS-050-270
TS-328	Print--Payment Notification	System shall provide printing of notice of payment	TS-050-270
TS-329	Print--Payment Voucher	System shall provide for printing of payment voucher	TS-050-270
TS-330	Save--Payment Confirmation	System shall provide for saving of payment submission confirmation to profile (if applicable)	TS-050-270
TS-331	Save--Payment Notification	System shall provide for saving of notice of payment to profile (if applicable)	TS-050-270
TS-332	Save--Payment Voucher	System shall provide for saving of payment voucher to profile (if applicable)	TS-050-270
TS-333	Export--Payment Confirmation	System shall provide for exporting of payment confirmation based on business rules	TS-050-270
TS-334	Export--Payment Notification	System shall provide for exporting of notice of payment based on business rules	TS-050-270
TS-335	Export--Payment Voucher	System shall provide for exporting of payment voucher based on business rules	TS-050-270
TS-336	Send--Payment Notification	System shall provide notice of payment to be sent by preferred correspondence channel	TS-050-270
TS-337	Send--Payment Voucher	System shall provide payment voucher to be sent by preferred correspondence channel	TS-050-270
TS-338	Notification--Payment Confirmation	System shall support automated generation of notification of payment confirmation by preferred correspondence channel based on business rules	TS-050-270
TS-339	Exceptions--Identify	System shall support automated identification of payment plan exceptions based on business rules (e.g. unable to create payment plan based on liability type, license)	TS-050-240
TS-340	Exceptions--Correct	System shall support automated determination of correction steps for a payment plan (e.g. sent to problem resolution, set flags, and/or generated automatic correspondence/notices) based on business rules	TS-050-240
TS-341	Notification of Exception	System shall support automated notification of identified payment plan exceptions	TS-050-240
TS-342	Exceptions--Call Out (In-Text)	System shall highlight payment plan exceptions	TS-050-240
TS-343	Exceptions--Call Out Descriptions (In-Text)	System shall display payment plan exception explanation for a given highlighted exception field	TS-050-240
TS-344	Exceptions--Descriptions (In-Text)	System shall provide exception code descriptions for in-text payment plan exceptions	TS-050-240
TS-345	Exceptions--Error Summary	System shall collate identified payment plan exceptions into a summary	TS-050-240
TS-346	Exceptions--Descriptions (Error Summary)	System shall provide error code descriptions for payment plan exception summary	TS-050-240
TS-347	Exceptions--Real Time Processing	System shall process corrected payment plan exceptions in real time	TS-050-240
TS-348	Corrected Payment Plan--Submission	System shall provide for resubmission of a corrected payment plan (e.g. change duration of agreed upon payment plan, add additional liabilities)	TS-050-240
[illegible]	Exceptions--Report Error Code	System shall provide an exportable file of submission exception codes, specifying location of payment plan exceptions	TS-050-240
[illegible]	Exceptions--Report Error Code Explanation	System shall provide an exportable file of payment plan exception code explanations	TS-050-240
TS-351	Exceptions--Manual Correction	System shall provide for entity to manually correct exceptions to process payment plans based on business rules	TS-050-240
TS-352	Exceptions--Acknowledgement	System shall provide acknowledgement process for manual correction of payment plan exceptions by preferred notification channel	TS-050-240
TS-353	Exceptions--DOR Override	System shall provide for DOR to manually override payment plan exceptions	TS-050-240
TS-354	Payment Plan--Display	System shall display payment plan details based on business rules (e.g. statutory requirements)	TS-050-230
TS-355	Payment Plan--Auto-Populate	System shall support automated generation of payment plan details (e.g. timeline, payment amounts per payment)	TS-050-230
TS-356	Payment Plan--Scroll	System shall enforce scrolling to bottom of each page in the payment plan details prior to progressing in the details	TS-050-230
TS-357	Acknowledgement	System shall prompt user to electronically indicate acknowledgement for payment plan submission	TS-050-230
TS-358	Payment Plan--Processing Timeline	System shall display payment plan processing timeline (e.g. initiation date, withdrawal date, modification dates)	TS-050-230
TS-359	Print--Payment Plan Confirmation	System shall provide for printing of payment submission confirmation (including PLN and confirmation number)	TS-050-230
TS-360	Print--Payment Plan Details	System shall provide for exporting of a displayed payment agreement information to printable format	TS-050-230
TS-361	Save--Payment Plan Confirmation	System shall provide for saving of payment plan enrollment confirmation to profile	TS-050-230
TS-362	Save--Payment Plan Details	System shall provide for saving of payment plan enrollment details to profile	TS-050-230
TS-363	Export--Payment Plan Details	System shall provide for exporting of a payment plan based on business rules	TS-050-230
TS-364	Send--Payment Plan Confirmation	System shall provide for payment plan enrollment confirmation to be sent by preferred correspondence channel	TS-050-230
TS-365	Send--Payment Plan Details	System shall provide for payment plan details to be sent by preferred correspondence channel	TS-050-230
TS-366	Display--Active Payment(s)	System shall display a list of active payment(s) based on business rules (e.g. authorization date, payment date, tax period)	TS-050-200

#	Name	Description	Task Reference ID
TS-367	Display--Active Payments to Be Processed	System shall display active payments that have not been processed in a list format	TS-050-200
TS-368	Display--Notification of Active Payment Processing	System shall display alert of DOR business processing hours (e.g. payments made after 5:00pm will be processed the next business day)	TS-050-200
TS-369	Search List--Filter	System shall provide for filtering scheduled payments on displayed fields (e.g. tax types, dates, amounts)	TS-050-200
TS-370	Create Reports	System shall provide for creation of active payment reports based on filtered search	TS-050-200
TS-371	Export Reports	System shall provide for exporting of scheduled payments reports to common formats	TS-050-200
TS-372	Print Reports	System shall provide for an entity to manually export active payments information to a printable format	TS-050-200
TS-373	Display History	System shall display list of processed payments and pertinent payment information in a viewable list based on business rules (e.g. authorization date, payment date, location)	TS-050-350
TS-374	Display History--Payment Credit by Tax Type	System shall display processed payments made against a liability by tax type	TS-050-350
TS-375	Display History--Payment Credit by Tax Period	System shall display processed payments made against a liability by tax period	TS-050-350
TS-376	Display History--Payment Allocation	System shall display history of processed payments with liabilities detailed (e.g. application of payment toward balance, penalty, interest)	TS-050-350
TS-377	Search History--Filter	System shall provide for filtering payment history on displayed fields (e.g. tax types, dates, amounts)	TS-050-350
TS-378	Create Reports	System shall provide creation of processed payment reports based on filtered search	TS-050-350
TS-379	Export Reports	System shall provide for exporting processed payments reports to common formats	TS-050-350
TS-380	Print Reports	System shall provide for an entity to manually export history of processed payment information	TS-050-350
TS-381	Authorized Payment Changes	System shall provide the capability for authorized users to alter scheduled payments	TS-050-280
TS-382	Edit--Payment Occurrence	System shall provide for editing of payment occurrence	TS-050-280
TS-383	Edit--Payment Series	System shall provide for editing of payment series	TS-050-280
TS-384	Cancel--Payment Occurrence	System shall provide the capability to cancel a payment occurrence	TS-050-280
TS-385	Cancel--Payment Series	System shall provide the capability to cancel a payment series	TS-050-280
TS-386	Validation	System shall support automated updates to a payment plan liability amount and due date based on under/overpayment	TS-050-280
TS-387	Notification--Change of Payment Status	System shall support automated notifications to taxpayer by preferred correspondence channel if editing payment changes the payment status	TS-050-280
TS-388	Notification--Change of Scheduled Payment Status	System shall support automated notifications if changes to the payment method impact the status of scheduled payments (e.g. credit card number change should be reflected on future/scheduled payments)	TS-050-280
TS-389	Display--Proposed Changes to Payment	System shall provide a side-by-side view of payment line items if payments are altered, providing an 'as is and 'as proposed' view	TS-050-280
TS-390	No Login--Payment	System shall provide for submission of payments without online registration	TS-050-310
TS-391	No Login--DLN	System shall provide for users not logged in to the self service portal to submit payments using identifying information based on business rules (e.g., Social Security Number (SSN), last years' payment, Document Locator Number (DLN))	TS-050-310
TS-392	Identification--Drop Down	System shall provide for users not logged in to the self service portal to select identifying information fields through a drop-down selection list	TS-050-310
TS-393	Identification--Two Forms	System shall provide for users not logged in to the self service portal to provide two forms of identifying information for making payments	TS-050-310
TS-394	Identification--Confirmation	System shall provide for users not logged in o the self service portal to confirm identifying information through double entry	TS-050-310
TS-395	Identification--Automated Confirmation	System shall provide for users not logged in to the self service portal to match taxpayer liability to identify information (e.g., Social Security Number (SSN), last years' payment, Document Locator Number (DLN))	TS-050-310
TS-396	IP Tracking	System shall provide a log of IP addresses for payments made by users not logged in to the self service portal	TS-050-310

CS - Customer Service

Defines the activities to process customer correspondence in the form of fax, email, text (SMS), or mail, to manage customer calls, and to manage follow-up activities, the call center workforce, and the service desk.
- Process Real Time Interaction: Defines activities to receive and route inbound calls to appropriate queue based on business rules, and to allow CSRs to confirm caller identities, perform different activities to complete taxpayer inquiries during the call, or transfer the call to another CSR, if necessary.
- Process Customer Correspondence: Defines activities to allow DOR to accept in-bound taxpayer correspondence through channels including paper mail, fax, e-mail, SMS and chat function, and to process correspondence activities by tracking status and allowing CSRs to evaluate and respond to correspondence.
- Manage Activities: Defines the activities to allow CSRs to create and process follow-up activities to provide a solution to the taxpayer's inquiry.
- Knowledge Resources: Defines the activities to allow CSRs and other DOR employees to access and use the Knowledge Base for research while processing taxpayer inquiries and executing activities and financial transactions for the taxpayer's account.
- Service Desk: Defines the activities to accept walk-in requests for help and the process to resolve and close work items.
- Customer Interaction Center: Determines activities to allow CIC administrator to manage CIC's daily operations including creation of work-shift scheduling based on incoming contact volume, manage CIC business rules related to routing, scripts, and alerts/messages, and monitor CIC's quality of customer service and performance.

#	Name	Description	Task Reference ID
		"Process Real Time Interaction" Functional Requirements	
CS-1	IP Address Access	System shall include capability to access IP addresses logged during user chat sessions	CS-010-150
CS-2	IP Address Storing	System shall include capability to store IP addresses logged during user chat sessions against user account	CS-010-150
CS-3	Relevant Caller Information Population	System shall automatically populate relevant caller information for employee (e.g. all returns and filings associated with SSN, outstanding liabilities and status, missing returns)	CS-010-070
CS-4	Taxpayer Category Flagging	System shall automatically include an alert on taxpayer's profile based on business rules (e.g. excessive agency contact, behind on payment plan)	CS-010-070
CS-5	Proactive Issue Spotting	System shall automatically highlight certain fields on screen based on business rules (e.g. overdue bills, missing returns)	CS-010-070
CS-6	Correspondence Pre-Fetch	System should automatically provide links to view recent correspondence sent and received	CS-010-070
CS-7	Contact History Display	System shall support contact history with relevant data (e.g. date of contact, owner, resolution, notes)	CS-010-100
CS-8	Multi-channel History Population	System shall support populating contact history for all channels of taxpayer contact	CS-010-100
CS-9	Contact History Pre-population	System shall pre-populate contact history if possible	CS-010-100
CS-10	Reason Code Selection	System shall provide employee with drop down list to select reason code for entity contact	CS-010-110
CS-11	Intelligent Drop Downs	System shall provide employee with intelligent drop down lists	CS-010-110
CS-12	Free Text Notes	System shall provide ability to document free-form text notes while working call	CS-010-110
CS-13	Reference Number	System shall automatically create reference number related to contact (i.e. transaction number of record that employee can give to caller)	CS-010-110
CS-14	Call Reason Code	System shall allow employee to assign reason code to call in contact log	CS-010-140
CS-15	Correspondence Follow Up	System should automatically suggest potential correspondence for caller based on business rules (e.g. resolution codes, taxpayer demographics)	CS-010-140
CS-16	Create Work Items	System shall provide employee ability to create work items for issue resolution	CS-010-140
CS-17	Action Item Assignment – Queue	System shall provide employee ability to assign work items to work queues for issue resolution	CS-010-140
CS-18	Action Item Assignment – Supervisor	System shall provide employee ability to assign work items to supervisor for issue resolution	CS-010-140
CS-19	Action Item Assignment – Employee	System shall provide employee ability to assign work items to employees for issue resolution	CS-010-140
CS-20	Call Issue Dashboard – Work Items	System shall provide employee with dashboard to track outstanding work items by caller contact	CS-010-140
CS-21	Call Issue Dashboard – Correspondence	System shall provide employee with dashboard to track issued correspondence by caller contact	CS-010-140
CS-22	Call Issue Dashboard – Issues	System shall provide employee with dashboard to track outstanding issue resolution by caller contact	CS-010-140
		"Process Customer Correspondence" Functional Requirements	
CS-23	Unique Identification Assignment	System shall automatically assign a unique identification number to each scanned image	CS-020-010
CS-24	Store Image	System shall store images from all correspondence channels (e.g. scanning, e-mail, fax)	CS-020-010
CS-25	Unique Identification Creation	System shall create unique identification number based on scan data including, but not limited to: batch number, image number, page number, date postmarked, and date scanned	CS-020-010
CS-26	Contact Record Creation	System shall automatically create contact record in entity contact history using unique identification number	CS-020-010
CS-27	Re-scan Submission	System shall allow employee to submit scanned image for re-scan	CS-020-010
CS-28	Attachment Linking	System shall provide ability include attachments (e.g. files, images) with incoming correspondence to contact record	CS-020-020
CS-29	Multi Tier Classification	System shall support classification of correspondence using intelligent drop downs	CS-020-020
CS-30	One Way Work Flow	System shall support reclassification of correspondence using intelligent drop downs	CS-020-020
CS-31	Correspondence Assignment	System shall automatically assign correspondence work item to employee based on business rules (e.g. correspondence received from entity in audit case assigned to auditor)	CS-020-020
CS-32	Priority Status - Automated	System shall support automated assignment of priority status to correspondence work item based on business rules (e.g. correspondence received related to SIU case)	CS-020-020
CS-33	Account Hold - Collections	System shall support automated hold indicators (such as billing and collections) based on correspondence classification per DOR business rules	CS-020-020
CS-34	Joint Filer Correspondence	System shall automatically allocate correspondence to contact history for multiple entities based on business rules (e.g. joint filers)	CS-020-020
CS-35	Anticipated Correspondence - Indexed	System should automatically link correspondence to entity contact history with OCR if possible	CS-020-020
CS-36	Illegible Correspondence	System shall record and track correspondences received that cannot be linked to an existing entity	CS-020-020
CS-37	Self Route Correspondence	System shall support the ability for employees to assign open work items themselves	CS-020-030

#	Name	Description	Task Reference ID
CS-38	Contact History - Routing Record	System shall maintain record of all employees that have interacted with the correspondence as part of the correspondence contact history	CS-020-030
CS-39	Work Item Owner Search	System shall provide a work item owner search function within contact history	CS-020
CS-40	Print Correspondence Cover Page	System shall allow employee to print a correspondence cover page to support the back scan process (date, name, classification, entity)	CS-02
CS-41	Priority Status - Manual	System shall support manual assignment of priority status to correspondence work item based on business rules (e.g. correspondence received related to SIU case)	CS-020-040
CS-42	Copy and Paste Electronic Correspondence	System shall allow employee to attach electronically received documents to contact history via "cut and paste"	CS-020-040
CS-43	Automated Route Correspondence	System shall automatically assign correspondence to employee that created contact history	CS-020-040
CS-44	Closure Code Drop Down	System shall provide intelligent drop downs with closure codes	CS-020-040
CS-45	Contact History - Closure Data	System shall automatically update contact history with closure data (e.g. closure code, employee name, and closure date)	CS-020-040
CS-46	Correspondence Work Item Status	System shall display status of correspondence work item (e.g. resolved, entity response required)	CS-020-040
CS-47	Adjustment of Dates	System shall provide ability for employee to manually adjust resolution or follow up date	CS-020-040
CS-48	Supervisor Assistance	System shall allow employee to request supervisor assistance for correspondence work item	CS-020-040
CS-49	Physical Location ID	System shall automatically assign a location number to unscanned correspondence	CS-020-050
CS-50	Reason Code for Unscanned	System shall provide reason code detailing why correspondence was not scanned for employee	CS-020-050
CS-51	Physical Copy of Unscanned	System shall provide employee ability to request physical copy of unscanned correspondence	CS-020-050
CS-52	Physical Copy Available	System shall indicate when physical copy of unscanned correspondence is unavailable for request	CS-020-050
		"Service Desk/Manage Contact/Knowledge Resources" Functional Requirements	
CS-53	Service Desk Contact History	System shall support contact history updates when entities use the service desk at DOR offices	CS-030
CS-54	Visit Reason Code	System shall enable employee conducting service desk support to log entity reason code for visiting	CS-030
CS-55	Entity Search	System shall support service desk employee searching for entity using unique entity information (e.g. SSN, address, TID)	CS-030
CS-56	Entity Profile Display	System shall display entity profile information to employee following identity authentication	CS-030
CS-57	Service Desk Transcript	System should generate a transcript of an entity's service desk visit to be delivered via entity's preferred medium (e.g., printed out, emailed)	CS-030
CS-58	Service Desk Interaction	System should provide a record of in-person interactions and retain ID number to retrieve interaction from database	CS-030
CS-59	Phone Interaction	System should provide a record of phone interactions and retain ID number to retrieve interaction from database	CS-030
CS-60	Chat Interaction	System should provide a record of chat interactions and retain ID number to retrieve interaction from database	CS-030
CS-61	Primary Item Ownership	System shall assign primary owner to work items generated from entity contact based on business rules (e.g., queue assignment, worker availability)	CS-030
CS-62	Secondary Item Ownership	System shall assign secondary owners as necessary to work items generated from entity contact based on business rules (e.g., queue assignment, worker availability)	CS-030
CS-63	Work Item Reminders	System shall generate work item call back reminders for call center employees who created work items	CS-030
CS-64	Automatic Generation	System shall generate notification to entities following work item resolution if possible based on business rules (e.g., type of work item, preferred method of contact)	CS-030
CS-65	Dynamic Scripting	System shall support use of dynamic scripts by employees	CS-030
		"Customer Interaction Center" Functional and Integration Requirements	
CS-66	Screen Recording – Telephone	System shall provide capability to access log of agent screen navigation from telephone session	CS-040
CS-67	Screen Recording – Chat	System shall provide capability to access log of agent screen navigation from chat session	CS-040
CS-68	Warehouse Interactions	System should warehouse recorded interactions per business rules (e.g., type of call, work item creation)	CS-040
CS-69	Interaction Searching	System shall support search capability on warehoused interactions using meta-data (e.g., date, employee, phone number of caller)	CS-0
CS-70	Interaction Retrieval	System shall support the retrieval of warehoused interactions by authorized employees	CS-04
CS-71	Script Searching	System shall allow employees to search for scripts during interaction	CS-040
CS-72	Script Retrieval	System shall allow employees to select scripts for retrieval during interaction	CS-040
CS-73	Script Selection	System shall display selected scripts during interaction	CS-040
CS-74	IVR Authentication Answers	Integration will provide capability to access user-keyed information in CTI system in real time	CS-040 Integration
CS-75	Breadcrumbs – IVR	System shall display caller's IVR choices to employee	CS-040 Integration
CS-76	Breadcrumbs – CSR	System shall display history of transfers within call to employee	CS-040 Integration
CS-77	Telephone Self Service	System shall support self service functionality for callers via telephone (e.g. account balance, payment due dates)	CS-040 Integration
CS-78	Demographic Information Viewing	System shall include capability to accept data transfers from CTI system in real time	CS-040 Integration
CS-79	Call Type Information Viewing	System shall include capability to accept contact data from IVR system in real time	CS-040 Integration
CS-80	Wrap-up Time Limit	System shall include capability to receive end of call information from CTI system in real time	CS-040 Integration
CS-81	Pre Populated Information Transfer	System shall automatically transfer all caller information when caller is transferred	CS-040 Integration
CS-82	Telephone Number Capture	System shall provide CTI system with dynamic messaging information based on CTI data request	CS-040 Integration
CS-83	Offering Surveys	System shall automatically send a survey invitation via the customer's medium of choice immediately following an interaction	CS-040 Integration
CS-84	Dynamic Survey Questions	System shall select survey question(s) based on business rules (e.g., IVR queue selected, length of interaction)	CS-040 Integration
CS-85	Survey Administration	System shall allow responses from surveys administered via phone and collected through the phone system to the ITS survey solution	CS-040 Integration
CS-86	Individual Survey Result Escalation	System shall automatically send survey results to an employee's supervisor based on business rules (e.g., employee average far above or below DOR average)	CS-040 Integration

#	Name	Description	Task Reference ID
CS-87	Trend Survey Result Escalation	System shall automatically send aggregated survey results to an employee's supervisor based on business rules (e.g., employee average trending negative over time)	CS-040 Integration
	urvey Dashboard	System shall provide a dashboard for customer interaction center supervisors to view grouped survey results (e.g., by date, issue type) from all channels	CS-040 Integration
CS-89	Call Handling Alerts	System should generate automated alerts of employee call handling statistics (e.g., calls/chats answered, average time in call/chat)	CS-040 Integration
CS-90	Trend Survey Result Escalation	System shall automatically send aggregated survey results to an employee's supervisor based on business rules (e.g., employee average trending negative over time)	CS-040 Integration
CS-91	Reason Code Integration	System shall collect and log call disposition codes produced by the CIC system.	CS-040 Integration

CA - Collections Activities

Defines the activities to capture debts owed to DOR, through outstanding tax payments and license/bond fees. This includes activities that are both automated and outsourced from discovery to taxpayer contact and enforcement.
- Perform Automated Collection: Defines the activities to automatically execute collections activities, through estimated assessments and demand notices.
- Third Party Collection Agency: Defines the activities to automatically release taxpayer account master and transactional data to a third party collection agency, to receive inbound updates from the collection agency (including updates on collection status, address data, and banking data), to update the collection agency with DOR updates to taxpayer accounts, and to manually and automatically recall accounts from the collection agency.
- Enforcement Actions: Defines the activities to automatically release taxpayer account master and transactional data to a third party collection agency, to receive inbound updates from the collection agency (including updates on collection status, address data, and banking data), to update the collection agency with DOR updates to taxpayer accounts, and to manually and automatically recall accounts from the collection agency.
- Process Payment Agreements: Defines the activities to check items for payment agreement eligibility and initiate payment agreements.
- Non-deficient Dunning: Defines the activities to dun non-deficient items that are subject to collections activities.

#	Name	Description	Task Refer
		"Perform Automated Collection" Functional Requirements	
CA-1	Proposed Assessment	System shall support automated generation of notice of proposed assessment based on business rules	CA-010
CA-2	Proposed Assessment--Reason Codes	System shall support automated generation of notice of proposed assessment based on reason code(s)	CA-010
CA-3	Proposed Assessment--Correspondence	System shall support automated generation of notice of proposed assessment by preferred correspondence channel(s) (e.g., mail, email, self-service portal) based on business rules	CA-010
CA-4	Proposed Assessment--Recipient	System shall provide notice of proposed assessment to designated recipient (e.g., responsible officer, power of attorney) based on business rules	CA-010
CA-5	Bill Staging	System shall support the staging of bills through collections lifecycle based on business rules	CA-010
CA-6	Collections Segmentation	System shall support variation of correspondence for population segments based on business rules	CA-010
CA-7	Demand Notice	System shall support automated generation of demand notice based on business rules	CA-010
CA-8	Demand Notice--Correspondence	System shall support automated generation of demand notice based on payment status (e.g., no payment, partial payment) by payment due date	CA-010
CA-9	Demand Notice--Hold	System shall allow for the hold of demand notice issuance based on business rules	CA-010
CA-10	Outbound Calling	System shall integrate with a CTI solution for automated outbound calling	CA-010
CA-11	Additional Outreach	System shall identify entities eligible for additional outreach based on defined criteria (e.g. liability amount, number of liabilities, tax type, risk level)	CA-010
		"Third Party Collection Agency" Functional Requirements	
CA-12	Multiple Collection Agencies	System shall support interfaces with multiple third party collection agencies	CA-020
CA-13	TPCA Distribution	System shall support automated distribution of eligible liabilities to third party collection agency(ies) based on business rules	CA-020
CA-14	TPCA Performance	System shall support the variation of liability distribution to third party collection agencies based on collection agency performance (e.g., payments made, payment plans created)	CA-020
CA-15	TPCA Optimization	System shall provide optimization modelling of liability distribution to third party collection agencies based on liability details (e.g., tax type, amount, age)	CA-020
CA-16	TPCA Manual Allocation of Liabilities	System shall allow for the manual allocation of eligible liabilities to third party collection agency(ies) based on business rules	CA-020
CA-17	TPCA Search Capabilities	System shall provide search capabilities across liabilities allocated to third party collection agency(ies) based on entity characteristics	CA-020
CA-18	New Liabilities	System shall support automated transmission of new liabilities to designated third party collection agency, including; warrant information, contact information, SSN, FEIN, liability details	CA-020
CA-19	Updated Liabilities	System shall support automated update to entity account information to third party collection agency based on business rules (e.g., liability amounts, changes in contact information, Responsible Officer(s), death, or holds)	CA-020
CA-20	Liability Recall Request--Automatic	System shall support automated recall of liability(ies) from third party collection agency(ies) based on business rules (e.g., legal, audit, bankruptcy, account errors, payment, age of liability, inactivity of collections agency)	CA-020
CA-21	Liability Recall Request--Manual	System shall allow for the manual selection of liability(ies) for recall from third party collection agency(ies) based on business rules	CA-020
CA-22	Liability Recall Reason Code	System shall assign reason codes to liability recall requests based on request trigger	CA-020
CA-23	Record Data Source	System shall record source of data provided by third party collection agency	CA-020
CA-24	Record Entity Account Updates	System shall record updates to entity account information from third party collection agency based on business rules	CA-020
CA-25	Record Bank Information	System shall record entity bank information provided by third party collection agency (e.g., bank, account number(s), routing number(s))	CA-020
CA-26	Record Employer Information	System shall record employment information provided by third party collection agency (e.g., employer contact, employment history, salary information)	CA-020
CA-27	Reconciliation--Balance	System shall support automated reconciliation of third party collection agency and DOR data at the balance level based on business rules	CA-020
CA-28	Reconciliation--Transaction	System shall support automated reconciliation of third party collection agency and DOR data at the transaction level based on business rules	CA-020
		"Enforcement Actions" Functional Requirements	
CA-29	Identify Eligible Liabilities	System shall support automated identification of eligible liabilities for enforcement activities based on business rules	CA-030
CA-30	File Warrant	System shall support automated filing of warrant(s) for responsible parties (e.g., individual, joint filers, Responsible Officers) of an eligible liability	CA-030
CA-31	Record Warrant Details	System shall support automated update of entity account(s) with warrant filing information, including: warrant status, expiration date, county of issuance, and liability on record	CA-030
CA-32	Manual Warrant Details	System shall allow for the manual update of entity account(s) with warrant filing information, including: warrant status, expiration date, county of issuance, and liability on record	CA-030
CA-33	Warrant Renewal	System shall support automated renewal of warrant based on business rules	CA-030
CA-34	Warrant Renewal--Manual	System shall allow for manual renewal of selected warrant(s) based on business rules	CA-030
CA-35	Update Warrant(s)	System shall provide the ability to update warrant(s) based on updates to liability(ies), including; partial payment, additional liability(ies)	CA-030
CA-36	Warrant Expiration	System shall allow for the manual selection of warrant(s) to expire based on business rules	CA-030
CA-37	Select Enforcement Approach	System shall support automated selection of enforcement activity(ies) based on business rules	CA-030

#	Name	Description	Task Refer
CA-38	Optimize Enforcement Approach	System shall provide optimization modelling of enforcement activities based on defined criteria, including; entity risk profile, liability details (e.g., tax type, amount, age), existing enforcement approach (if applicable), and enforcement activity performance	CA-030
CA-39	Manual Override of Enforcement Approach	System shall allow for the manual selection of enforcement activities based on access controls	CA-030
CA-40	Notification of Enforcement Action(s)	System shall support automated generation of notification of pending enforcement action(s) based on business rules	CA-010
CA-41	Identify Employers--DOR	System shall support automated identification of taxpayer employers from DOR data	CA-030
CA-42	Identify Employers--Third Party	System shall support automated identification of employers of taxpayers from third party employment data	CA-030
CA-43	Request Wage Garnishment	System shall support automated generation of wage garnishment requests to employer(s) based on business rules	CA-030
CA-44	Track Wage Garnishment	System shall track wage garnishment compliance to liability based on business rules	CA-030
CA-45	Request Bank Information	System shall support automated generation of requests for identification of assets from bank(s) for bank levies	CA-030
CA-46	Request Account Freeze	System shall support automated generation of request to freeze eligible funds based on business rules	CA-030
CA-47	Notification of Bank Levy	System shall supported automated generation of notification of proposed bank levy based on business rules	CA-030
CA-48	Request for Asset Seizure	System shall support automated generation of request to seize eligible funds from identified bank account(s) based on business rules	CA-030
CA-49	Lien Request	System shall support automated generation of lien request to BMV based on business rules	CA-030
CA-50	Load Title Data	System shall record entity title information provided for lien (e.g., make, model, VIN number, date issued)	CA-030
CA-51	Partial Tax Lien Release	System shall allow for partial lien release based on business rules	CA-030
CA-52	Identify External License(s)	System shall support automated identification of entity license registration(s) eligible for revocation based on business rules	CA-030
CA-53	Request Revocation of External Licenses	System shall support automated generation of requests for license revocation to relevant external agencies based on business rules	CA-030
CA-54	Notify Sheriff	System shall support automated generation of notification to a sheriff of newly assigned liability(ies) on business rules	CA-030
CA-55	Sherriff User Access	System shall provide user access to sheriff's to manage collections activities based on business rules	CA-030
CA-56	Allocation to Field Agent(s)	System shall support automated distribution of field collection liabilities to field agents through a worklist based on defined criteria, including; geography, workload	CA-030
CA-57	Suspend Enforcement Action(s)	System shall support automated suspension of enforcement activities based on business rules	CA-030
CA-58	Suspend Enforcement Action(s)--Manual	System shall allow for the manual suspension of enforcement activities based on business rules	CA-030
CA-59	Clear Warrant(s)	System shall support automated generation of warrant dissolution requests to county clerk(s) based on business rules	CA-030
		"Process Payment Agreements" Functional Requirements	
CA-60	Determination of Eligibility--Entity	System shall support automated determination of payment plan eligibility based on entity data (e.g., filing history, billing history, payment agreement history, ability to pay, etc.)	CA-040
CA-61	Determination of Eligibility--Liability	System shall support automated determination of payment plan eligibility based on liability data (e.g., number of liabilities, tax type, stage of bill, etc.)	CA-040
CA-62	Prepopulated Payment Scenario	System shall provide a pre-populated payment agreement option based on business rules (e.g., initial payment, payment amount, duration, interest, etc.)	CA-040
CA-63	Establish Terms	System shall support automated determination of payment agreement parameters for selection based on business rules (e.g., initial payment, payment amount, duration, interest, etc.)	CA-040
CA-64	Payment Scenario View	System shall support automated determination of payment schedule based on selected payment agreement parameters (i.e., initial payment, payment amount, duration, interest, etc.)	CA-040
CA-65	Varying Interest Rate	System shall support automated determination of interest rates for liabilities based on business rules	CA-040
CA-66	Manual Terms	System shall allow for the manual entry of proposed payment agreement terms (e.g., initial payment, payment amount, duration, etc.) based on business rules	CA-040
CA-67	Consolidating Payment Agreements	System shall allow for the merger of existing payment agreements based on business rules	CA-040
CA-68	Amending Active Payment Agreement	System shall allow for the manual update of active payment agreements based on business rules	CA-040
CA-69	Recalculating Payments	System shall support automated recalculation of payment due against the payment schedule based on business rules	CA-040
CA-70	Allowing Multiple Payment Agreements	System shall allow multiple payment agreements per entity based on business rules	CA-040
CA-71	Automated Payments	System shall provide options for automated scheduled payments (e.g., electronic funds transfer, auto debit of checking account, etc.)	CA-040
CA-72	Payment Reminders	System shall provide options for proactive payment agreement notifications for selection based on business rules (e.g., reminder payment is due)	CA-040
CA-73	Payment Confirmations	System shall provide options for reactive payment agreement notifications for selection based on business rules (e.g., verification of payment)	CA-040
CA-74	Payment Agreement Balance Statements	System shall generate payment agreement balance statements based on business rules	CA-040
CA-75	Selection of Payment Agreement Schedule	System shall provide payment scheduling options (i.e., initial payment date, payment frequency, recurring payment date, etc.) for selection based on business rules	CA-040
CA-76	Supervisor Review	System shall support automated push of payment agreement terms for supervisor review based on business rules	CA-040
CA-77	Reinstate Payment Plan	System shall provide for reinstatement of a payment plan based on business rules	CA-040
CA-78	Monitor Compliance	System shall support automated tracking of payment agreement compliance based on business rules	CA-040
CA-79	Suspending Payment Agreement	System shall allow for the suspension of payment agreements based on business rules	CA-040
		"Non-deficient Dunning" Functional Requirements	
CA-80	Identify Entities for Proactive Outreach	System shall identify entities eligible for proactive outreach based on defined criteria (e.g. tax type, filing type, entity type, payment history, case management, etc.)	CA-050
CA-81	Outreach Selection Criteria	System shall provide ability to change proactive outreach eligibility criteria thresholds	CA-050
CA-82	Monitoring of Expected Payments	System shall support automated monitoring of expected payments	CA-050
CA-83	Filing Due Date	System shall support automated monitoring of filing due dates	CA-050
CA-84	Estimated Payment Due Date	System shall support automated monitoring of estimated payment due dates	CA-050

#	Name	Description	Task Refer
CA-85	Identify Delinquency(ies)	System shall identify delinquent entities eligible for notification based on defined criteria (e.g. entity status, tax type, filing type, entity type, etc.)	CA-050
CA-86	Delinquency	System shall provide ability to change criteria to identify target entities for delinquency notifications based on business rules	050
CA-87	Determine Contact Type(s)	System shall support automated selection of contact channel(s) based on business rules	0
CA-88	Determine Contact Channel(s)—Manual	System shall allow for the manual selection of contact channel based on business rules	CA-050
CA-89	Contact Optimization	System shall provide optimization modelling of contact activities based on historical data	CA-050
CA-90	Determine Treatment Strategy	System shall support automated selection of entity treatment strategy based on business rules (e.g., tax type, liability type, total liabilities, entity type, entity status, and compliance history)	CA-050

PD - Process Distributions

Defines the activities to process refunds, disbursements, check management, and exceptions.
- Process Refunds and Disbursements: Defines the activities to direct check refunds and disburse ACH direct deposits, bank transfers, and checks.
- Process Failed Refunds and Disbursements: Defines the activities to automatically post failed electronic disbursement items sent back to DOR from the bank or other sources.

#	Name	Description	Task Reference ID
		"Process Refunds and Disbursements" Functional Requirements	
PD-1	Refund Payment Channel	System shall support automated payment of refund to the taxpayer via taxpayer's desired channel (e.g., check, ACH)	PD-010-060
PD-2	Refund Distribution - Summary View	System shall generate summary view of refund disbursements, including: total disbursements and disbursements by tax type and fund	PD-010-060
PD-3	Refund Distribution - Transaction-level	System shall generate transaction-level data of refund disbursements (e.g., entity details, dollar amount, address, etc.)	PD-010-060
PD-4	Refund Distribution - Throttling	System shall allow for limiting the number of disbursements by period	PD-010-060
PD-5	Refund Distribution - Check Code	System shall support generation of distribution code for refund checks being claimed by DOR	PD-010-060
PD-6	Refund Hold	System shall allow for manual refund holds based on business rules	PD-010-060
PD-7	Refund Distribution - File Update	System shall allow for refund distribution file update based on business rules	PD-010-070
PD-8	ACH File	System shall send a detailed transaction file for ACH disbursements to the bank	PD-010-040
PD-9	Account Update	System shall load disbursement report details from Auditor of State including: status, check number, check warrant number, and distribution date	PD-010-040
		"Process Failed Refunds and Disbursements" Functional Requirements	
PD-10	Failed delivery reason codes	System shall support automated assignment of reason codes for failed refunds	PD-020-010
PD-11	Update taxpayer account—returned check	System shall support automated refund status updates to taxpayer accounts based on failed refunds checks	PD-020-010
PD-12	Identify multiple attempts	System shall support automated flagging of taxpayer account due to multiple failed refunds based on business rules	PD-020-010
PD-13	Load bank file	System shall support automated load of file from bank with failed refunds, including: name, account number, amount, transaction date	PD-020-020
PD-14	Bank reason codes	System shall support automated assignment of reason codes for failed refunds from bank	PD-020-020
PD-15	Reconcile failed payments	System shall support automated update of taxpayer account with failed refund data	PD-020-020
PD-16	Update taxpayer account--bank file	System shall allow manual updates to taxpayer accounts based on failed refunds using bank file reason codes	PD-020-020
PD-17	Notification of check issuance	System shall generate automated notification that physical check rather than electronic payment was made	PD-020-020
PD-18	Address verification	System shall display potential addresses for entity using external address databases (e.g., USPS, state agencies)	PD-020-030
PD-19	Quietus check status	System shall support automated indication if a disbursement check in quietus (pre-void) status	PD-020-060
PD-20	Quietus check status—manual	System shall allow worker to manually indicate a disbursement check is in a quietus (pre-void) status	PD-020-060
PD-21	Quietus check reason code	System shall allow worker to manually indicate a quietus check's reason code	PD-020-060
PD-22	Verify quietus check	System shall update the status of a refund check from "quietus" to "void" based on external data (from Auditor of State)	PD-020-070
PD-23	Supervisor review	System shall support supervisor review for authorization to re-issue refund or disbursement	PD-020-070
PD-24	Unclaimed fund status	System shall support unclaimed check status for failed refunds and disbursements based on business rules	PD-020-050
PD-25	Notify Attorney General	System shall support automated notification of unclaimed check status to the Attorney General based on business rules	PD-020-050
PD-26	Update taxpayer account—entity response	System shall support manual updates to taxpayer accounts due to failed refunds	PD-020-080

PP - Process Payments

Defines the activities to post payments by using payment lots, identify and process taxpayer payments returned by bank, clear open items against corresponding payments, and calculate appropriate penalty and interest on delinquent open items.
- Process and Post Authorized Payments: Defines the activities to process authorized ACH Debit and Credit Card Payments. Defines the activities to post taxpayer-initiated payments, including but not limited to wire transfers, checks, ACH debits, and credit card payments.
- Process Payment Exceptions: Defines the activities to route failed payments to a clarification worker for processing, for reasons such as a missing taxpayer account for the payment, insufficient taxpayer information (e.g. missing tax type, period, etc.), data inconsistency (e.g. having multiple taxpayers for single FID or SSN), or another reason (e.g. closed period).

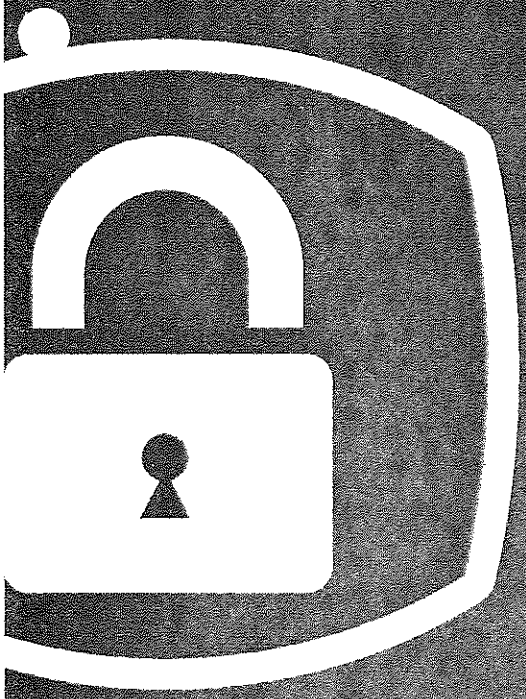
#	Name	Description	Task Reference ID
		"Process and Post Authorized Payments" Functional Requirements	
PP-1	Allocate Payment	System shall allow for payments to be allocated across liabilities, tax types, and periods	PP-010-040
PP-2	Notification of Payment	System shall support automated notification of payment posting by self service portal message/SMS/email (if applicable)	PP-010-040
PP-3	Display Allocation	System shall display payment allocation in taxpayer profile (e.g. across liabilities, periods)	PP-010-040
PP-4	Cash Receipt	System shall support automated generation of receipt of a payment	PP-010-040
PP-5	ACH Method	System shall capture payment details of ACH payment (e.g. amount, date, DOR system of origin)	PP-010-040
PP-6	ACH Vendors	System shall capture source of vendor for ACH payments	PP-010-040
PP-7	Credit Card Fees	System shall display associated fees for payments by credit cards on entity account	PP-010-040
PP-8	Manual Cash Entry	System shall allow for the manual entry of payments (e.g. cash, check)	PP-010-040
PP-9	Deposit File	System shall support automated creation of bank deposit files based on business rules	PP-010-080
PP-10	Deposit Slip	System shall support automated generation of daily cash summary based on business rules	PP-010-080
PP-11	Deposit Identification Number	System shall support automated generation of deposit identification number for deposits	PP-010-080
PP-12	Load High Volume File	System shall support automated loading of payment file from high volume processor (e.g. Fairfax) for high volume check payments	PP-010-080
PP-13	Post High Volume File Information	System shall support automated posting of payment details in high volume file to entity accounts	PP-010-080
PP-14	Reconciliation–High Volume	System shall support automated reconciliation of high volume processor bank deposit information to ITS information	PP-010-080
PP-15	Capture Payment	System shall support automated receipt of new payments from designated third party credit card processors	PP-010-050
PP-16	Pending Card Payment	System shall indicate payments made with credit card as pending in entity account prior to payment processing completion	PP-010-050
PP-17	Updated Payments	System shall support automated update to pending payment in entity account information following payment processing completion	PP-010-050
PP-18	Payment Tracking	System shall support automated assignment of payment locator number to third party credit card payment	PP-010-050
PP-19	Reconciliation - Balance	System shall support automated reconciliation of third party credit card and DOR data at the balance level based on business rules	PP-010-050
PP-20	Reconciliation - Transaction	System shall support automated reconciliation of third party credit card and DOR data at the transaction level based on business rules	PP-010-050
PP-21	Confirm Payment	System shall support automated notification of file receipt from third party credit card processor for errors	PP-010-050
		"Process Payment Exceptions" Functional Requirements	
PP-22	Payment Allocation	System shall support the allocation of payments through DOR defined hierarchy based on business rules	PP-020-020
PP-23	Search Unidentified Funds	System shall allow searching for unallocated funds by key data (e.g. date, amount, bank account number)	PP-020-070
PP-24	Receive Exceptions	System shall support automated receipt of payment exception data from internal agencies (e.g., Treasurer of State, Office of Information Technology)	PP-020-080
PP-25	Load Exceptions	System shall support automated loading of payment exception data from internal agencies against entity data	PP-020-080
PP-26	Exception Reason Code	System shall assign return reason code in file to ITS reason for return	PP-020-080

MC - Manage Case Activities

Defines the activities to initiate, execute, and close cases escalated within DOR, including but not limited to appeals, audit, bankruptcy, collections, fraud, internal affairs, investigations, and taxpayer advocate.
- Select, Create, and Assign Case: Defines the activities to evaluate, select, create, and assign DOR cases for further investigation.
- Execute Case: Defines the activities to prepare, plan, and execute DOR cases.
- Close Case: Defines the activities to formally close a case after execution.

#	Name	Description	Task Reference ID
		"Select, Create, and Assign Case" Functional Requirements	
MC-1	Account Status	System shall allow employee to update account status for potential case review by a specific DOR business unit	MC-010-010
MC-2	Case Criteria	System shall allow employee to generate potential case list based on criteria, including: program type, issue type, geography, dollar amount, entity type	MC-010-010
MC-3	Manual Review of Potential Cases	System shall allow for the manual review of potential cases	MC-010-010
MC-4	Manual Case Selection	System shall allow for the manual selection of a potential case	MC-010-010
MC-5	Automated Case Selection	System shall support automated selection of a potential case based on business rules	MC-010-010
MC-6	Potential Case Prioritization	System shall display potential cases by priority based on business rules	MC-010-010
MC-7	Filtered Case List	System shall allow employee to filter case data based on fields, including: date, type, and age	MC-010-010
MC-8	Historical Cases	System shall support automated checks for historical cases related to potential case data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address, established relationships	MC-010-020
MC-9	Duplicative Cases	System shall support automated checks for duplicative cases via data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address	MC-010-020
MC-10	Conflicting Cases	System shall support automated checks for conflicting cases via data items, including: entity name, FEIN, SSN, TID, ITIN, external IDs, email, address	MC-010-020
MC-11	List Case History	System shall support automated, prioritized listing of potential related cases for review based on business rules	MC-010-020
MC-12	Manual Case Update	System shall allow for the manual update of existing case file based on business rules	MC-010-030
MC-13	Case Updates	System shall allow authorized users to update existing case criteria, including: extension of the case time period, addition of new liabilities	MC-010-030
MC-14	Case Update Notifications	System shall notify existing case owners of updates to existing case criteria	MC-010-030
MC-15	Automatic Case Creation	System shall support automated case creation based on business rules	MC-010-040
MC-16	Manual Case Creation	System shall allow for the manual case creation based on business rules	MC-010-040
MC-17	New Case Generation	System shall allow for the manual generation of a new case based on an existing case	MC-010-040
MC-18	New Case Detail Inheritance	System shall allow for new case to inherit select case details from prior case based on business rules	MC-010-040
MC-19	New Case Linking	System shall support automated linking of a new case to prior case	MC-010-040
MC-20	Additional Case--Types	System shall allow additional case types to be defined	MC-010-040
MC-21	Additional Case--Sub-Type	System shall allow additional case sub-types to be defined	MC-010-040
MC-22	Case Creation--Ad Hoc	System shall allow for the manual creation of cases on an ad hoc basis	MC-010-040
MC-23	Case Creation--Non-entity	System shall allow for the manual creation of cases not tied to an entity	MC-010-040
MC-24	Case Creation--Transaction	System shall allow for the manual creation of cases not tied to a transaction	MC-010-040
MC-25	Case Creation--Filing Obligation	System shall allow for the manual creation of cases not tied to a filing obligation	MC-010-040
MC-26	Case ID Creation	System shall support automated creation of a unique identification number upon creation of a case	MC-010-040
MC-27	Case Attachments	System shall allow attachments to case files, including: documents, correspondence, and emails	MC-010-040
MC-28	Link Cases	System shall allow employees to link cases with existing cases	MC-010-040
MC-29	Case Type Identification	System shall allow for the manual addition of case type identifications	MC-010-040
MC-30	Case Status Duration	System shall support automated tracking of case status duration	MC-010-040
MC-31	Flagged Case Notifications	System shall support automated account flagging based on criteria, including: new case creation, outstanding liabilities, open audit, collections, account activity	MC-010-060
MC-32	Automatic Account Flagging	System shall allow for manual account flagging based on criteria, including: new case creation, outstanding liabilities, open audit, collections, and account activity	MC-010-060
MC-33	Business Event Notifications	System shall support automated push notifications to case owners for related business events based on business rules	MC-010-060
MC-34	Correspondence Holds	System shall support automated account holds on entity correspondence based on business rules	MC-010-060
MC-35	Collections Holds	System shall support automated account holds on collection activities based on business rules	MC-010-060
MC-36	Offsets Holds	System shall support automated account holds on offsets based on business rules	MC-010-060
MC-37	Penalty / Interest Holds	System shall support automated account holds on accumulation of penalty / interest based on business rules	MC-010-060
MC-38	Case Update Holds	System shall support automated account holds on certain updates based on business rules	MC-010-060
MC-39	Manual Account Holds	System shall allow for manual account holds based on user access rules	MC-010-060
MC-40	Automatic Case Assignment	System shall support automated case assignment based on business rules	MC-010-070
MC-41	Manual Case Assignment	System shall allow for manual case assignment based on business rules	MC-010-070
MC-42	Request Case Assignment	System shall allow authorized users to request case assignments from case inventory	MC-010-070
MC-43	Case Assignment Search	System shall allow authorized users to search assigned cases by predefined case elements	MC-010-070
MC-44	Priority Assignment	System shall support automated case assignment based on case priority business rules	MC-010-070
MC-45	Capacity Assignment	System shall support automated case assignment based on capacity business rules	MC-010-070
MC-46	Case Assignment--Experience Assignment	System shall support automated case assignment based on skills based business rules	MC-010-070
MC-47	Case Assignment--Analyst Tracking	System shall support automated case assignment based on end-user availability by date (i.e. leave tracking)	MC-010-070

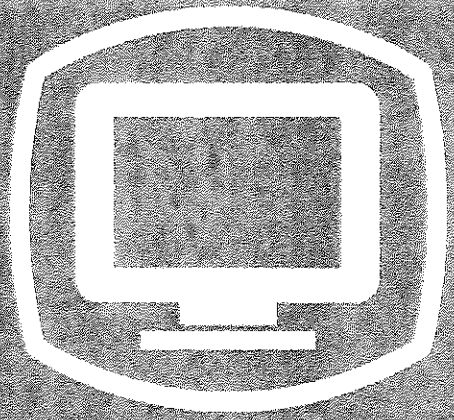
#	Name	Description	Task Reference ID
MC-48	Case Assignment—Availability Assignment	System shall support automated case assignment based on analyst availability	MC-030-070
		"Execute Case" Functional Requirements	
MC-49	Manual Case Review	System shall allow for manual review of case elements, including: case notes, case history, account history, financials	MC-0
MC-50	Manual Notes	System shall support the ability for employee to manually enter notes against a case	MC-020-010
MC-51	Case Status Designation	System shall support automated designation of case status (e.g., open, pending closure, pending reassignment)	MC-020-010
MC-52	Manual Case Status Change	System shall allow for manual status changes of case based on business rules	MC-020-010
MC-53	Push Notifications	System shall support automated push notifications to supervisor after case status change based on business rules	MC-020-010
MC-54	Manual Reassignment	System shall allow for the manual reassignment of a case	MC-020-020
MC-55	Manual Closure	System shall allow for the manual closure of a case based on business rules	MC-020-020
MC-56	Prepopulated Execution Activities	System shall support automated generation of case execution activities based on business rules	MC-020-030
MC-57	Manual Execution Activities	System shall allow for the manual creation of case execution activities	MC-020-030
MC-58	Manual Case Updates	System shall allow for the manual updates to case execution activities	MC-020-030
MC-59	Activity Assignment	System shall allow for the manual assignment of selected case activities to another employee based on business rules	MC-020-030
MC-60	Posting Financials	System shall allow for employee to post financials based on business rules	MC-020-030
MC-61	Attachments	System shall allow for attachments to case files, including: filings, correspondence, agreements	MC-020-030
MC-62	Automated Case Updates	System shall support automated case updates from external systems, including: IPAC, PACER, and Protest Tracking	MC-020-030
MC-63	Automated Event Tracking	System shall support automated tracking of appeals events, including: conferences, hearings, filings, settlement requests	MC-020-030
MC-64	Scheduling	System shall support automated Outlook calendar invites for scheduled execution activities	MC-020-030
MC-65	Internal Report Generation	System shall support automated generation of internal reports, including: audit workpapers, collections workpapers	MC-020-030
MC-66	Workpaper Download	System shall allow for the manual download of case documentation, including: workpapers	MC-020-030
MC-67	Workpaper Upload	System shall allow for the manual upload of workpapers	MC-020-030
MC-68	Disconnected Mode - Case Profiles	System shall allow employees to operate in disconnected mode to update case profiles	MC-020-030
MC-69	Disconnected Mode - Execution	System shall allow employees to operate in disconnected mode to update execution activities	MC-020-030
MC-70	Disconnected Mode - Workpapers	System shall allow employees to operate in disconnected mode to update workpapers	MC-020-030
MC-71	Financial Simulations	System shall support financial simulation of case execution to determine potential outcomes of actions	MC-020-030
MC-72	Updating Financial Simulations	System shall support automated update of financials based on uploaded workpapers	MC-020-030
MC-73	Disconnected Case Limitation	System shall have the ability to limit the number of disconnected cases based on performance metrics	MC-020-030
MC-74	Failed Document Upload	System shall support automated notifications for conflicts when disconnected case is synchronized with the system	MC-020-030
MC-75	Conflict Identification	System shall support automated conflict identification and resolution when documents fail to upload to the system	MC-020-030
MC-76	Tracking Execution Duration	System shall support automated duration tracking of collective case execution activities	MC-020-030
MC-77	Tracking Activity Duration	System shall support automated duration tracking of each case execution activity	MC-020-030
MC-78	Activity Status Update--Automated	System shall support automated status updates of case execution activities	MC-020-030
MC-79	Activity Status Update—Manual	System shall allow for manual status updates of case execution activities based on business rules	MC-020-030
MC-80	Case Activity Status Duration	System shall support automated tracking of case activity status duration	MC-020-030
MC-81	Manual Time Tracking	System shall allow employees to manually track hours to a specific case	MC-020-030
MC-82	Audit Logging	System shall support automated audit logging of cases	MC-020-030
MC-83	View Logging	System shall support automated view logging of cases	MC-02
MC-84	Time Stamp Access	System should support automated timestamping of cases once accessed	MC-02
MC-85	Time Stamp Departure	System should support automated timestamping of cases once exited	MC-020-030
MC-86	Expense Tracking	System shall allow employees to manually track expense details by case, including: expense type and amount	MC-020-030
MC-87	Time Variance	System shall support automated report generation from budgeted time v. actual time recorded per case	MC-020-030
MC-88	Expense Variance	System shall support automated report generation from budgeted expense v. actual expense recorded per case	MC-020-030
MC-89	QA Case Review	System shall support automated random selection of cases for QA review	MC-020-030
MC-90	Case Duration Monitoring	System shall support automated monitoring of case duration	MC-020-030
MC-91	Aging Case Review	System shall support automated triggering of aging cases for supervisor review based on business rules	MC-020-030
MC-92	Proposed Financials	System shall allow for the manual set up of proposed financials based on business rules	MC-020-040
MC-93	Automated Case Review Assignment	System shall support automated assignment of case for review based on business rules	MC-020-050
MC-94	Manual Case Review Assignment	System shall support the manual assignment of case for review	MC-020-050
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MC-95	Identify Open Items	System shall support automated checks for open case activities based on business rules	MC-030-010
MC-96	Manual Activity Closure	System shall allow activity status overrides from open to closed based on business rules	MC-030-020
MC-97	Open Activity Safeguard	System shall prevent case closure due to open case activities	MC-030-040
MC-98	Attachment Safeguard	System shall prevent case closure due to missing attachments based on business rules	MC-030-040
MC-99	Case Closure	System shall support automated case closure based on business rules	MC-030-040
MC-100	Case Closure Notification	System shall support automated real-time screen notification to case owner confirming case closure	MC-030-040

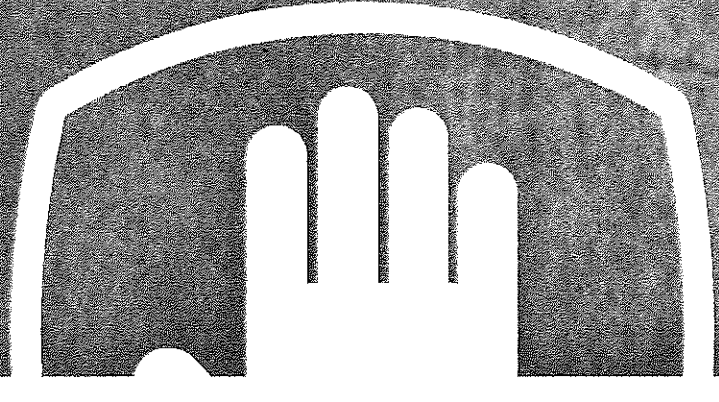


Publication 1075

Tax Information Security Guidelines For Federal, State and Local Agencies

Safeguards for Protecting Federal Tax Returns and Return Information





IRS Mission Statement

Provide America's taxpayers top-quality service by helping them understand and meet their tax responsibilities and enforce the law with integrity and fairness to all.

Office of Safeguards Mission Statement

The Mission of the Office of Safeguards is to promote taxpayer confidence in the integrity of the tax system by ensuring the confidentiality of IRS information provided to federal, state, and local agencies. Safeguards verifies compliance with IRC 6103(p)(4) safeguard requirements through the identification and mitigation of any risk of loss, breach, or misuse of Federal Tax Information held by external government agencies.

Changes for September 2016 Revision

This publication revises and supersedes Publication 1075 (October 2014) and is effective September 30, 2016. Feedback for Publication 1075 is highly encouraged. Please send any comments to SafeguardReports@irs.gov. Following are the highlighted changes:

1) Editorial changes have been made throughout this document to update website references and links, as well as to renumber sections and to clarify guidance

2) Table of Contents updated. Please find "tables" listed under respective sections rather than at the end of the *Table of Contents*

3) Section 1.3 – "Access Safeguards Resources Online" changed to "Access Safeguard Resources"

4) Section 1.3.1 – Added "Website Resources"

5) Section 1.3.2 – Added "Mailbox"

6) Section 1.4.1 – "Federal Tax Information (FTI)" – Added reference to include the Centers for Medicare and Medicaid and IRC 6103(p)(2)(B) Agreements

7) Section 2.7 – Created Section 2.7.1 "On-Site Review Process" and 2.7.2 "Computer Security Review" to elaborate on the Safeguard Review Process

8) Section 2.9 – Added "Voluntary Termination of Receipt of FTI"

9) Section 2.9.1 – Added "Archiving FTI"

10) Section 2.9.2 – Added "Termination Documentation"

11) Section 3.2 – Updated "Electronic and Non-Electronic Logs" requirements and deleted duplicate log sample

12) Section 4.4 – Deleted duplicate paragraph for FTI in transit

13) Section 4.6 – "Offsite Storage Requirements" – Updated to show agency-type specific requirements

14) Section 4.7.1 – "Equipment" - Added exception for use of VDI and updated to include personally-owned devices

15) Section 5.1.1 – Added "Background Investigation Minimum Requirements"

16) Section 5.4.2 – Added guidance for use of Consolidated Data Centers

17) Section 5.4.2.1 – Added all contractor and shared sites to be included in Safeguard reviews

18) Section 5.4.3 – Added "Review Availability of Contractor Facilities"

19) Section 6.3 – Updated "Disclosure Awareness Training"

20) Section 7.2.1 – Renamed from "SSR Update Submission and Instructions" to "Initial SSR Submission Instructions-New Agency Responsibility"

21) Section 7.2.2 – Renamed from "SSR Update Submission Dates" to "Instructions for Agencies Requesting New FTI Data Streams" and includes the mandatory requirement for providing evidence of security testing and ATO before the system is operational

22) Section 7.2.3 – Renamed from "SSR Update Submission Instruction" to "Annual SSR Update Submission Instructions"

23) Section 7.2.2 – Renumbered "SSR Update Submission Dates" to Section 7.2.4

24) Section 7.4 – Added table for 45 Day Notification Reporting Requirements

25) Section 7.4.4 – Removed requirement to notify Safeguards prior to implementing a data warehouse

26) Section 7.4.5 – "Non-Agency Owned Systems" updated

27) Section 7.4.8 – Removed requirement to notify Safeguards prior to locating FTI in a virtual environment

28) Section 8.3 – "Destruction and Disposal" – Updated section to include new requirements regarding shredding and updated regarding whenever physical media leaves the physical or systemic control of the agency

29) Section 9.2 – Updated Table 8 for Automated Compliance and Vulnerability Assessment Testing to include profiles used with these tools can be downloaded from the Office of Safeguards' website

30) Section 9.3.1.7(b) – "Unsuccessful Log On Attempts (AC-7) - Updated automatic lock period to 15 minutes

31) Section 9.3.1.10 – "Session Termination (AC-12)" – Updated to show information system must automatically terminate a user session after 30 minutes of inactivity

32) Section 9.3.1.15 – "Use of External Information Systems (AC-20) – Updated to reflect personally-owned device requirements.

33) Section 9.3.2.3 – Added definition of personnel with security roles and responsibilities and added distinction from Section 6.3, Disclosure Awareness and 9.3.2.2, Security Awareness Training (AT-2)

34) Section 9.3.3.8(c) – "Time Stamps (AU-8)" – Updated regarding synchronization of internal information system clocks

35) Section 9.3.3.10 – "Audit Record Retention (AU-11)" – Added clarification on retention

36) Section 9.3.7.3 – "Device Identification and Authentication (IA-3)" – Added clarification

37) Section 9.3.8.3 – Updated Incident Response Testing to remove the word, "systems" as testing requirements apply to both paper and electronic FTI

38) Section 9.3.11.7 – Updated to reflect 5 year retention period requirement

39) Section 9.3.12.3(c) – Added to Rules of Behavior (PL-4), "review and update at a minimum annually"

40) Section 9.3.15.6 – "Security Engineering Principles" (SA-8) - Added clarification of what security engineering principles include

41) Section 9.4.8 – "Mobile Devices " - Updated to reflect current restrictions with BYOD

42) Section 9.4.9 – Updated Multi-Functional Devices to include High-Volume Printers

43) Section 9.4.11(g) – "Storage Area Networks" - changed audit review to weekly

44) Section 9.4.13 – "Virtual Desktop Infrastructure" – updated to include agency and non-agency owned requirements

45) Section 9.4.14 – "Virtual Environment" Removed requirement to notify Safeguards prior to locating FTI in a virtual environment

46) Section 9.4.17 – "Web Browser" – Removed requirement a) Private browsing must be enabled on the Web browser and configured to delete temporary files and cookies upon exiting the session

47) Section 10.0 – Updated Reporting Improper Inspections or Disclosures including Table 9: TIGTA Field Division Contact Information

48) Section 12.1 – Updated guidelines for agencies authorized to produce statistical reports in "Return Information in Statistical Reports – General"

49) Exhibit 7 – "Safeguarding Contract Language" - added additional requirements in Section I Performance and Section III Inspection

50) Exhibit 10 – Changed to reflect updated SSR Requirements

51) Exhibit 12 – *Glossary and Terms* is no longer labeled, but is still found in the back of the publication

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1.0 Introduction

1.1 General

To foster a tax system based on voluntary compliance, the public must maintain a high degree of confidence that the personal and financial information furnished to the Internal Revenue Service (IRS) is protected against unauthorized use, inspection, or disclosure.

The IRS must administer the disclosure provisions of the Internal Revenue Code (IRC) according to the spirit and intent of these laws, ever mindful of the public trust. The IRC defines and protects the confidential relationship between the taxpayer and the IRS and makes it a crime to violate this confidence. IRC 7213 prescribes criminal penalties, making it a felony offense for federal and state employees and others who illegally disclose federal tax returns and return information. Additionally, IRC 7213A makes the unauthorized inspection of Federal Tax Information (FTI) a misdemeanor, punishable by fines, imprisonment, or both. And finally, IRC 7431 prescribes civil damages for unauthorized inspection or disclosure, and upon criminal indictment or information under IRC 7213 or 7213(A), notification to the taxpayer that an unauthorized inspection or disclosure has occurred.

The concerns of citizens and Congress regarding individual rights to privacy require the IRS to continuously assess disclosure practices and the safeguards used to protect the confidential information entrusted. While the sanctions of the IRC are designed to protect the privacy of taxpayers, the IRS recognizes the importance of cooperating to the fullest extent permitted by law with other federal, state, and local authorities in their administration and enforcement of laws.

Those agencies or agents that legally receive FTI directly from either the IRS or from secondary sources (e.g., Social Security Administration [SSA]), pursuant to IRC 6103 or by an IRS-approved exchange agreement must have adequate programs in place to protect the data received. Furthermore, as agencies procure contractor services, it becomes equally important that contractors protect that information from unauthorized use, access, and disclosure.

Safeguards reports and related communications in possession of federal, state and local agencies are considered the property of the IRS and may not be disclosed to anyone outside the agency and are subject to disclosure restrictions under federal law and IRS rules and regulations. This includes, but is not limited to, Preliminary Findings Report (PFR); Safeguard Review Report (SRR); Safeguard Security Report (SSR) and Corrective Action Plan (CAP).

Release of any IRS Safeguards document requires the express permission of the Internal Revenue Service. Requests received through Sunshine and/or Information Sharing/Open Records provisions must be referred to the federal Freedom of Information Act (FOIA) statute for processing. State and local agencies receiving such requests should refer the requestor to the instructions to file a FOIA request with the IRS. Federal agencies should follow established procedures which require consultation before citing FOIA exemptions on IRS agency records, or directly refer the FOIA request to IRS for processing.

The intent of this requirement is to address any public request for sensitive information and prevent disclosure of data that would put FTI at risk. The agency may still distribute these reports internally and within other state agencies, auditors or oversight panels as required to either take corrective actions or report status without further IRS approval.

Additional guidance may be found at, https://www.irs.gov/uac/IRS-Freedom-of-Information, and questions should be referred to the Safeguards mailbox at Safeguardreports@irs.gov.

1.2 Overview of Publication 1075

This publication provides guidance to ensure the policies, practices, controls, and safeguards employed by recipient agencies, agents, or contractors adequately protect the confidentiality of FTI.

Enterprise security policies address the purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance to implement all applicable security controls. This document contains the managerial, operational, and technical security controls that must be implemented as a condition of receipt of FTI.

The guidelines outlined herein apply to all FTI, no matter the amount or the media in which it is recorded. FTI must be afforded the same levels of protection regardless of it residing on paper or electronic form. Systematic, procedural, or manual security policies must minimize circumvention.

A mutual interest exists in our responsibility to ensure that FTI is disclosed only to persons authorized and used only as authorized by statute or regulation. The IRS is confident of your diligence in this area and believes that this publication will be a helpful resource.

Conforming to these guidelines meets the safeguard requirements of IRC 6103(p)(4) and makes our joint efforts beneficial.

Requirements throughout this document apply to all organizational segments of an agency receiving FTI. It is the agency's responsibility to ensure all functions within the agency, including consolidated data centers and contractors (where allowed by federal statute) with access to FTI, understand and implement the requirements in this publication.

This publication provides the preliminary steps to consider before submitting a request to receive FTI, requirements for proper protection, expectations from the IRS, and considerations that may be helpful in establishing a program to protect FTI. The exhibits in this publication are provided for additional guidance.

The Office of Safeguards is responsible for all interpretations of safeguarding requirements. Publication 1075 requirements may be supplemented or modified between editions of Publication 1075 via guidance issued by the Office of Safeguards and posted on the Office of Safeguards website.

1.3 Access Safeguards Resources

The Office of Safeguards maintains Publication 1075, templates, guidance, and frequently asked questions online at http://www.irs.gov/uac/Safeguards-Program. Agencies are highly encouraged to regularly visit the website for updates.

1.3.1 Website Resources

The website contains many resources to assist agencies with meeting Publication1075 requirements. Examples of the website's features include:

- Safeguard alerts and technical assistance memorandums
- Recommendations on how to comply with Publication 1075 requirements
- Reporting requirement templates (e.g., Safeguard Security Report [SSR]) and guidance
- Instructions for reporting unauthorized accesses, disclosures, or data breaches
- Internal inspections report templates and instructions
- IRS disclosure awareness videos and resources
- Disclosure and physical security requirements documented in the Safeguard Disclosure Security Evaluation Matrix (SDSEM) template
- Computer security requirements documented in Safeguard Computer Security Evaluation Matrix (SCSEM) templates organized by technology or topic

1.3.2 Mailbox

The Safeguards Mailbox is a repository for information and communication to the Office of Safeguards relative to Safeguarding requirements and Publication 1075. The Mailbox is located at SafeguardReports@irs.gov. Below are items that are appropriate for submission to the Mailbox:

- Safeguards Reports and Extension Requests
- 45 Day Notifications
- Publication 1075 Technical Inquiries
- Re-Disclosure Agreements

1.4 Key Definitions

This section establishes a baseline of key terms used throughout this publication. For additional definitions of terms and phrases, refer to *Glossary and Key Terms*.

1.4.1 Federal Tax Information (FTI)

Safeguarding FTI is *critically important* to continuously protect taxpayer confidentiality as required by IRC 6103. FTI is a term of art and consists of federal tax returns and return information (and information derived from it) that is in the agency's possession or control which is covered by the confidentiality protections of the IRC and subject to the IRC 6103(p)(4) safeguarding requirements including IRS oversight. FTI is categorized as Sensitive But Unclassified information and may contain personally identifiable information (PII).

FTI includes return or return information received directly from the IRS or obtained through an authorized secondary source, such as Social Security Administration (SSA), Federal Office of Child Support Enforcement (OCSE), Bureau of the Fiscal Service (BFS),or Centers for Medicare and Medicaid Services (CMS), or another entity acting on behalf of the IRS pursuant to an IRC 6103(p)(2)(B) Agreement.

FTI includes any information created by the recipient that is derived from federal return or return information received from the IRS or obtained through a secondary source.

> FTI may not be masked to change the character of information to circumvent IRC 6103 confidentiality requirements.

1.4.2 Return and Return Information

IRC 6103(b)(1) defines a return as any tax or information return, estimated tax declaration, or refund claim (including amendments, supplements, supporting schedules, attachments, or lists) required by or permitted under the IRC and filed with the IRS by, on behalf of, or with respect to any person or entity. Examples of returns include forms filed on paper or electronically, such as Forms 1040, 941, 1120, and other informational forms, such as 1099 or W-2*. Forms include supporting schedules, attachments, or lists that are supplemental to or part of such a return.

* Refer to IRS.gov for a complete catalog of IRS forms.

Return information, in general, is any information collected or generated by the IRS with regard to any person's liability or possible liability under the IRC. IRC 6103(b)(2)(A) defines return information very broadly. It includes but is not limited to:

- Information that IRS obtained from any source or developed through any means that relates to the potential liability of any person under the IRC for any tax, penalty, interest, fine, forfeiture, or other imposition or offense
- Information extracted from a return, including names of dependents or the location of business
- The taxpayer's name, address, and identification number
- Information collected by the IRS about any person's tax affairs, even if identifiers, such as name, address, and identification number are deleted
- Status of whether a return was filed, under examination, or subject to other investigation or processing, including collection activities
- Information contained on transcripts of accounts

1.4.3 Personally Identifiable Information

FTI may include Personally Identifiable Information (PII). FTI may include the following PII elements:

- Name of a person with respect to whom a return is filed
- Taxpayer mailing address
- Taxpayer identification number
- E-mail addresses
- Telephone numbers
- Social Security Numbers
- Bank account numbers
- Date and place of birth
- Mother's maiden name
- Biometric data (e.g., height, weight, eye color, fingerprints)
- Any combination of the above

1.4.4 Information Received From Taxpayers or Third Parties

Copies of tax returns or return information provided to the agency directly by the taxpayer or his/her representative (e.g. W-2's, Form 1040, etc.) or obtained from public information files (e.g. federal tax lien on file with the county clerk, Offers in Compromise available for public inspection; court records, etc.) is not protected FTI that is subject to the safeguarding requirements of IRC 6103(p)(4). If the agency independently verifies FTI provided by the IRS or a secondary source *with the* taxpayer or a third party source, the verified information is not FTI as long as the IRS source information is replaced or overwritten with the newly provided information.

1.4.5 Unauthorized Access

Unauthorized access occurs when an entity or individual knowingly or due to gross negligence receives or has access to FTI without authority, as defined in IRC 6103.

> *Access to FTI is permitted only to individuals who require the FTI to perform their official duties and as authorized under the IRC. FTI must never be indiscriminately disseminated, even within the recipient agency, body, or commission. Agencies must evaluate the need for FTI before the data is requested or disseminated.*

1.4.6 Unauthorized Disclosure

An unauthorized disclosure occurs when an entity or individual with authorization to receive FTI knowingly or with gross negligence discloses FTI to another entity or individual who does not have authority, as defined in IRC 6103 and IRC 6104(c).

> *An unauthorized disclosure has occurred when FTI is knowingly or due to gross negligence provided to an individual who does not have the statutory right to have access to it under the IRC. Even without willfulness or gross negligence FTI is not to be disclosed to entities or individuals who are not authorized by IRC 6103 to have it.*

Subject to the disclosure provisions of IRC 6103, agencies may need to disclose FTI to outside entities (e.g., for prosecution, appeals, or collection processes) as long as the receiving entity has a need-to-know and the individual recipient has authority under IRC 6103 to receive it. If the individual does not have a need-to-know, this constitutes an unauthorized disclosure.

1.4.7 Need to Know

Under need-to-know restrictions, even if an entity or an individual has the authority to access FTI, one would not be given access to such information if it were not necessary to perform his or her official duties with regard to the purpose for which IRC 6103 provides the FTI is to be used.

> *Limiting access to individuals on a need-to-know basis reduces opportunities to "browse" or improperly view FTI. Restricting access to designated personnel minimizes improper access or disclosure. When FTI must be provided to clerical, computer operators, or others, these should only be provided the FTI that is essential to accomplish their official duties.*

2.0 Federal Tax Information and Reviews

2.1 General

IRC 6103 is a confidentiality statute and generally prohibits the disclosure of FTI (see *Exhibit 1, USC Title 26, IRC 6103,* for general rules and definitions). Exceptions to the general rule authorize disclosure of FTI to certain federal, state, and local agencies. Generally, these disclosures are made by the IRS in response to written requests signed by the head of the requesting agency or an authorized delegate. FTI so disclosed may be used by the receiving agency solely for the purpose described in the exception authorizing the disclosure. The statutes providing authorization to disclose FTI contain specific conditions that may require different procedures in maintaining and using the information. These conditions are outlined under specific sections in this publication.

As a condition of receiving FTI, the receiving agency must show, to the satisfaction of the IRS, the ability to protect the confidentiality of that information. Certain safeguards must be implemented to prevent unauthorized access and use. Besides written requests, the IRS may require formal agreements that specify, among other things, how the information will be protected. An agency must ensure its safeguards will be ready for immediate implementation upon receipt of FTI. Copies of the initial and subsequent requests for data and any formal agreement must be retained by the agency a minimum of five years as a part of its recordkeeping system.

Agencies must always maintain the latest SSR on file. The initial request for FTI must be followed by submitting an SSR to the IRS at least 45 days before the scheduled or requested receipt of FTI (see *Section 7.0, Reporting Requirements—6103(p)(4)(E)*). The SSR must include processing and safeguard procedures for all FTI received and distinguish between agency programs and functional organizations using FTI. Multiple organizations, divisions or programs within a federal agency using FTI should be consolidated into a single report for that agency at the direction of the Office of Safeguards.

Agencies entering into an agreement to disclose FTI to agents or contractors requires advance notice to the Office of Safeguards (see *Section 7.4, 45 Day Notification Reporting Requirements* and *Section 11.3, Disclosing FTI to Contractors.*)

> *Agencies must exercise care in outlining their safeguard program. Reports that lack clarity or sufficient information will be returned to the submitting agency for additional documentation.*

2.2 Authorized Use of FTI

Any agency that receives FTI for an authorized use may not use that information in any manner or for any purpose not consistent with that authorized use. If an agency needs FTI for a different authorized use under a different provision of IRC 6103, a separate request must be sent to the Office of Disclosure.

> *An unauthorized secondary use of FTI is specifically prohibited and may result in discontinuation of disclosures to the agency and imposition of civil or criminal penalties on the responsible officials.*

The Office of Safeguards conducts "need and use" verification reviews as part of the safeguard review and always considers whether the agency's use is in conformance with the governing provisions allowing the disclosure of FTI. The agency must describe the purpose(s) for which FTI is collected, used, maintained, and shared.

2.3 Secure Data Transfer

The IRS established a Secure Data Transfer (SDT) program to provide encrypted electronic transmission of FTI between the IRS and trading partners. For support with establishing an IRS SDT account, please submit an SDT Customer Support Request. Complete information on establishing an SDT account is available in the SDT Handbook. The SDT Handbook is available from a local IRS governmental liaison or a request to the Safeguards mailbox.

In addition to installing the SDT software, each agency must also have an IdenTrust Certificate installed. After the initial installation, agencies are required to renew the IdenTrust Certificate every two years. Refer to the ACES (Access Certificates for Electronic Services) IdenTrust website for additional information.

Only the following types of documents will be accepted via SDT:

- Control File (.txt)
- Adobe (.pdf)
- Word Document (.doc or .docx)
- Excel Document (.xls or.xlsx)
- Zipped File (.zip)

Contact the SafeguardReports@irs.gov mailbox for specific details on how to submit information via SDT.

2.4 State Tax Agency Limitations

FTI may be obtained per IRC 6103(d) by state tax agencies only to the extent the information is needed for, and is reasonably expected to be used for, state tax administration. An agency's records must include some account of the result of its use of FTI (e.g., disposition of closed cases and summary of revenues generated) or

include reasons why the information was not used. If any agency continually receives FTI that it is unable to use for any reason, it must contact the IRS official liaison and discuss the need to stop the receipt of this FTI.

State tax agencies using FTI to conduct statistical analysis, tax modeling, or revenue projections must notify the IRS by submitting a signed *Need and Use Justification for Use of Federal Tax Information* form and following the established guidelines.

Annually, the agency must provide updated information in the SSR regarding its modeling activities that include FTI. In the SSR, the agency must describe:

- Any use of FTI that is in addition to what was described in the original Need and Use Justification Form
- Any new, previously unreported internal tax administration compilations that include FTI
- Changes to the listing of authorized employees (Attachment B to the Need and Use Justification Form)

If the agency intends to use a contractor for conducting statistical analysis, tax modeling, or revenue projections, it must submit a 45-day notification (see *Section 11.3, Disclosing FTI to Contractors*) prior to contractor access to the FTI. The agency's SSR must detail the use of FTI for this purpose. In addition, the agency must submit a separate statement detailing the methodology used and data to be used by the contractor. The Office of Safeguards and Statistics of Income functions will review the information provided to confirm that appropriate safeguarding protocols are in place and that the modeling methodology to be used to remove taxpayer identifying information is appropriate.

The agency must:

a) Identify the minimum FTI elements (e.g., name, address, date of birth) that are relevant and necessary to accomplish the legally authorized purpose of collection
b) Limit the collection and retention of FTI to the minimum elements identified for the purposes described in the notice and for which the individual has provided consent
c) Conduct an initial evaluation of FTI holdings, as well as:

    i. Establish and follow a schedule for regularly reviewing those holdings to ensure that only FTI identified in the notice is collected and retained; and
    ii. Certify that the FTI continues to be necessary to accomplish the legally authorized purpose.

2.5 Coordinating Safeguards within an Agency

Because of the diverse purposes that authorized disclosures may be made to an agency and the division of responsibilities among different components of an agency, FTI may be received and used by several quasi-independent units within the agency's organizational structure. Where there is such a dispersal of FTI, the agency must centralize safeguarding responsibilities to the greatest extent practical and establish and maintain uniform safeguard standards consistent with IRS guidelines. The official(s) assigned these responsibilities must hold a position high enough in the agency's organizational structure to ensure compliance with the agency safeguard standards and procedures.

The selected official(s), or point(s) of contact (POC(s)) must also be responsible for ensuring that internal inspections are conducted, for submitting required safeguard reports to the IRS, for properly reporting any data breach incidents, and for any necessary liaison with the IRS.

2.6 Safeguard Reviews

A safeguard review is an on-site evaluation of the use of FTI and the measures employed by the receiving agency and its agents (where authorized) to protect the data.

This includes all FTI received whether from the IRS or a secondary source such as SSA, BFS or another agency (see *Section1.4.1, Federal Tax Information)*. Safeguard reviews are conducted to determine the adequacy of safeguards as opposed to evaluating an agency's programs. Several factors will be considered when determining the need for and the frequency of reviews. Reviews are conducted by the IRS Office of Safeguards within the Office of Privacy, Governmental Liaison and Disclosure.

2.7 Conducting the Review

The IRS initiates the review by communication with an agency point of contact (POC). The preliminary discussion will be followed by a formal engagement letter to the agency head, which provides official notification of the planned safeguard review.

This engagement letter outlines what the review will encompass. Additional requests for specific information will be provided to the agency POC. These requests may include a list of records to be reviewed (e.g., training manuals, flowcharts, awareness program documentation, and organizational charts relating to the processing of FTI), the scope and purpose of the review, a list of the specific areas to be reviewed, and agency personnel to be interviewed.

Reviews cover the requirements of IRC 6103(p)(4) which can be found in:

- Section 3.0, *Recordkeeping Requirement*
- Section 4.0, *Secure Storage—IRC 6103(p)(4)(B)*
- Section 5.0, *Restricting Access—IRC 6103(p)(4)(C)*
- Section 6.0, *Other Safeguards—IRC 6103(p)(4)(D)*
- Section 7.0, *Reporting Requirements—6103(p)(4)(E)*
- Section 8.0, *Disposing of FTI—IRC 6103(p)(4)(F)*
- Section 9.0, *Computer System Security*

2.7.1 On-Site Review Process

The on-site review officially begins at the opening conference where procedures and parameters will be communicated. Observing actual operations is a required step in the review process. Sites to be reviewed will be based on the flow of the FTI through the agency, which may include field offices, consolidated data centers, off-site storage facilities, disaster recovery sites, and contractor sites both within and outside the state. Agency files may be spot-checked to determine if they contain FTI. The actual review is followed by a closing conference and issuance of a Preliminary Findings Report (PFR) where the agency is informed of findings identified during the review. A Safeguard Review Report (SRR) and Corrective Action Plan (CAP) will be issued within 45 days of the closing conference to document the on-site review findings. Requests for corrections to the SRR must be emailed to the SafeguardReports@irs.gov mailbox. The Office of Safeguards will respond with acknowledgement and determination.

Table 1 – Safeguard Review Cycle

Action	Notice	Time Frame	Note
Preliminary Discussion	Primary Point of Contact from last review	*120 days ahead of review	*Timeframe is approximate for the preliminary discussion and engagement letter. This may occur closer to the actual review date.
Engagement Letter	Submitted to agency head	*120 to 30 days in advance of review	
Opening Conference	At HQ with agency head, department heads, and IT staff	Day 1 of review 9:00 a.m.	Opening conference will summarize the review.
On-Site Review	Visit to various departments where FTI is located	2 to 3 days	Additional days may be needed as required.

Action	Notice	Time Frame	Note
Closing Conference with Preliminary Findings Report	At HQ with agency head and department heads	Last day of review; will leave PFR for agency	Agency can start working on the findings but must wait until the CAP cycle to report corrective actions. This may be a soft (preliminary) closing if there are additional sites or devices to review.
Final Report	Submitted to agency head	Prepared within 45 days after closing conference	Agency responds with CAP.
CAP Submissions	Report on any corrective action still open from the final report	Submitted semi-annually	Responses must include a status of finding and an actual numerical date of when the planned or actual correction action is taken to address the finding. Subsequent CAP responses are required for all open findings. Evidentiary documentation is required for critical and significant findings.
SSR Submission	Initially report procedures established to protect FTI received from the IRS; reports yearly actions taken to protect FTI and any updates in procedures	Submitted annually	Yearly update to the document will be accompanied by a certification of accuracy by agency head.

2.7.2 Computer Security Review Process

The Office of Safeguards will assess agency compliance with the computer security requirements identified in this publication as part of the on-site review process. Requirements are assessed as they relate to NIST SP 800-53 security controls as outlined in this publication. To ensure a standardized computer security review process, the following techniques will be used to evaluate agency policies, procedures, and IT equipment that receive, process, store, or transmit FTI:

Table 2 – IT Testing Techniques

Automated Compliance and Vulnerability Assessment Testing	Computer Security Reviewers will use a combination of compliance and vulnerability assessment software tools to validate the adequate protection of FTI on agency and contractor owned equipment. These automated tools will be launched from either IRS-issued flash drives or laptop computers. Profiles used with these tools can be downloaded from the Office of Safeguards' website.
SCSEM	Documents and tests hardening requirements for specific technologies used to receive, process, store, or transmit FTI. SCSEMs can and should be downloaded from the Office of Safeguards' website.
MOT	Documents will be requested in advance and expected to be provided prior to the review process, no later than the opening conference.

Agencies should be prepared for the Computer Security Reviewers to use the preceding resources as part of the on-site review. As necessary, agency management approval must be obtained prior to the on-site review, if agency policies and procedure contradict any of these methods.

2.8 Corrective Action Plan

The CAP must be updated and submitted semi-annually on the latest version to the Office of Safeguards (see *Section 7.3, Corrective Action Plan*) until all review findings are accepted and closed by the Office of Safeguards.

The CAP must include a brief explanation of actions already taken or planned to resolve the finding. For all outstanding findings, the agency must detail planned actions and associated milestones for resolution.

All findings must be addressed in a timely fashion. The Office of Safeguards will identify deadlines for resolution based upon the risk associated with each finding. Outstanding issues must be resolved and addressed in the next reporting cycle of the CAP.

2.9 Voluntary Termination of Receipt of FTI

2.9.1 Termination Documentation

When an agency no longer requires FTI, notify Safeguards at SafeguardReports@irs.gov by providing the following:

1. Copies of notifications to all agencies from which FTI is received, that FTI will no longer be requested, and
2. Letter from the Head of Agency certifying that all residual FTI has been destroyed. (See Section 8.0 Disposal of FTI – IRC 6103(p)(4)(F))

Once documentation is reviewed, the Office of Safeguards will send an acknowledgement of the agency's termination, instructions on Safeguard reporting and on-site review obligations. Instructions for reinstatement will be included in the acknowledgement letter.

2.9.2 Archiving FTI Procedure (for agencies terminating receipt of FTI but required by statute to retain FTI for designated periods)

If residual FTI is required to be retained by statute for a designated period (e.g., 5 or 10 years), then agencies must:

- Insure that a currently authorized agency and/or contractor retain FTI in accordance with Publication 1075 security standards
- Provide copies of notifications as shown in 2.9.1 (1. copies of notifications requesting termination of FTI) above
- Submit an annual SSR each year during the retention period
- Continue to be subject to periodic Safeguard Reviews
- Letter from Head of Agency certifying that all residual FTI has been destroyed when the retention period has ended

3.0 Recordkeeping Requirement – IRC 6103 (p)(4)(A)

3.1 General

Federal, state, and local agencies, bodies, commissions, and agents authorized under IRC 6103 to receive FTI are required by IRC 6103(p)(4)(A) to establish a permanent system of standardized records of requests made by or to them for disclosure of FTI. For additional guidance, see *Exhibit 2, USC Title 26, IRC 6103(p)(4)*.

This recordkeeping must include internal requests among agency employees as well as requests outside of the agency. These records are required to track the movement of FTI. The records are to be maintained for five years or the agency's applicable records control schedule must be followed, whichever is longer. The Safeguards website contains guidance, job aids, helpful tools, and frequently asked questions to assist agencies in meeting safeguard requirements; see http://www.irs.gov/uac/Safeguards-Program.

The agency must establish, maintain, and update at least annually, an inventory that contains a listing of all programs and information systems identified as collecting, using, maintaining, or sharing FTI. Provide each update of the FTI inventory to the Chief Information Officer or information security official at least annually to support the establishment of information security requirements for all new or modified information systems containing FTI.

Records must be maintained in accordance with IRS audit log retention requirements for electronic and non-electronic files. For additional guidance, see *Exhibit 9, Record Retention Schedules*.

3.2 Electronic and Non-Electronic FTI Logs

The agency must establish a tracking system to identify and track the location of electronic and non-electronic FTI from receipt until it is destroyed. The FTI log may include tracking elements, such as:

- Taxpayer Name or other identifier*
- Tax year(s)
- Type of information (e.g., revenue agent reports, Form 1040, work papers)
- The reason for the request
- Date requested
- Date received
- Exact location of the FTI
- Who has had access to the data
- If disposed of, the date and method of disposition

*To the extent possible, do not include FTI in the log. If FTI is used, the log must be secured in accordance with all other safeguards requirements.

If the authority to make further disclosures is present (e.g., agents/contractors), information disclosed outside the agency must be recorded on a separate list or log. The log must reflect to whom the disclosure was made, what was disclosed, and why and when it was disclosed. Agencies transmitting FTI from one mainframe computer to another, as in the case of the SSA sending FTI to state human services agencies, need only identify the bulk records transmitted. This identification will contain the approximate number of taxpayer records, the date of the transmissions, the best possible description of the records, and the name of the individual making/receiving the transmission.

Figure 1 – Sample FTI Log

Non-Electronic Recordkeeping Log									
Date Requested	Date Received	Taxpayer Name	Tax Year(s)	Type of Information	Reason for Request	Exact Location	Who has access?	Disposition Date	Disposition Method

3.3 Converted Media

Conversion of FTI from paper to electronic media (scanning) or from electronic media to paper (print screens or printed reports) also requires tracking from creation to destruction of the converted FTI. All converted FTI must be tracked on logs containing the fields detailed in Section 3.2, depending upon the current form of the FTI, electronic or non-electronic.

3.4 Recordkeeping of Disclosures to State Auditors

When disclosures are made by a state tax agency to state auditors, recordkeeping requirements pertain only in instances where the auditors use FTI for further scrutiny and inclusion in their work papers. In instances where auditors read large volumes of records containing FTI, whether in paper or electronic format, the state tax agency need only identify bulk records examined. This identification will contain the approximate number of taxpayer records, the date of inspection, a description of the records, and the name of the individual(s) making the inspection. Recordkeeping log samples are provided in Section 3.2.

Disclosure of FTI to state auditors by child support enforcement and human services agencies is not authorized by statute. FTI in case files must be removed prior to access by the auditors

4.0 Secure Storage—IRC 6103(p)(4)(B)

4.1 General

Security may be provided for a document, an item, or an area in a number of ways. These include but are not limited to locked containers of various types, vaults, locked rooms, locked rooms that have reinforced perimeters, locked buildings, guards, electronic security systems, fences, identification systems, and control measures.

How the required security is provided depends on the facility, the function of the activity, how the activity is organized, and what equipment is available. Proper planning and organization will enhance the security while balancing the costs.

The IRS has categorized federal tax and privacy information as moderate risk. The minimum protection standards (MPS) must be used as an aid in determining the method of safeguarding FTI. These controls are intended to protect FTI in paper and electronic form.

4.2 Minimum Protection Standards

Minimum protection standards (MPS) establish a uniform method of physically protecting data and systems as well as non-electronic forms of FTI. This method contains minimum standards that will be applied on a case-by-case basis. Because local factors may require additional security measures, management must analyze local circumstances to determine location, container, and other physical security needs at individual facilities. MPS have been designed to provide management with a basic framework of minimum security requirements.

The objective of these standards is to prevent unauthorized access to FTI. MPS thus requires two barriers. Example barriers under the concept of MPS are outlined in the following table. Each topic represents one barrier and should be used as a starting point to identify two barriers of MPS to protect FTI.

Table 3 – Minimum Protection Standards

Secured Perimeter	The perimeter is enclosed by slab-to-slab walls constructed of durable materials and supplemented by periodic inspection. Any lesser-type partition must be supplemented by electronic intrusion detection and fire detection systems. All doors entering the space must be locked in accordance with Locking Systems for Secured Areas. In the case of a fence/gate, the fence must have intrusion detection devices or be continually guarded, and the gate must be either guarded or locked with intrusion alarms.
Security Room	A security room is a room that has been constructed to resist forced entry. The entire room must be enclosed by slab-to-slab walls constructed of approved materials (e.g., masonry brick, concrete) and supplemented by periodic inspection, and entrance must be limited to specifically authorized personnel. Door hinge pins must be non-removable or installed on the inside of the room.
Badged Employee	During business hours, if authorized personnel serve as the second barrier between FTI and unauthorized individuals, the authorized personnel must wear picture identification badges or credentials. The badge must be clearly displayed and worn above the waist.
Security Container	A security container is a storage device (e.g., turtle case, safe/vault) with a resistance to forced penetration, with a security lock with controlled access to keys or combinations.

The MPS or "two barrier" rule applies to FTI, beginning at the FTI itself and extending outward to individuals without a need-to-know. MPS provides the capability to deter, delay, or detect surreptitious entry. Protected information must be containerized in areas where other than authorized employees may have access after-hours.

Using a common situation as an example, often an agency desires or requires that security personnel or custodial service workers or landlords for non-government-owned facilities have access to locked buildings and rooms. This may be permitted as long as there is a second barrier to prevent access to FTI. A security guard, custodial services worker, or landlord may have access to a locked building or a locked room if FTI is in a locked security container. If FTI is in a locked room but not in a locked security container, the guard, janitor, or landlord may have a key to the building but not the room.

Additional controls have been integrated into this document that map to National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 Revision 4. These are identified in *Section 9.3, NIST SP 800-53 Control Requirements.* Per NIST guidelines, policies and procedures must be developed, documented, and disseminated, as necessary, to facilitate implementing physical and environmental protection controls.

For additional guidance, see *Section 9.3.11.3, Physical Access Control (PE-3)*.

4.3 Restricted Area Access

Care must be taken to deny unauthorized access to areas containing FTI during duty and non-duty hours. This can be accomplished by creating restricted areas, security rooms, or locked rooms. Additionally, FTI in any form (computer printout, photocopies, tapes, notes) must be protected during non-duty hours. This can be done through a combination of methods, including secured or locked perimeter, secured area, or containerization.

A restricted area is an area where entry is limited to authorized personnel (individuals assigned to the area). All restricted areas either must meet secured area criteria or provisions must be made to store FTI in appropriate containers during non-duty hours. Using restricted areas is an effective method for eliminating unnecessary traffic through critical areas, thereby reducing the opportunity for unauthorized access or disclosure or theft of FTI. All of the following procedures must be implemented to qualify as a restricted area.

Restricted areas will be prominently posted and separated from non-restricted areas by physical barriers that control access. The number of entrances must be kept to a minimum and must have controlled access (e.g., electronic access control, key access, door monitor) to prevent unauthorized entry. The main entrance must be controlled by locating the desk of a responsible employee at the entrance to ensure that only authorized personnel with an official need may enter.

A restricted area visitor log must be maintained at a designated entrance to the restricted area, and all visitors (persons not assigned to the area) entering the area shall be directed to the designated entrance.

The visitor access log must require the visitor to provide the following information:

- Name and organization of the visitor
- Signature of the visitor
- Form of identification
- Date of access
- Time of entry and departure
- Purpose of visit
- Name and organization of person visited

The visitor must sign, either electronically or physically, into the visitor access log. The security personnel must validate the person's identity by examining government-issued identification (e.g., state driver's license or passport) and recording in the access log the type of identification validated. The security personnel must compare the name and signature entered in the access log with the name and signature of the government- issued identification. When leaving the area, the security personnel or escort must enter the visitor's time of departure.

Each restricted area access log must be closed out at the end of each month and reviewed by management.

Figure 2 – Sample Visitor Access Log

Visitor Access Log							
Date	Name & Org. of Visitor	Form of Identification of Visitor	Purpose of Visit	Name & Organization of Person Visited	Time of Entry	Time of Departure	Signature of Visitor

For additional guidance on visitor access requirements, see *Section 9.3.11.7, Visitor Access Records (PE-8)*.

4.3.1 Use of Authorized Access List

To facilitate the entry of employees who have a frequent and continuing need to enter a restricted area, but who are not assigned to the area, an Authorized Access List (AAL) can be maintained so long as MPS are enforced *(see Section 4.2, Minimum Protection Standards)*.

Agency Employees: The AAL must contain the following:

- Name of individual
- Agency or department name
- Name and phone number of agency POC
- Address of agency POC
- Purpose for access

The AAL for agency employees must be updated at least annually or when employee access changes.

Vendors and Non-Agency Personnel: The AAL must contain the following information:

- Name of vendor/contractor/non-agency personnel
- Name and phone number of agency Point of Contact authorizing access
- Name and address of vendor POC
- Address of vendor/contractor
- Purpose and level of access

Vendors, contractors, and non-agency personnel AAL must be updated monthly.

If there is any doubt of the identity of the individual, the security monitor must verify the identity of the vendor/contractor individual against the AAL prior to allowing entry into the restricted area.

For additional guidance, see *Section 9.3.11.2, Physical Access Authorizations (PE-2)*. Also, see *Section 9.3.11.8, Delivery and Removal (PE-16)*, for guidance on controlling information system components entering and exiting the restricted area.

4.3.2 Controlling Access to Areas Containing FTI

Management or a designee shall maintain an authorized list of all personnel who have access to information system areas, where these systems contain FTI. This shall not apply to those areas within the facility officially designated as publicly accessible.

The agency shall issue appropriate authorization credentials, including badges, identification cards, or smart cards. In addition, a list shall be maintained that identifies those individuals who have authorized access to any systems where FTI is housed. Access authorizations and records maintained in electronic form are acceptable.

Each agency shall control physical access to the information system devices that display FTI information or where FTI is processed to prevent unauthorized individuals from observing the display output. For additional information, see *Section 9.3.11.5, Access Control for Output Devices (PE-5)*.

The agency or designee shall monitor physical access to the information system where FTI is stored to detect and respond to physical security incidents. For additional information, see *Section 9.3.11.6, Monitoring Physical Access (PE-6)*.

For all areas that process FTI, the agency shall position information system components within the facility to minimize potential damage from physical and environmental hazards and to minimize the opportunity for unauthorized access. For additional guidance, see *Section 9.3.11.10, Location of Information System Components (PE-18)*.

Whenever cleaning and maintenance personnel are working in restricted areas containing FTI, the cleaning and maintenance activities must be performed in the presence of an authorized employee.

Allowing an individual to "piggyback" or "tailgate" into restricted locations must be prohibited and documented in agency policy. The agency must ensure that all individuals entering an area containing FTI do not bypass access controls or allow unauthorized entry of other individuals. Unauthorized access must be challenged by authorized individuals (e.g., those with access to FTI). Security personnel must be notified of piggyback/tailgate attempts.

4.3.3 Control and Safeguarding Keys and Combinations

All containers, rooms, buildings, and facilities containing FTI must be locked when not in actual use.

Access to a locked area, room, or container can be controlled only if the key or combination is controlled. Compromising a combination or losing a key negates the security provided by that lock. Combinations to locks must be changed annually or when an employee who knows the combination retires, terminates employment or transfers to another position.

Combinations must be given only to those who have a need to have access to the area, room, or container and must never be written on a sticky-note, calendar pad, or any other item (even though it is carried on one's person or hidden from view). An envelope containing the combination must be secured in a container with the same or a higher security classification as the highest classification of the material authorized for storage in the container or area the lock secures.

Keys must be issued only to individuals having a need to access an area, room, or container. Inventory records must be maintained on keys and must account for the total keys available and keys issued. The inventory must account for master keys and key duplicates. A annual reconciliation must be done on all key records. The number of keys or persons with knowledge of the combination to a secured area will be kept to a minimum. Keys and combinations will be given only to those individuals who have a frequent need to access the area.

4.3.4 Locking Systems for Secured Areas

The number of keys or persons with knowledge of the combination to a secured area will be kept to a minimum. Keys and combinations will be given only to those individuals who have a frequent need to access the area.

Access control systems (e.g., badge readers, smart cards, and biometrics) that provide the capability to audit access control attempts must maintain audit records with successful and failed access attempts to secure areas containing FTI or systems that process FTI. Agency personnel must review access control logs on a monthly basis. The access control log must contain the following elements:

- Owner of the access control device requesting access
- Success/failure of the request
- Date and time of the request

4.4 FTI in Transit

Handling FTI must be such that the FTI does not become misplaced or available to unauthorized personnel.

Any time FTI is transported from one location to another, care must be taken to provide appropriate safeguards. When FTI is hand-carried by an individual in connection with a trip or in the course of daily activities, it must be kept with that individual and protected from unauthorized disclosures.

All shipments of paper or electronic FTI (including compact disk [CD], digital video disk [DVD], thumb drives, hard drives, tapes, and microfilm) must be documented on a transmittal form and monitored to ensure that each shipment is properly and timely received and acknowledged. All FTI transported through the mail or courier/messenger service must be double-sealed; that is, one envelope within another envelope. The inner envelope must be marked "confidential" with some indication that only the designated official or delegate is authorized to open it. The outermost envelope should not be labeled as FTI or provide any indication that the contents contains FTI, since that may actually increase risk to the contents. Using sealed boxes serves the same purpose as double-sealing and prevents anyone from viewing the contents thereof.

4.5 Physical Security of Computers, Electronic, and Removable Media

Computers and electronic media that receive, process, store, or transmit FTI must be in a secure area with restricted access. In situations when requirements of a secure area with restricted access cannot be maintained, such as home work sites, remote terminals or other office work sites, the equipment must receive the highest level of protection practical, including full disk encryption. All computers and mobile devices that contain FTI and reside at an alternate work site must employ encryption mechanisms to ensure that FTI may not be accessed if the computer is lost or stolen (see OMB M-06-16).

Basic security requirements must be met, such as keeping FTI locked up when not in use. When removable media contains FTI, it must be labeled as FTI.

All computers, electronic media, and removable media containing FTI, must be kept in a secured area under the immediate protection and control of an authorized employee or locked up. When not in use, the media must be promptly returned to a proper storage area/container.

Inventory records of electronic media must be maintained and reviewed semi-annually for control and accountability. *Section 3.0, Recordkeeping Requirement*, contains additional information. For additional guidance on log retention requirements, see *Exhibit 9, Record Retention Schedules*.

For physical security protections of transmission medium (e.g., cabling), see *Section 9.3.11.4, Access Control for Transmission Medium (PE-4)*.

4.6 Media Off-Site Storage Requirements

Media containing FTI which is sent to an off-site storage facility, must be properly secured, labeled, and protected from access by unauthorized individuals at all times. The media may not be stored on open shelving, unless the shelving is in a restricted area (see Restricted Area Access, Section 4.3) accessible only to individuals with authorized access to FTI. The agency must ensure that contractor-operated off-site storage facilities maintaining FTI on open shelving comply with all safeguarding requirements (e.g., visitor access logs, internal inspections, contractor access restrictions, employee training, and the contract include Exhibit 7 safeguarding language). These facilities are subject to IRS safeguard reviews.

Agencies which do not have the statutory authority to contract for services that involve the disclosure of FTI (e.g. state Child Support Enforcement, Human Services and certain workforce agencies (not receiving data under 6103(d)), may not allow release media containing FTI to a contractor operated off-site storage facility unless the following conditions are met:

- The media is encrypted and labeled as containing "federal tax information"
- The media is locked in a turtle case or security container
- The agency retains the key to the turtle case

4.7 Telework Locations

If the confidentiality of FTI can be adequately protected, telework sites, such as employee's homes or other non-traditional work sites can be used. FTI remains subject to the same safeguard requirements and the highest level of attainable security. All of the requirements of *Section 4.5, Physical Security of Computers, Electronic, and Removable Media*, apply to telework locations.

The agency must conduct periodic inspections of alternative work sites during the year to ensure that safeguards are adequate. The results of each inspection shall be fully documented. IRS reserves the right to visit alternative work sites while conducting safeguard reviews. Changes in safeguard procedures must be described in detail by the agency in the SSR. For additional information, see *Section 7.2, Safeguard Security Report*.

4.7.1 Equipment

The agency must retain ownership and control, for all hardware, software, and end-point equipment connecting to public communication networks, where these are resident at all alternate work sites. The use of virtual desktop infrastructure with non-agency-owned devices (including personally-owned devices) is an acceptable alternative, where all requirements in section *9.4.13 Virtual Desktop Infrastructure* are met.

Employees must have a specific room or area in a room that has the appropriate space and facilities for the type of work done. Employees also must have a way to communicate with their managers or other members of the agency if security problems arise.

The agency must give employees locking file cabinets or desk drawers so that documents, disks, and tax returns may be properly secured when not in use. If agency furniture is not furnished to the employee, the agency must ensure that an adequate means of storage exists at the work site. The agency must provide "locking hardware" to secure automated data processing equipment to large objects, such as desks or tables. Smaller, agency-owned equipment must be locked in a filing cabinet or desk drawer when not in use.

4.7.2 Storing Data

FTI may be stored on hard disks only if agency-approved security access control devices (hardware/software) have been installed, are receiving regularly scheduled maintenance including upgrades, and are being used. Access controls must include password security, an audit trail, encryption, virus detection, and data overwriting capabilities.

4.7.3 Other Safeguards

Only agency-approved security access control devices and agency-approved software will be used. Copies of illegal and non-approved software will not be used. Electronic media that is to be reused must have files overwritten or degaussed.

The agency must maintain a policy for the security of alternative work sites. The agency must coordinate with the managing host system(s) and any networks and maintain documentation on the test. Before implementation, the agency will certify that the security controls are adequate for security needs. Additionally, the agency will promulgate rules and procedures to ensure that employees do not leave computers unprotected at any time. These rules must address brief absences while employees are away from the computer. The agency must provide specialized training in security, disclosure awareness, and ethics for all participating employees and managers. This training must cover situations that could occur as the result of an interruption of work by family, friends, or other sources.

5.0 Restricting Access—IRC 6103(p)(4)(C)

5.1 General

Agencies are required by IRC 6103(p)(4)(C) to restrict access to FTI only to persons whose duties or responsibilities require access (see *Exhibit 2, USC Title 26, IRC 6103(p)(4)*, and *Exhibit 4, Sanctions for Unauthorized Disclosure*). To assist with this requirement, FTI must be clearly labeled "Federal Tax Information" and handled in such a manner that it does not become misplaced or available to unauthorized personnel. Additionally, warning banners advising of safeguarding requirements must be used for computer screens (see *Exhibit 8, Warning Banner Examples*).

To understand the key terms of *unauthorized disclosure*, *unauthorized access*, and *need-to-know*, see *Section 1.4, Key Definitions*.

5.1.1 Background Investigation Minimum Requirements

Determining the suitability of individuals who require access to U.S. government Sensitive But Unclassified (SBU) information, including FTI, is a key factor in ensuring adequate information security. Prior to granting access to FTI, and periodically thereafter, the Agency must complete a suitability background investigation which is favorably adjudicated by the Agency.

Federal agencies must conduct a suitability or security background investigation based on the position sensitivity of the individual's assigned position and risk designation associated with the investigative Tier established by the Federal Investigative Standards (FIS). Granting access to FTI requires a Tier 2 level investigation at a minimum.

A FIS Tier 2 standard background investigation meets the suitability investigative requirement for non-sensitive positions designated as moderate risk public trust (requested using Standard Form 85P). Investigations conducted at Tiers 2-5 meet the minimum standard for an employee or contractor access to FTI. Federal agencies may be asked to provide evidence that the required BI was conducted for each individual granted access to FTI. FIS standards require reinvestigation every five years at a minimum.

State and local agencies which are not required to implement the federal background investigation standards must establish a personnel security program that ensures a background investigation is completed at the appropriate level for any individual who will have access to FTI using the guidance below as the minimum standard and a reinvestigation conducted within 10 years at a minimum.

- Agencies must develop a written policy requiring that employees, contractors and sub-contractors (if authorized), with access to FTI must complete a background investigation that is favorably adjudicated. The policy will identify the process, steps,

timeframes and favorability standards that the agency has adopted. The agency may adopt the favorability standards set by the FIS or one that is currently used by another state agency, or the Agency may develop its own standards specific to FTI access.

- The written background investigation policy must establish a result criterion for each required element which defines what would result in preventing or removing an employee's or contractor's access to FTI.

- Agencies must initiate a background investigation for all employees and contractors prior to permitting access to FTI.

- State agencies must ensure a reinvestigation is conducted within 10 years from the date of the previous background investigation for each employee and contractor requiring access to FTI.

- Agencies must make written background investigation policies and procedures as well as a sample of completed employee and contractor background investigations available for inspection upon request.

- Background investigations for any individual granted access to FTI must include, at a minimum:

    a) FBI fingerprinting (FD-258) - review of Federal Bureau of Investigation (FBI) fingerprint results conducted to identify possible suitability issues. (Contact the appropriate state identification bureau for the correct procedures to follow.) A listing of state identification bureaus can be found at: https://www.fbi.gov/about-us/cjis/identity-history-summary-checks/state-identification-bureau-listing

    This national agency check is the key to evaluating the history of a prospective candidate for access to FTI. It allows the Agency to check the applicant's criminal history in all 50 states, not only current or known past residences.

    b) Check of local law enforcement agencies where the subject has lived, worked, and/or attended school within the last 5 years, and if applicable, of the appropriate agency for any identified arrests.

    The local law enforcement check will assist agencies in identifying trends of misbehavior that may not rise to the criteria for reporting to the FBI database but is a good source of information regarding an applicant.

    c) Citizenship/residency – Validate the subject's eligibility to legally work in the United States (e.g., a United States citizen or foreign citizen with the necessary authorization).

Employers must complete USCIS Form I-9 to document verification of the identity and employment authorization of each new employee hired after November 16, 1986, to work in the United States. Within 3 days of completion, any new employee must also be processed through E-Verify to assist with verification of his/her status and the documents provided with the Form I-9. The E-Verify system is free of charge and can be located at www.uscis.gov/e-verify. This verification process may only be completed on new employees. Any employee with expiring employment eligibility must be documented and monitored for continued compliance.

5.1.2 Implementing the Background Investigation Requirement

The requirements of Section 5.1.1 pertaining to initial and periodic background investigations for individuals before authorizing access to FTI is effective upon date of this publication. Implementation of the new standards, including the development of written policies and verification that all individuals with access to FTI have an appropriate level of investigation and initiating new required investigations to comply with the requirement may occur within one year.

Upon publication, agencies should initiate action to establish a written background investigation policy that conforms to the standards of Section 5.1.1. Agencies should also identify all employees or contractors who currently have access to FTI and have not completed the required personnel security screening and initiate a background investigation which meets these standards. Agencies should initiate a background investigation for all newly hired employees and contractors who will require access to FTI to perform assigned duties as soon as practicable upon notification of the requirement.

Federal agencies that completed a Moderate-Risk Background Investigation (MBI) or higher, for individuals with access to FTI, prior to the October 2014 implementation date of the FIS Tier 2 standard investigation, have met the minimum standard and no further investigation is needed so long as reinvestigation is timely scheduled. Individuals granted access to FTI based on a National Agency Check with Inquiries (NACI) is not sufficient and a Tier 2 investigation should be initiated for continued access to FTI.

Agency implementation efforts to achieve full compliance with the minimum background investigation requirement may vary based on based on state legislation, budget and labor relation hurdles. Some state agencies have published standards which meet or exceed these requirements while others may have minimal or no standards established for background investigations. The expectation is that all agencies receiving FTI will take the steps necessary towards full compliance with this requirement.

As a part of the annual Safeguard Security Report, (SSR), and during an agency on-site review, compliance with and efforts underway to achieve compliance will be evaluated. Any deficiencies will be documented in the agency's Corrective Action Plan, (CAP), and there will be an expectation that each agency response includes an update on progress and a plan to continue moving forward towards compliance.

5.2 Commingling of FTI

Commingling of FTI refers to having FTI and non-FTI data stored together, regardless of format. For example, commingling occurs when FTI is included in sentence of text in a paper notice or letter; a row or column containing FTI a database table; files stored on electronic media (some files containing FTI and some don't),or at a shared data center with some systems including FTI subject to access restrictions (and some don't). Any kind of commingling creates the need for additional controls, since the introduction of FTI requires the entire letter, data table, removable media, etc to be handled and protected as FTI.

It is recommended that FTI be kept physically and logically separate from other information to the maximum extent possible to avoid inadvertent disclosures and need for additional controls. Agencies should attempt to avoid maintaining FTI as part of their case files including any recordation or transcription in case notes or activity logs, whether paper or electronic.
In situations where physical separation is impractical, the file must be clearly labeled to indicate that FTI is included, and the file must be safeguarded.

All FTI must be removed prior to releasing files to an individual or agency without authorized access to FTI.

5.2.1 Commingling of Electronic Media

If FTI is recorded on electronic media (e.g., tapes) with other data, it must be protected as if it were entirely FTI. Such commingling of data on electronic media should be avoided, if practicable. FTI only loses its character when it is verified by a third party and overwritten in the agency's records.

When data processing equipment is used to process or store FTI and the information is mixed with agency data, access must be controlled by:

- Restricting computer access only to authorized personnel
- Systemic means, including labeling; for additional information, see *Section 9.3.10.3, Media Marking (MP-3)*
- When technically possible, data files, data sets, and shares must be overwritten after each use

Commingled data at multi-purpose facilities results in security risks that must be addressed. If the agency shares physical or computer facilities with other agencies, departments, or individuals not authorized to have FTI, strict controls—physical and systemic—must be maintained to prevent unauthorized disclosure of this information.

Examples of commingling include:

- If the document has both FTI and information provided by the individual or third party, commingling has occurred, and the document must also be labeled and safeguarded. If the individual or a third party from its own source provides the information, this is not FTI. *Provided* means actually giving the information on a separate document, not just verifying and returning a document that includes FTI.

- If a new address is received from IRS records and entered into a computer database, the address must be identified as FTI and safeguarded. If the individual or third party subsequently provides the address independently, the address will not be considered FTI as long as the address is overwritten by replacing the IRS source address with the newly provided information, non-IRS source address. Again, *provided* means using individual or third-party knowledge or records as the source of information, which does not include FTI.

5.3 Access to FTI via State Tax Files or Through Other Agencies

Some state disclosure statutes and administrative procedures permit access to state tax files by other agencies, organizations, or employees not involved in tax matters. As a general rule, IRC 6103(d) does not permit access to FTI by such employees, agencies, or other organizations. The IRC clearly provides that FTI will be furnished to state tax agencies only for tax administration purposes and made available only to designated state tax personnel and legal representatives or to the state audit agency for an audit of the tax agency. Questions about whether particular state employees are entitled to access FTI must be forwarded to the Disclosure Manager at the IRS Office that serves your location.[†] Generally, the IRC does not permit state tax agencies to furnish FTI to other state agencies or to political subdivisions, such as cities or counties. State tax agencies may not furnish FTI to any other state or local agency, even where agreements have been made, informally or formally, for the reciprocal exchange of state tax information unless formally approved by the IRS. Also, non-government organizations, such as universities or public interest organizations performing research cannot have access to FTI.

Although state tax agencies are specifically addressed previously in this section, the restrictions on data access and non-disclosure to another agency or third party applies to all agencies authorized to receive FTI. Generally, statutes that authorize disclosure of FTI do not authorize further disclosures by the recipient agency. Unless IRC 6103 provides for further disclosures by the agency, the agency cannot make such disclosures or otherwise grant access to FTI to either employees of another component of the agency not involved with administering the program for which the FTI was specifically received or to another state agency for any purpose.

Agencies and subdivisions within an agency may be authorized to obtain the same FTI for different purposes, such as a state tax agency administering tax programs and a component human services agency administering benefit eligibility verification programs (IRC 6103(l)(7)) or child support enforcement programs (IRC 6103(l)(6)).

[†] Refer to http://www.irs.gov/uac/IRS-Disclosure-Offices for contact information.

However, the IRC disclosure authority does not permit agencies or subdivisions of agencies to exchange or make subsequent disclosures of this information for another authorized purpose even within the agency. In addition, unless specifically authorized by the IRC, agencies are not permitted to allow access to FTI to agents, representatives, or contractors.

FTI cannot be accessed by agency employees, agents, representatives, or contractors located offshore—outside of the United States territories, embassies or military installations. Further, FTI may not be received, processed, stored, transmitted, or disposed of by information technology (IT) systems located offshore.

5.4 Controls over Processing

The agency must establish adequate controls to prevent disclosing FTI to other state agencies, tax or non-tax, or to political subdivisions, such as cities or counties, for any purpose, including tax administration, absent explicit written IRS authority granted under IRC 6103(p)(2)(B).

Processing of FTI in an electronic media format including removable media, microfilms, photo impressions, or the conversion to other formats (including tape reformatting or duplication, reproduction or conversion to digital images or hard copy printout) will be performed as indicated in the following environments.

5.4.1 Agency Owned and Operated Facility

Processing under this method will take place in a manner that will protect the confidentiality of the information on the electronic media. All safeguards outlined in this publication also must be followed and will be subject to IRS safeguard reviews.

5.4.2 Contractor or Agency Shared Facility - Consolidated Data Centers

5.4.2.1 Agency Shared Facilities:

Recipients of FTI are allowed to use a shared facility but only in a manner that does not allow access to FTI by employees, agents, representatives, or contractors of other agencies using the shared facility.

> *For purposes of applying sections 6103(l), (m), and (n), the term* agent *includes contractors.*

Access restrictions pursuant to the IRC authority by which the FTI is received continue to apply; for example, human services agencies administering benefit eligibility programs may not allow contractors, including consolidated data center contractors, access to any FTI.

The agency must include, as appropriate, the requirements specified in *Exhibit 7, Safeguarding Contract Language*, in accordance with IRC 6103(n).

In addition to the agency being subject to Safeguard reviews, all contractor and shared sites that receive, process, store or transmit FTI are subject to reviews.

These requirements also apply to releasing electronic media to a private contractor or other agency office, even if the purpose is merely to erase the old media for reuse.

5.4.2.2 Consolidated Data Centers:

Agencies using consolidated data centers must implement appropriate controls to ensure the protection of FTI, including a service level agreement (SLA) between the agency authorized to receive FTI and the consolidated data center. The SLA must cover the following:

- The agency with authority to receive FTI is responsible for ensuring the protection of all FTI received. The consolidated data center shares responsibility for safeguarding FTI.
- The SLA provides written notification to the consolidated data center management that they are bound by the provisions of Publication 1075, relative to protecting all FTI within their possession or control.
- The SLA shall detail the IRS' right to inspect consolidated data center facilities and operations accessing, receiving, storing or processing FTI under this agreement to assess compliance with requirements defined in IRS Publication 1075. The SLA shall specify that IRS' right of inspection includes the use of manual and/or automated scanning tools to perform compliance and vulnerability assessments of information technology (IT) assets that access, store, process or transmit FTI.
- The SLA shall detail the consolidated data center's responsibilities to address corrective action recommendations to resolve findings of noncompliance identified by IRS inspections.
- The agency will conduct an internal inspection of the consolidated data center every 18 months, as described in Section 6.4, *Internal Inspections*. Multiple agencies sharing a consolidated data center may partner together to conduct a single, comprehensive internal inspection. However, care must be taken to ensure agency representatives do not gain unauthorized access to other agencies' FTI during the internal inspection.

- The employees from the consolidated data center with access to or use of FTI, including system administrators and programmers, must:
    1) meet the background check requirements defined in IRS Publication1075 and
    2) prior to initial access to or use of FTI, as well as annually thereafter, receive disclosure awareness training and sign a confidentiality statement. These provisions also extend to any contractors hired by the consolidated data center that have authorized access to or use of FTI.
- The specific data breach incident reporting procedures for all consolidated data center employees and contractors must be covered. The required disclosure awareness training must include a review of these procedures.
- The Exhibit 7 language must be included in the contract between the recipient agency and the consolidated data center, including all contracts involving contractors hired by the consolidated data center.
- Responsibilities must be identified for coordination of the 45-day notification of the use of contractors or subcontractors with access to FTI.

Generally, consolidated data centers are either operated by a separate state agency (e.g., Department of Information Services) or by a private contractor. If an agency is considering transitioning to either a state-owned or private vendor consolidated data center, the Office of Safeguards strongly suggests the agency submit a request for discussions with Safeguards as early as possible in the decision making or implementation planning process. The purpose of these discussions is to ensure the agency remains compliant with safeguarding requirements during the transition to the consolidated data center.

5.4.3 Review Availability of Contractor Facilities:

As a part of the agency review process, all affiliated contractors who receive, transmit, process and store FTI on behalf of the agency are subject to review and testing.

The agency must include Exhibit 7, Safeguarding Contract Language, in accordance with IRC 6103(n) for all contracts. Agencies seeking to modify this language must secure approval from Safeguards in advance.

These requirements also apply to releasing electronic media to a private contractor or other agency office, even if the purpose is merely to erase the old media for reuse.

5.5 Child Support Agencies—IRC 6103(l)(6), (l)(8), and (l)(10)

In general, no officer or employee of any state or local child support enforcement agency can make further disclosures of FTI.

However, limited information may be disclosed to agents or contractors of the agency for the purpose of, and to the extent necessary in, establishing and collecting child support obligations from and locating individuals owing such obligations.

The information that may be disclosed for this purpose to an agent or a contractor is limited to:

- The address;
- Social Security Number of an individual with respect to whom child support obligations are sought to be established or enforced; and/or
- The amount of any reduction under IRC 6402(c) in any overpayment otherwise payable to such individual.

Tax refund offset payment information may not be disclosed by any federal, state, or local child support enforcement agency employee, representative, agent, or contractor into any court proceeding. To satisfy the re-disclosure prohibition, submit only payment date and payment amount for all payment sources (not just tax refund offset payments) into court proceedings.

> *Forms 1099 and W-2 information are not authorized by statute to be disclosed to contractors under the child support enforcement program (IRC 6103(l)(6).*

5.6 Human Services Agencies—IRC 6103(l)(7)

No officer or employee of any federal, state, or local agency administering certain programs under the Social Security Act, the Food Stamp Act of 1977, or Title 38, United States Code, or certain housing assistance programs is permitted to make further disclosures of FTI for any purpose. Human services agencies may not contract for services that involve the disclosure of FTI to contractors.

5.7 Deficit Reduction Agencies—IRC 6103(l)(10)

Agencies receiving FTI from the Bureau of Fiscal Service related to tax refund offsets are prohibited from making further disclosures of the FTI received unless authorized.

5.8 Centers for Medicare and Medicaid Services—IRC 6103(l)(12)(C)

The Administrator of the Centers for Medicare and Medicaid Services (CMS) is authorized under IRC 6103(l)(12)(C) to disclose FTI it receives from SSA to its agents for the purpose of, and to the extent necessary in, determining the extent that any Medicare beneficiary is covered under any group health plan. A contractual relationship must exist between CMS and the agent. The agent, however, is not authorized to make further disclosures of FTI for any purpose.

5.9 Disclosures under IRC 6103(l)(20)

Disclosures to officers, employees, and contractors of SSA and other specified agencies are authorized to receive specific tax information for the purpose of carrying out the Medicare Part B premium subsidy adjustment and Part D Base Beneficiary Premium Increase. These disclosures are subject to safeguard requirements. Any agency receiving FTI from SSA authorized by this provision is also subject to IRS safeguard requirements and review.

5.10 Disclosures under IRC 6103(l)(21)

Disclosures to officers, employees, and contractors of the U.S. Department of Health and Human Services (HHS) at the request of a taxpayer seeking financial assistance for health insurance affordability programs. HHS may release FTI to an Exchange established under the Affordable Care Act or a state agency administering eligibility determinations for Medicaid or Children's Health Insurance Programs for the purpose of establishing eligibility for participation in the Exchange, verifying the appropriate amount of any credits, and determining eligibility for participation in the state program. These disclosures are subject to safeguard requirements. Any agent or contractor is also subject to IRS safeguard requirements and review. IRC 6103(l)(21)(C) may allow the Office of Inspector General, HHS to have access to FTI maintained in the eligibility records of an Exchange or state entity administering these programs, under certain limited circumstances. This authority does not extend to independent state audit agencies which may not have access to FTI in eligibility records unless a contractual relationship is established which conforms to the disclosure requirements of IRC 6103.

5.11 Disclosures under IRC 6103(i)

Federal law enforcement agencies receiving FTI pursuant to court orders or by specific request under Section 6103(i) for purposes of investigation and prosecution of non-tax federal crimes, or to apprise of or investigate terrorist incidents, are subject to safeguard requirements and review.

The Department of Justice must report in its SSR the number of FTI records provided and to which federal law enforcement agency the data was shared for the calendar year processing period.

5.12 Disclosures under IRC 6103(m)(2)

Disclosures to agents of a federal agency under IRC 6103(m)(2) are authorized for the purposes of locating individuals in collecting or compromising a federal claim against the taxpayer in accordance with Sections 3711, 3717, and 3718 of Title 31. If the FTI is shared with agents or contractors, the agency and agent or contractor are all subject to IRS safeguarding requirements and reviews.

6.0 Other Safeguards—IRC 6103(p)(4)(D)

6.1 General

IRC 6103(p)(4)(D) requires that agencies receiving FTI to provide other safeguard measures, as appropriate, to ensure the confidentiality of the FTI. Agencies are required to provide a training program for their employees and contractors.

6.2 Training Requirements

Education and awareness are necessary to provide employees, contractors, and other persons with the information to protect FTI. There are multiple components to a successful training program. In this section, training requirements are consolidated to ensure agencies understand all of the requirements to comply with this publication.

Disclosure awareness training is described in detail within *Section 6.3, Disclosure Awareness Training*. Additional training requirements are located in various sections of the document and identified in the following table.

Table 4 – Training Requirements

Training Component	Applicability	Section
Disclosure Awareness Training	• Unique to protection of FTI and prevention of unauthorized disclosure	6.3
Security Awareness Training	• Provides basic security awareness training to information system users	9.3.2.2
Role-Based Training	• Provides individualized training to personnel based on assigned security roles and responsibilities	9.3.2.3
Contingency Training	• Provides individualized training to personnel based on assigned roles and responsibilities as they relate to recovery of backup copies of FTI	9.3.6.3
Incident Response Training	• Provides individuals with agency-specific procedures to handle incidents • Provides individuals with IRS-specific requirements pertaining to incidents involving FTI	9.3.8.2 and 10.0

6.3 Disclosure Awareness Training

Employees and contractors must maintain their authorization to access FTI through annual training and recertification. Prior to granting an agency employee or contractor access to FTI, each employee or contractor must certify his or her understanding of the agency's security policy and procedures for safeguarding IRS information.

Disclosure awareness training stipulates that:

- Employees and contractors must be advised of the penalty provisions of IRC-Sections 7431, 7213, and 7213A (see *Exhibit 4, Sanctions for Unauthorized Disclosure*, and *Exhibit 5, Civil Damages for Unauthorized Disclosure*).
- The training provided before the initial certification and annually thereafter must also cover the incident response policy and procedure for reporting unauthorized disclosures and data breaches (see *Section 10.0, Reporting Improper Inspections or Disclosures*).
- During this training, agencies must make employees aware that disclosure restrictions and penalties apply even after employment with the agency has ended.
- For the initial certification and the annual recertification, the employee or contractor must sign, either with ink or electronic signature, a confidentiality statement certifying his or her understanding of penalty provisions and the security requirements. It must also contain a statement that the employee understands they must report possible improper inspection or disclosure of FTI, including breaches and security incidents to both TIGTA and Safeguards.

  Example: I understand the penalty provisions of IRC 7431, 7213 and 7213A.
  Example: I understand upon discovering a possible improper inspection or disclosure of FTI, including breaches and security incidents, I must follow the proper incident reporting requirements to ensure the Office of Safeguards and the Treasury Inspector General for Tax Administration are notified of a possible issue involving FTI.

- The initial certification and recertification must be documented and placed in the agency's files for review and retained for at least five years.

Additional security and information requirements can be expressed to appropriate personnel by using a variety of methods, such as, but not limited to:

- Additional formal and informal training
- Discussion at group and managerial meetings
- Security bulletin boards throughout the secure work areas
- Security articles in employee newsletters
- Pertinent articles that appear in the technical or popular press to share with members of the management staff
- Posters to display with short simple educational messages (e.g., instructions on reporting unauthorized access "UNAX" violations, address), and
- Email and other electronic messages to inform users

6.3.1 Disclosure Awareness Training Products

The following resources are available from the IRS to assist your agency in meeting the federal safeguard requirements for disclosure awareness and the protection of FTI. Technical information is available to you on the Office of Safeguards website at https://www.irs.gov/uac/safeguards-program.

Some of the following products can be ordered from the IRS Distribution Center by calling 800-TAX-FORM (829-3676). Be sure to identify yourself as a (state) government employee, provide the publication number and quantity. All products will be delivered to the agency address you provide and to the attention of the person you specify. Please do not call the tax help number (800-829-4933). If you experience an ordering problem send an email to SafeguardReports@irs.gov mailbox.

Publication 1075, Tax Information Security Guidelines for Federal, State, and Local Agencies (Key publication explains the federal safeguard requirements)

- Only available online: http://www.irs.gov/pub/irs-pdf/p1075.pdf

Safeguards Disclosure Awareness Videos (Explains key safeguard concepts for protecting the confidentiality of FTI)

- Available online through Safeguards website: https://www.irs.gov/uac/irs-disclosure-awareness-videos
- For DVD availability, please send an email to SafeguardReports@irs.gov

Protecting FTI, Pocket Guide for Government Employees (Provides basic disclosure concepts and warns of civil and criminal sanctions for misuse of FTI)

- Available through Distribution Center: Publication 4761 (Rev. 09-2013)

UNAX Don't Go There!

- Available through Distribution Center:: Bold beige, orange and blue print raises awareness that unauthorized access is UNAX - Poster 11"x17" poster— Document 12800 (Rev. 03-2013)
- Available through Distribution Center: Tri-fold handout—Document 12612 (Rev. 05-2012)

Disclosure Awareness Video—Protecting FTI: A Message from the IRS (Discusses what access to FTI is, how to safeguard it, and how disclosures of that information are protected by federal law)

- Available online through Safeguards website: https://www.irs.gov/uac/irs-disclosure-awareness-videos

6.4 Internal Inspections

Another measure IRS requires is internal inspections by the recipient agency. The purpose is to ensure that the security policies and procedures established by the agency to protect FTI are functioning, maintained and enforced. The agency must submit copies of these inspections to the IRS with the SSR (see *Section 7.2, Safeguard Security Report*). To provide an objective assessment, the inspection must be conducted by a function other than the using function.

To provide reasonable assurance that FTI is adequately safeguarded, the inspection must address the safeguard requirements the IRC and the IRS impose. The agency monitors and audits privacy controls and internal privacy policy to ensure effective implementation.

Agencies must establish a review cycle as follows:

- Local offices receiving FTI: at least every three years
- Headquarters office facilities housing FTI and the agency computer facility: at least every 18 months
- All contractors with access to FTI, including a consolidated data center or off-site storage facility: at least every 18 months

The agency must complete a documented schedule (internal inspection plan), detailing the timing of all internal inspections in the current year and next two years (three-year cycle). The plan must be included as part of the SSR, as described in Section 7.2.

Inspection reports, including a record of corrective actions, must be retained by the agency for a minimum of five years from the date the inspection was completed. IRS personnel may review these reports during an on-site safeguard review. A summary of the agency's findings and the actions taken to correct any deficiencies must be included with the SSR submitted to the IRS.

Key areas that must be addressed include recordkeeping, secure storage, limited access, disposal, and computer security.

6.4.1 Recordkeeping

Each agency and function within that agency shall maintain a log of all requests for FTI, including receipt and disposal of returns or return information. This includes any medium containing FTI, such as computer tapes, cartridges, CDs, or data received electronically.

6.4.2 Secure Storage

FTI (including tapes, cartridges, or other removable media) must be stored in a secure location, safe from unauthorized access.

6.4.3 Limited Access

Access to returns and return information (including tapes, cartridges, or other removable media) must be limited to only those employees, officers, and contractors who are authorized access by law or regulation and whose official duties require such access.

The physical and systemic barriers to unauthorized access must be reviewed and reported. An assessment of facility security features must be included in the report.

6.4.4 Disposal

Upon completion of use, agencies must ensure that the FTI is destroyed or returned to the IRS or the SSA according to the guidelines contained in *Section 8.0, Disposing of FTI—IRC 6103(p)(4)(F).*

6.4.5 Computer Systems Security

The agency's review of the adequacy of its computer security provisions must provide reasonable assurance that access to FTI is limited to personnel who have a need- to-know. This need-to-know must be enforced electronically as well as physically (see Internal Inspection Template on the Office of Safeguards website and *Section 9.3.1, Access Control*, and other portions of Section 9.0, Computer System Security, as applicable).

> *The review of the computer facility must include the evaluation of computer security and physical security controls.*

6.5 Plan of Action and Milestones

The agency must implement a process for ensuring that a Plan of Action and Milestones (POA&M) is developed and monitored. The POA&M must include the corrective actions identified during the internal inspections and will identify the actions the agency plans to take to resolve these findings.

> *The POA&M pertains to findings identified by the agency during the internal inspections process and any other internal or external audit.*
>
> *The CAP covers findings identified by the Office of Safeguards during the on-site safeguard review. While these findings may be similar, their inclusion in either the POA&M or CAP is dependent upon how they were identified and who (the agency or the Office of Safeguards) is monitoring the finding resolution. Based upon deficiencies noted during the agency's inspection, list all deficiencies and corrective actions along with reasonable time frames for the remediation to occur* (refer to *Section 7.3, Corrective Action Plan*).

7.0 Reporting Requirements—6103(p)(4)(E)

7.1 General

IRC 6103(p)(4)(E) requires agencies receiving FTI to report on procedures established and used for ensuring the confidentiality of FTI that is received, processed, stored, or transmitted to or from the agency. The major components consisting of reporting requirements include the SSR, CAP and 45-day notification requirements.

Another measure IRS requires is internal inspections by the recipient agency. The purpose is to ensure that the security policies and procedures established by the agency to protect FTI are functioning, maintained and enforced. The agency must submit copies of these inspections to the IRS with the SSR (see *Section 7.2, Safeguard Security Report*). To provide an objective assessment, the inspection must be conducted by a function other than the using function.

7.1.1 Report Submission Instructions

Correspondence, reports, and attachments should be sent electronically to the Office of Safeguards using one of the following two methods:

- Secure Data Transfer (SDT), if the agency participates in the SDT program
- Email to Safeguards mailbox at SafeguardReports@irs.gov. Email transmissions must be sent by an IRS-approved encrypted method as outlined in *Section 7.1.2, Encryption Requirements*

Please adhere to the following guidelines when submitting correspondence, reports, and attachments to the Office of Safeguards:

- Submissions must be made using official templates provided by the Office of Safeguards
- If the report refers to external file attachments, the reference should clearly identify the filename and section contained within the attachment being referenced
- Attachments must be named clearly and identify the associated section in the SSR, CAP, or 45-day notification
- Attachment filenames must follow a standardized naming convention (e.g., CAPATT1, CAPATT2)
- Do not embed the attachment into the SSR, CAP, or 45-day notification

7.1.2 Encryption Requirements

The Office of Safeguards recommends that all required reports, when sent to the Office of Safeguards via email, be transmitted using IRS-approved encryption methods to protect sensitive information. Agencies are requested to adhere to the following guidelines to use encryption:

- Compress files in .zip or .zipx formats
- Encrypt the compressed file using Advanced Encryption Standard
- Use a strong 256-bit encryption key string
- Ensure a strong password or pass phrase is generated to encrypt the file
- Communicate the password or pass phrase with the Office of Safeguards through a separate email or via a telephone call to your IRS contact person. Do not provide the password or passphrase in the same email containing the encrypted attachment

Refer to your specific file compression software user guide for instructions on how to compress and encrypt files. Known compatible products with IRS include but are not limited to WinZip and Secure Zip.

Please remember, while the attachment is encrypted, the content of the email message will not be encrypted, so it is important that any sensitive information be contained in the attachment (encrypted document).

7.2 Safeguard Security Reports

Agencies executing data exchange agreements involving access to FTI and subject to safeguarding requirements must provide evidence that adequate safeguard protections and controls are in place before IRS will authorize the release of FTI. The agency must submit an initial SSR for approval at least 90 days prior to the agency planned date for receipt of FTI.

7.2.1 Initial SSR Submission Instructions – New Agency Responsibilities

In order to obtain initial IRS approval to receive FTI, an agency new to the Safeguard Program must have an approved SSR. To facilitate IRS approval, the agency is expected to:

- Designate an agency Safeguards point of contact (POC), see *Section 2.5 Coordinating Safeguards Within an Agency*
- Make program officials and/or contractors available to discuss access and use of FTI, as needed
- The SSR must be submitted for approval at least 90 days prior to the agency receiving FTI

IRS will request evidentiary documentation for the controls shown in the table below during review of the agency's SSR.

Table 5 - Evidentiary Requirements for SSR approval before release of FTI

800-53 Control	Control Name	Evidentiary Documents (Artifacts) for Review
Section 5.2	Comingling and Labeling	• Screenshots of database schemas that show electronic FTI labeling • Sample output (report/notice) that shows how FTI is labeled
AC-6	Least Privilege	• FTI data flow diagram (physical and logical) to include all devices and inputs/outputs • Access Control Policy & Procedures
AC-17	Remote Access	• Screenshot of authentication screens • Document how multi-factor authentication is deployed for all remote network access to systems containing FTI and the tokens used for authentication
AC-20	Use of External Information System	• Remote Access Policy & Procedures • Notice of Use for any non-agency-owned information systems; components; or devices to process, store, or transmit FTI, seeking IRS approval to meet 45-Day Notification Reporting Requirement
AU-2	Audit Events	• Audit and accountability policy and procedure for operating systems, databases and applications with FTI • Log Monitoring Policy (recordkeeping)
AU-3	Content of Audit Records	• Sample audit logs for all technologies/components associated with FTI
AT-4	Security Training Records	• Training material (for users and system security personnel) • Sample certification statement
CA-2	Security Assessments	• Independent Security Assessment Report (SAR) or other report reflecting the results of security testing and mitigation for any high findings within the last year.
CA-6	Security Authorization	• Signed Authority to Operate (ATO) for new systems (or DRAFT if ATO not yet granted) • Documentation appointing the system Authorization Official

CM-8	Information System Component Inventory	• Complete listing of FTI inventory (includes networking devices) identifying: platform, operating system, and applicable software
IA-5	Authenticator Management	• Password & Authenticator Management Policy & Procedures Screenshots of local security policy for password management
IR-6	Incident Reporting	• Incident Response Plan and Procedures
MP-6	Media Sanitization	• Media Sanitization Policy & Procedures • Destruction log template
PE-3	Physical Access Control	• Physical Access Policy & Procedures • Alternative Worksite Policy & Procedures
PE-8	Visitor Access Records	• Sample visitor access log
SA-9	External Information System Services	• System & Services Acquisition Policy and/or Access Control Policy
SC-4	Information in Shared Resources	• System & Communication Policy & Procedures
SC-7	Boundary Protection	• Network architecture and design documents and/or diagrams depicting FTI network segments or logical location of FTI system
SC-8	Transmission Confidentiality and Integrity	• System & Communication Policy & Procedures • Network design diagram and documentation with all FTI transmission protocols and encryption mechanisms identified
SI-2	Flaw Remediation	• Patch Management Policy & Procedure
SI-3	Malicious Code Protection	• Malicious Code Protection Policy & Procedure

If the agency does not submit all required evidentiary documentation, or the evidence is inadequate to comply with Pub 1075 standards, or the agency fails to conduct an independent security controls assessment, the IRS reserves the right to conduct an on-site visit to assess the effectiveness of the controls established in order to approve the SSR so FTI can be released. Subsequently, Safeguards will conduct a risk-based assessment to determine when to schedule an agency's first on-site safeguard review after initial receipt of FTI.

Refer to the SSR template on the Office of Safeguards website for additional guidance and instructions for completing the document.

7.2.2 Agencies Requesting New FTI Data Streams

The following documents need to be on file or submitted by an agency currently receiving FTI with an approved SSR and seeking additional FTI under newly assigned program authority or expanded statutory authority under IRC 6103. To obtain IRS approval to for a a new FTI data stream, the agency must have established compliance with existing safeguarding standards and have available for IRS will review:

- Approved SSR for the most recent reporting period
- Current CAP with approved mitigation strategies for critical and significant findings
- New FTI Data Stream need to be addressed in the next annual SSR update
- Documentation of security testing with any high findings mitigated and a signed ATO for any newly developed system that will be receiving, processing, storing or transmitting FTI (which is not covered in the agency's SSR already on file).

7.2.3 Annual SSR Update Submission Instructions

The agency must update and submit the SSR annually to encompass any changes that impact the protection of FTI. Example changes include, but are not limited to:

- New data exchange agreements
- New computer equipment, systems, or applications (hardware or software)
- New facilities including office moves and relocations
- Organizational changes, such as moving IT operations to a consolidated data center from an embedded IT operation

The following information must be updated in the SSR to reflect updates or changes regarding the agency or regarding safeguarding procedures within the reporting period:

- Changes to information or procedures previously reported
- Current annual period safeguard activities
- Planned actions affecting safeguard procedures
- Agency use of contractors (non-agency employees)

The annual SSR update must be submitted on the prior year SSR template that was returned to the agency. This will allow for a version control of the document, assurance that the agency addressed all outstanding items previously noted as well as reduce the need for recreating the entire document.

7.2.4 SSR Update Submission Dates

The SSR submission and all associated attachments must be sent annually to identify changes to safeguarding procedures. The annual update portion of the SSR should include a description of updates or changes that have occurred during the applicable reporting period. The CAP must also be submitted with the SSR (see *Section 7.3, Corrective Action Plan*, for additional CAP requirements).

Submission due dates are defined according to geographic locations or if the organization is a federal agency.

Table 6 – SSR Due Dates

	Reporting Period	SSR Due
Federal Agencies		
All Federal Agencies	January 1 through December 31	January 31
All State Agencies and Territories		
AK, AL, AR, AS, AZ, CA	February 1 through January 31	February 28
CNMI, CO, CT, DC, DE, FL, GA	March 1 through February 28	March 31
GU, HI, IA, ID, IL, IN, KS	April 1 through March 31	April 30
KY, LA, MA, MD, ME, MI	May 1 through April 30	May 31
MN, MO, MS, MT, NE	June 1 through May 31	June 30
NC, NH, NJ, NM, NV, NY	July 1 through June 30	July 31
ND, OH, OK, OR	August 1 through July 31	August 31
PA, PR, RI, SC, SD, TN	September 1 through August 31	September 30
TX, UT, VA, VI, VT, WA	October 1 through September 30	October 31
WI, WV, WY	November 1 through October 31	November 30

Educational institutions receiving IRS addresses to locate debtors under IRC 6103(m)(4)(B) must send annual reports to the Department of Education as the federal oversight agency for this program.

When extenuating circumstances exist, agencies may request an Annual SSR extension, in 30 day increments, for a maximum of 60 days. Extension requests should be submitted not later than (NLT) 30 days prior to the scheduled SSR due date. Request for extensions will not be considered after the scheduled SSR due date. A request for a second extension must be accompanied by a draft SSR.

Extension requests should be sent to the Office of Safeguards via Secure Data Transfer (SDT) or email to SafeguardReports@irs.gov, with the subject SSR extension request and reasons for the request. All extension requests will be evaluated on a case by case basis. Safeguards will provide an email response, approving or disapproving the request within 5 work days after receipt of the request.

7.3 Corrective Action Plan

The CAP represents the corrective actions described in the SRR. The IRS will provide each agency an SRR along with a CAP upon completion of an on-site review. The agency must develop the CAP to report on completed corrective actions as well as provide status updates to any unresolved or planned actions.

7.3.1 CAP Submission Instructions and Submission Dates

The agency must submit the CAP semi-annually, as an attachment to the SSR and on the CAP due date, which is six months from the scheduled SSR due date.

The CAP due dates are provided in the following chart.

Table 7 – CAP Due Dates

	CAP with SSR	CAP (only)
Federal Agencies		
All Federal Agencies	January 31	July 31
All State Agencies and Territories		
AK, AL, AR, AS, AZ, CA	February 28	August 31
CNMI, CO, CT, DC, DE, FL, GA	March 31	September 30
GU, HI, IA, ID, IL, IN, KS	April 30	October 31
KY, LA, MA, MD, ME, MI	May 30	November 30
MN, MO, MS, MT, NE	June 30	December 31
NC, NH, NJ, NM, NV, NY	July 31	January 31
ND, OH, OK, OR	August 31	February 28
PA, PR, RI, SC, SD, TN	September 30	March 31
TX, UT, VA, VI, VT, WA	October 31	April 30
WI, WV, WY	November 30	May 31

If the SRR was issued within 60 days from the upcoming CAP due date in the preceding chart, the agency's first CAP will be due on the subsequent reporting date to allow the agency adequate time to document all corrective actions proposed and taken.

When extenuating circumstances exist, agencies may request an extension for no more than 30 days. Extension requests should be submitted not later than (NLT) 30 days prior to the scheduled CAP due date. Request for extensions will not be considered after the scheduled CAP due date. Extension requests should be sent to the Office of Safeguards via Secure Data Transfer (SDT) or email to SafeguardReports@irs.gov, with the subject CAP extension request and reasons for the request. All extension requests will be evaluated on a case by case basis. Safeguards will provide an email response, approving or disapproving the request within 5 work days after receipt of the request.

The CAP must be returned/submitted using the version sent by the Office of Safeguards with the SSR. The template should not be altered. The Planned Implementation Dates fields should not include any text; only numeric value and entered in mm/dd/yyyy format.

7.4 45-Day Notification Reporting Requirements

IRC 6103 limits the usage of FTI to only those purposes explicitly stated. Due to the security implications, higher risk of unauthorized disclosure and potential for unauthorized use of FTI based on specific activities conducted, the Office of Safeguards requires advanced notification (45 days) prior to implementing certain operations or technology capabilities that require additional uses of the FTI.

In addition to the initial receipt of FTI (see Section 2.1), the following circumstances or technology implementations require the agency to submit to the Office of Safeguards via the Office of Safeguards mailbox, at a minimum of 45 days ahead of the planned implementation, notification for the following activities that involve FTI:

Table 8 – 45-Day Notification Reporting Requirements

FTI related to:	Advance approval required to proceed?
Cloud Computing	No, only notification required*
Consolidated Data Center	No, only notification required*
Disclosure to a Contractor	No, Notification is required before releasing FTI to any agency contractor not listed in the last annual SSR. Only applicable for agencies specifically authorized pursuant to IRC 6103 statute or regulation.*
Re-disclosure by Contractor to Sub-Contractor	Yes, FTI may not be released to a sub-contractor absent IRS approval in writing from Safeguards. Only applicable for agencies specifically authorized pursuant to IRC 6103 statute or regulation.*
Data Warehouse Processing	No
Non-Agency-Owned Information Systems	No
Tax Modeling for Tax Administration	Yes, by Disclosure
Test Environment	Yes, by Safeguards
Virtualization of IT Systems	No

See additional details pertaining to each topic in the following sections. Contact the Office of Safeguards mailbox with any questions pertaining to the 45-day notification requirement.

7.4.1 Cloud Computing

Receiving, processing, storing, or transmitting FTI in a cloud environment requires prior notification to the Office of Safeguards. Refer to *Section 9.4.1, Cloud Computing Environments,* for guidance and details on 45-day notification requirements.
*Note: Advance *approval* is not required, only advance notification.

7.4.2 Consolidated Data Center

Agencies are required to notify the Office of Safeguards when moving IT operations to a consolidated data center. Refer to *Section 5.4.2, Contractor- or Agency-Shared Facility—Consolidated Data Centers* for additional information.
*Note: Advance *approval* is not required, only advance notification.

7.4.3 Contractor or Subcontractor Access

All agencies intending to re-disclose FTI to contractors must notify the IRS at least 45 days prior to the planned re-disclosure. Contractors consist of but are not limited to cloud computing providers, consolidated data centers, off-site storage facilities, shred companies, IT support, or tax modeling/revenue forecasting providers. The contractor notification requirement also applies in the circumstance where the contractor hires additional subcontractor services. Approval is required if the (prime) contractor hires additional subcontractor services in accordance with *Exhibit 6, Contractor 45-Day Notification Procedures.*

> *Notification is also required for contractors to perform statistical analysis, tax modeling, or revenue projections* (see *Section 2.4, State Tax Agency Limitations).*

7.4.4 Data Warehouse Processing

No prior notification is required when an agency implements a data warehouse containing FTI. For additional data warehouse guidance, see *Exhibit 10, Data Warehouse Security Requirements.*

7.4.5 Non-Agency-Owned Information Systems

Under limited circumstances, the IRS may review requests for the use or access to FTI using a non-agency-owned information system (e.g., mobile devices, cloud environments, outsourced data centers). Notify the Office of Safeguards 45 days in advance of planned activities to use non-agency-owned information systems to receive, process, store, or transmit FTI. See *Section 9.3.1.15 Use of External Information Systems (AC-20)* for additional information.

7.4.6 Tax Modeling

The agency must notify the Office of Safeguards if planning to include FTI in statistical analysis, tax modeling, or revenue projections.

The Office of Safeguards will forward the notification to the IRS Statistics of Income for approval of the modeling methodology (see *Section 2.4, State Tax Agency Limitations*).

7.4.7 Live Data Testing

Agencies must submit a Data Testing Request (DTR) form to request approval to use live FTI in a testing environment. Refer to *Section 9.4.6, Live Data Testing*, for additional guidance on 45-day notification requirements.

7.4.8 Virtualization of Information Technology Systems

No prior notification is required when an agency is planning to receive, process, store, or transmit FTI in virtualized environments. For additional guidance, see *Section 9.4.14, Virtualization Environments.*

8.0 Disposing of FTI—IRC 6103(p)(4)(F)

8.1 General

Users of FTI are required by IRC 6103(p)(4)(F) to take certain actions after using FTI to protect its confidentiality (see *Exhibit 2, USC Title 26, IRC 6103(p)(4)*, and *Exhibit 5, Civil Damages for Unauthorized Disclosure*). Agency officials and employees either will return the information (including any copies made) to the office from which it was originally obtained or destroy the FTI. Agencies will include in their annual report (e.g., SSR) a description of the procedures implemented. See *Section 7.0, Reporting Requirements—6103(p)(4)(E)* for additional reporting requirements.

8.2 Returning IRS Information to the Source

Agencies electing to return IRS information must use a receipt process and ensure that the confidentiality is protected at all times during transport (see *Section 4.4, FTI in Transit*).

8.3 Destruction and Disposal

FTI furnished to the user and any paper material generated therefrom, such as copies, photo impressions, computer printouts, notes, and work papers, must be destroyed by burning or shredding. If a method other than burning or shredding is used, that method must make the FTI unreadable or unusable.

The following guidelines must be observed when destroying FTI:

Table 9 – FTI Destruction Methods

Burning
The material must be burned in an incinerator that produces enough heat to burn the entire bundle, or the bundle must be separated to ensure that all pages are incinerated.

Shredding
To make reconstruction more difficult: • Destroy paper using cross cut shredders which produce particles that are 1 mm x 5 mm (0.04 in. x 0.2 in.) in size (or smaller), or pulverize/disintegrate paper materials using disintegrator devices equipped with a 3/32 in. (2.4 mm) security screen. *If shredding deviates from the above specification, FTI must be safeguarded until it reaches the stage where it is rendered unreadable through additional means, such as burning or pulping.*

FTI furnished or stored in electronic format must be destroyed in the following manner:

- Electronic media (e.g., hard drives, tapes, CDs, and flash media) must be destroyed according to guidance in *Section 9.3.10.6, Media Sanitization (MP-6)*, and *Section 9.4.7, Media Sanitization*. Electronic media containing FTI must not be made available for reuse by other offices or released for destruction without first being subjected to electromagnetic erasing. If reuse is not intended, the tape must be destroyed by burning or shredding in accordance with applicable standards (see Table 13, Media Sanitation Techniques).

- Destroy microfilms (microfilm, microfiche, or other reduced image photo negatives) by burning.

Whenever physical media leaves the physical or systemic control of the agency for maintenance, exchange, or other servicing, any FTI on it must be destroyed by sanitizing according to guidance in *Section 9.3.10.6, Media Sanitization (MP-6)*, and *Section 9.4.7, Media Sanitization*. FTI must be purged from the media prior to allowing release.

When using either method for destruction, every third piece of physical electronic media must be checked to ensure appropriate destruction of FTI.

Hand tearing, recycling, or burying information in a landfill are unacceptable methods of disposal.

8.4 Other Precautions

FTI must never be disclosed to an agency's agents or contractors during disposal without legal authorization and destruction must be witnessed by an agency employee.

The Department of Justice, state tax agencies, and SSA may be exempted from the requirement of having agency personnel witness destruction by a contractor. If a contractor is used:

- The contract must contain safeguard language in *Exhibit 7, Safeguarding Contract Language* as appropriate to the contract to ensure the protection of FTI.
- Destruction of FTI must be certified by the contractor when not witnessed by an agency employee.
- It is recommended that the agency periodically observe the process to ensure compliance with security of FTI until it reaches a non-disclosable state and that an approved destruction method is utilized.
- If the agency has legal authority to disclose FTI to a disposal contractor and chooses one that is National Association for Information Destruction (NAID) certified, the agency will not be required to complete an internal inspection every 18 months of that facility. However, it must maintain a copy of, and periodically validate the NAID certification.

9.0 Computer System Security

9.1 General

This section details the computer security requirements agencies must meet to adequately protect FTI under their administrative control. While the Office of Safeguards has responsibility to ensure the protection of FTI, it is the responsibility of the agency to build in effective security controls into its own IT infrastructure to ensure that FTI is protected at all points where it is received, processed, stored, or transmitted. It will not be the intent of IRS to monitor each control identified but to provide these to the organization, identifying those controls required for the protection of moderate risk systems within the federal government.

All agency information systems used for receiving, processing, storing, or transmitting FTI must be hardened in accordance with the requirements in this publication. Agency information systems include the equipment, facilities, and people that collect, process, store, display, and disseminate information. This includes computers, hardware, software, and communications, as well as policies and procedures for their use.

Impact levels used in this document are described in Federal Information Processing Standards (FIPS) 199, *Standards for Security Categorization of Federal Information and Information Systems*. NIST publications are available at http://csrc.nist.gov/publications/PubsSPs.html.

The computer security framework was primarily developed using guidelines specified in NIST SP 800-30 Revision 1, *Guide for Conducting Risk Assessments,* and NIST SP 800- 53 Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations*. Only applicable NIST SP 800-53 controls are included in this publication as a baseline. Applicability was determined by selecting controls required to protect the confidentiality of FTI. Agencies are encouraged to review supplemental guidance provided within NIST SP 800-53.

Section 9.3, NIST SP 800-53 Control Requirements, provides the security control requirements that relate to protecting information systems that receive, process, store, or transmit FTI and are based on the moderate baseline security controls defined by NIST.

The Office of Safeguards has included NIST control enhancement requirements where appropriate to protect the confidentiality of FTI. Control enhancements are identified with a CE designator after the requirement is described.

9.2 Assessment Process

The Office of Safeguards will assess agency compliance with the computer security requirements identified in this publication as part of the on-site review process. Requirements are assessed as they related to NIST SP 800-53 security controls as outlined in this publication. Please see *Section 2.7.2 Computer Security Review Process* for information on the on-site review process.

9.3 NIST SP 800-53 Control Requirements

9.3.1 Access Control

9.3.1.1 Access Control Policy and Procedures (AC-1)

The agency must:

a) Develop, document, and disseminate to designated agency officials:
   (1) An access control policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance
   (2) Procedures to facilitate the implementation of the access control policy and associated access controls

b) Review and update the current:
   (1) Access control policy every three years (or if there is a significant change)
   (2) Access control procedures at least annually

9.3.1.2 Account Management (AC-2)

The agency must:

a. Identify and select the accounts with access to FTI to support agency missions/business functions
b. Assign account managers for information system accounts;
c. Establish conditions for group and role membership
d. Specify authorized users of the information system, group and role membership, and access authorizations (i.e., privileges) and other attributes (as required) for each account
e. Require approval for requests to create information system accounts
f. Create, enable, modify, disable, and remove information system accounts in accordance with documented agency account management procedures
g. Monitor the use of information system accounts
h. Notify account managers when accounts are no longer required, when users are terminated or transferred, or when individual information system usage or need- to-know permission changes
i. Authorize access to information systems that receive, process, store, or transmit FTI based on a valid access authorization, need-to-know permission, and under the authority to re-disclosed FTI under the provisions of IRC 6103
j. Review accounts for compliance with account management requirements at a
k. minimum of annually for user accounts and semi-annually for privileged accounts
l. Establish a process for reissuing shared/group account credentials (if deployed) when individuals are removed from the group.

The information system must automatically disable inactive accounts after 120 days of inactivity. (CE3)

9.3.1.3 Access Enforcement (AC-3)

The information system must enforce:

a) Approved authorizations for logical access to information and system resources in accordance with applicable access control policies
b) A role-based access control policy over defined subjects and objects and controls access to FTI based upon a valid access authorization, intended system usage, and the authority to be disclosed FTI under the provisions of IRC 6103

9.3.1.4 Information Flow Enforcement (AC-4)

The information system must enforce approved authorizations for controlling the flow of FTI within the system and between interconnected systems based on the technical safeguards in place to protect the FTI.

Additional requirements for protecting the flow of FTI can be found in:

- *Section 9.4.3, Email Communications*
- *Section 9.4.4, Fax Equipment*
- *Section 9.4.9, Multi-Functional Devices*

9.3.1.5 Separation of Duties (AC-5)

The agency must:

a. Separate duties of individuals to prevent harmful activity without collusion
b. Document separation of duties of individuals
c. Define information system access authorizations to support separation of duties

9.3.1.6 Least Privilege (AC-6)

The agency must:

a. Employ the principle of least privilege, allowing only authorized accesses for users (or processes acting on behalf of users) that are necessary to accomplish assigned tasks in accordance with agency missions and business functions
b. Explicitly authorize access to FTI (CE1)
c. Require that users of information system accounts, or roles, with access to FTI, use non-privileged accounts or roles when accessing non-security functions (CE2)
d. Restrict privileged accounts on the information system to a limited number of individuals with a need to perform administrative duties (CE5)

The information system must:

a. Audit the execution of privileged functions (CE9)
b. Prevent non-privileged users from executing privileged functions; including disabling, circumventing, or altering implemented security safeguards/countermeasures (CE10)

9.3.1.7 Unsuccessful Logon Attempts (AC-7)

The information system must:

a. Enforce a limit of three consecutive invalid logon attempts by a user during a 120-minute period
b. Automatically lock the account for a period of at least 15 minutes

Specific to mobile device requirements, the logon is to the mobile device, not to any one account on the device. Additional mobile device controls are addressed in *Section 9.3.1.14, Access Control for Mobile Devices (AC-19),* and *Section 9.4.8, Mobile Devices.*

9.3.1.8 System Use Notification (AC-8)

The information system must:

a. Before granting access to the system, display to users an IRS-approved warning banner that provides privacy and security notices consistent with applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance and states that:

    1. The system contains U.S. Government information
    2. Users actions are monitored and audited
    3. Unauthorized use of the system is prohibited
    4. Unauthorized use of the system is subject to criminal and civil sanctions

    The warning banner must be applied at the application, database, operating system, and network device levels for all systems that receive, process, store, or transmit FTI.

b. Retain the warning banner on the screen until users acknowledge the usage conditions and take explicit actions to log on to or further access the information system.

For publicly accessible systems, the information system must:

a. Display the IRS-approved warning banner granting further access
b. Display references, if any, to monitoring, recording, or auditing that are consistent with privacy accommodations for such systems that generally prohibit those activities
c. Include a description of the authorized uses of the system

For sample warning banners approved by the Office of Safeguards, see Exhibit 8.

9.3.1.9 Session Lock (AC-11)

The information system must:

a. Prevent further access to the system by initiating a session lock after 15 minutes of inactivity or upon receiving a request from a user
b. Retain the session lock until the user reestablishes access using established identification and authentication procedures

9.3.1.10 Session Termination (AC-12)

The information system must automatically terminate a user session after 30 minutes of inactivity.

This control addresses the termination of user-initiated logical sessions in contrast to SC-10 which addresses the termination of network connections that are associated with communications sessions (i.e., network disconnect). A logical session (for local, network, and remote access) is initiated whenever a user (or process acting on behalf of a user) accesses an organizational information system.

9.3.1.11 Permitted Actions without Identification or Authentication (AC-14)

The agency must:

a. Identify specific user actions that can be performed on the information system without identification or authentication consistent with agency missions/business functions. FTI may not be disclosed to individuals on the information system without identification and authentication
b. Document and provide supporting rationale in the SSR for the information system the user actions not requiring identification or authentication

Examples of access without identification and authentication would be instances in which the agency maintains a publicly accessible website for which no authentication is required.

9.3.1.12 Remote Access (AC-17)

The agency must:

a. Establish and document usage restrictions, configuration/connection requirements, and implementation guidance for each type of remote access allowed
b. Authorize remote access to the information system prior to allowing such connections
c. Authorize and document the execution of privileged commands and access to security-relevant information via remote access for compelling operational needs only (CE4)

The information system must:

a. Monitor and control remote access methods (CE1)
b. Implement cryptographic mechanisms to protect the confidentiality and integrity of remote access sessions where FTI is transmitted over the remote connection and (CE2)
c. Route all remote accesses through a limited number of managed network access control points (CE3)

Remote access is defined as any access to an agency information system by a user communicating through an external network, for example, the Internet.

Any remote access where FTI is accessed over the remote connection must be performed using multi-factor authentication.

FTI cannot be accessed remotely by agency employees, agents, representatives, or contractors located offshore—outside of the United States territories, embassies, or military installations. Further, FTI may not be received, processed, stored, transmitted, or disposed of by IT systems located offshore.

9.3.1.13 Wireless Access (AC-18)

The agency must:

a. Establish usage restrictions, configuration/connection requirements, and implementation guidance for wireless access
b. Authorize wireless access to the information system prior to allowing such connections
c. Employ a wireless intrusion detection system to identify rogue wireless devices and to detect attack attempts and potential compromises/breaches to the information system (SI-4, CE14)

The information system must protect wireless access to the system using authentication and encryption. (CE1)

Additional requirements for protecting FTI on wireless networks are provided in *Section 9.4.18, Wireless Networks*.

9.3.1.14 Access Control for Mobile Devices (AC-19)

A mobile device is a computing device that (i) has a small form factor such that it can easily be carried by a single individual; (ii) is designed to operate without a physical connection (e.g., wirelessly transmit or receive information); (iii) possesses local, non-removable, or removable data storage; and (iv) includes a self-contained power source.

The agency must:

a. Establish usage restrictions, configuration requirements, connection requirements, and implementation guidance for agency-controlled mobile devices
b. Authorize the connection of mobile devices to agency information systems
c. Employ encryption to protect the confidentiality and integrity of information on mobile devices (e.g., smartphones and laptop computers) (CE5)
b. Purge/wipe information from mobile devices based on 10 consecutive, unsuccessful device logon attempts (e.g., personal digital assistants, smartphones and tablets). Laptop computers are excluded from this requirement (AC-7, CE2)

Additional requirements on protecting FTI accessed by mobile devices are provided in *Section 9.4.8, Mobile Devices*.

9.3.1.15 Use of External Information Systems (AC-20)

Unless approved by the Office of Safeguards, the agency must prohibit:

a. Access to FTI from external information systems, other than through a virtual desktop infrastructure (see *Section 9.4.13 Virtual Desktop Infrastructure*)
b. Use of agency-controlled portable storage devices (e.g., flash drives, external hard drives) containing FTI on external information systems (CE2)
c. Use of non-agency-owned information systems; system components; or devices to process, store, or transmit FTI; any non-agency-owned information system usage requires the agency to notify the Office of Safeguards 45 days prior to implementation (see Section 7.4, *45-Day Notification Reporting Requirements)* (CE3)

The agency may allow the use of personally-owned devices, without notification, only for the following purposes:

a. Bring Your Own Device (BYOD) used to access e-mail, where all requirements in Section 9.4.8 Mobile Devices are met
b. Remote access through a virtual desktop infrastructure (VDI) environment, where all requirements in Section 9.4.13 Virtual Desktop Infrastructure are met

External information systems, or non-agency-owned equipment, include any technology used to receive, process, transmit, or store FTI that is not owned and managed by the agency. A subset of external information systems is personally-owned devices, which include any device owned by an individual employee, rather than the agency itself.

9.3.1.16 Information Sharing (AC-21)

The agency must restrict the sharing/re-disclosure of FTI to only those authorized in IRC 6103 and as approved by the Office of Safeguards.

9.3.1.17 Publicly Accessible Content (AC-22)

The agency must:

a. Designate individuals authorized to post information onto a publicly accessible information system
b. Train authorized individuals to ensure that publicly accessible information does not contain FTI
c. Review the proposed content of information prior to posting onto the publicly accessible information system to ensure that FTI is not included
d. Review the content on the publicly accessible information system for FTI, at a minimum, quarterly and remove such information, if discovered

9.3.2 Awareness and Training

9.3.2.1 Security Awareness and Training Policy and Procedures (AT-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:

    1. A security awareness and training policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the security awareness and training policy and associated security awareness and training controls

b. Review and update the current:

    1. Security awareness and training policy every three years (or if there is a significant change)
    2. Security awareness and training procedures at least annually

9.3.2.2 Security Awareness Training (AT-2)

The agency must:

a. Provide basic security awareness training to information system users (including managers, senior executives, and contractors):

    1. As part of initial training for new users
    2. When required by information system changes
    3. At least annually thereafter

b. Include security awareness training on recognizing and reporting potential indicators of insider threat. (CE2)

This section is closely coupled with Section 6.3, Disclosure Awareness Training, which provides the requirement for general FTI disclosure awareness training; however, this control is focused on information security and operational security awareness.

Insider threat training should bring awareness of the potential for individuals (e.g., employees, contractors, former employees) to use insider knowledge of sensitive agency information (e.g., security practices, systems that hold sensitive data) to perform malicious actions, which could include the unauthorized access or re-disclosure of FTI.

9.3.2.3 Role-Based Security Training (AT-3)

The agency must provide role-based security training to personnel with assigned security roles and responsibilities:

a. Before authorizing access to the information system or performing assigned duties that require access to FTI
b. When required by information system changes
c. At least annually thereafter

Personnel with security roles and responsibilities include, but are not limited to, the following positions: Information System Security Manager, Information System Security Officer, Security Specialist, Network Administrator, Systems Administrator, Database Administrator, Programmer/Systems Analyst, System Owner, Systems Designer/Systems Developer, helpdesk.

Note: Training conducted under this section is distinct from Section 6.3, Disclosure Awareness, and Section 9.3.2.2, Security Awareness Training (AT-2).

9.3.2.4 Security Training Records (AT-4)

The agency must:

a. Document and monitor individual information system security training activities, including basic security awareness training and specific information system security training
b. Retain individual training records for a period of five years

9.3.3 Audit and Accountability

9.3.3.1 Audit and Accountability Policy and Procedures (AU-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. An audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance

2. Procedures to facilitate the implementation of the audit and accountability policy and associated audit and accountability controls

b. Review and update the current:

1. Audit and accountability policy every three years
2. Audit and accountability procedures at least annually.

9.3.3.2 Audit Events (AU-2)

Security-relevant events must enable the detection of unauthorized access to FTI data. Auditing must be enabled to the greatest extent necessary to capture access, modification, deletion, and movement of FTI by each unique user.

The agency must:

a. Determine that the information system is capable, at a minimum, of auditing the following event types:
   1. Log onto system
   2. Log off of system
   3. Change of password
   4. All system administrator commands, while logged on as system administrator
   5. Switching accounts or running privileged actions from another account, (e.g., Linux/Unix SU or Windows RUNAS)
   6. Creation or modification of super-user groups
   7. Subset of security administrator commands, while logged on in the security administrator role
   8. Subset of system administrator commands, while logged on in the user role
   9. Clearing of the audit log file
   10. Startup and shutdown of audit functions
   11. Use of identification and authentication mechanisms (e.g., user ID and password)
   12. Change of file or user permissions or privileges (e.g., use of suid/guid, chown, su)
   13. Remote access outside of the corporate network communication channels (e.g., modems, dedicated VPN) and all dial-in access to the system
   14. Changes made to an application or database by a batch file
   15. Application-critical record changes
   16. Changes to database or application records, where the application has been bypassed to produce the change (via a file or other database utility)
   17. All system and data interactions concerning FTI
   18. Additional platform-specific events, as defined in SCSEMs located on the Office of Safeguards website
b. Coordinate the security audit function with other agency entities requiring audit-related information to enhance mutual support and to help guide the selection of auditable events
c. Provide a rationale for why the auditable events are deemed to be adequate to support after-the-fact investigations of security incidents
d. Review and update the audited events at a minimum, annually (CE3)

Access to FTI must be audited at the operating system, software, and database levels. Software and platforms have differing audit capabilities. Each individual platform audit capabilities and requirements are maintained on the platform-specific Office of Safeguards SCSEM, which is available on the IRS Office of Safeguards website.

9.3.3.3 Content of Audit Records (AU-3)

The information system must:

a. Generate audit records containing information that establishes what type of event occurred, when the event occurred, where the event occurred, the source of the event, the outcome of the event, and the identity of any individuals or subjects associated with the event
b. Generate audit records containing details to facilitate the reconstruction of events if unauthorized activity or a malfunction occurs or is suspected in the audit records for audit events identified by type, location, or subject (CE1)

9.3.3.4 Audit Storage Capacity (AU-4)

The agency must allocate audit record storage capacity to retain audit records for the required audit retention period of seven years.

9.3.3.5 Response to Audit Processing Failures (AU-5)

The information system must:

a. Alert designated agency officials in the event of an audit processing failure
b. Monitor system operational status using operating system or system audit logs and verify functions and performance of the system. Logs shall be able to identify where system process failures have taken place and provide information relative to corrective actions to be taken by the system administrator
c. Provide a warning when allocated audit record storage volume reaches a maximum audit record storage capacity (CE1)

9.3.3.6 Audit Review, Analysis, and Reporting (AU-6)

The agency must:

a. Review and analyze information system audit records at least weekly or more frequently at the discretion of the information system owner for indications of unusual activity related to potential unauthorized FTI access
b. Report findings according to the agency incident response policy. If the finding involves a potential unauthorized disclosure of FTI, the appropriate special agent-in-charge, Treasury Inspector General for Tax Administration (TIGTA), and the IRS Office of Safeguards must be contacted, as described in *Section 10.0, Reporting Improper Inspections or Disclosures*.

The Office of Safeguards recommends agencies identify events that may indicate a potential unauthorized access to FTI. This recommendation is not a requirement at this time, but agencies are encouraged to contact the Office of Safeguards with any questions regarding implementation strategies. Methods of detecting unauthorized access to FTI include matching audit trails to access attempts (successful or unsuccessful) across the following categories:

Table 10 – Proactive Auditing Methods to Detect Unauthorized Access to FTI

Do Not Access List	Create a Do Not Access list to identify high-profile individuals or companies whose records have a high probability of being accessed without proper authorization
Time of Day Access	Identify suspicious behavior by tracking FTI accesses outside normal business hours
Name Searches	Detect potential unauthorized access by monitoring name searches (especially searches on the same last name as the employee)
Previous Accesses	Identify employee accesses to Tax Identification Numbers (TINs) that the employee has accessed in the past but currently does not have a case assignment or need to access
Volume	Monitor the volume of accesses a person performs and compare them to past case assignment levels
Zip Code	Determine whether an employee is accessing taxpayers whose address of record is geographically close to the employee's home or work location (i.e., same building, zip code, block)
Restricted TIN	Monitor all TINs associated with past employees' tax returns (e.g., self, spouse, children, businesses).

It is recommended the agency define a frequency in which the preceding categories are updated for an individual to ensure the information is kept current.

9.3.3.7 Audit Reduction and Report Generation (AU-7)

The information system must provide an audit reduction and report generation capability that:

a. Supports on-demand audit review, analysis, and reporting requirements and after-the-fact investigations of security incidents; and
b. Does not alter the original content or time ordering of audit records.

9.3.3.8 Time Stamps (AU-8)

The information system must:

a. Use internal system clocks to generate time stamps for audit records
b. Record time stamps for audit records that can be mapped to Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT)
c. Compare and synchronize the internal information system clocks to an enterprise-wide authoritative time source. Where possible, synchronize enterprise time source to an external source (e.g., NIST, Naval Observatory).

9.3.3.9 Protection of Audit Information (AU-9)

The information system must protect audit information and audit tools from unauthorized access, modification, and deletion.

The agency must authorize access to manage audit functionality only to designated security administrator(s) or staff other than the system and network administrator. System and network administrators must not have the ability to modify or delete audit log entries. (CE4)

9.3.3.10 Audit Record Retention (AU-11)

The agency must retain audit records for the events identified in Section 9.3.3.2, Audit Events (AU-2) for seven years to provide support for after-the-fact investigations of security incidents and to meet regulatory and agency information retention requirements.

9.3.3.11 Audit Generation (AU-12)

The information system must:

a. Provide audit record generation capability for the auditable events defined in *Section 9.3.3.2, Audit Events (AU-2)*
b. Allow designated agency officials to select which auditable events are to be audited by specific components of the information system
c. Generate audit records for the events with the content defined in *Section 9.3.3.4, Content of Audit Records (AU-3).*

9.3.3.12 Cross-Agency Auditing (AU-16)

The agency must employ mechanisms for coordinating the access and protection of audit information among external organizations when audit information is transmitted across agency boundaries.

> *This requirement applies to outsourced data centers or cloud providers. The provider must be held accountable to protect and share audit information with the agency through the contract.*

See *Section 9.4.1, Cloud Computing Environments* for additional cloud computing requirements, including language for cloud computing requirements. Also see *Section 5.4, Controls over Processing* for information pertaining to consolidated data centers.

9.3.4 Security Assessment and Authorization

9.3.4.1 Security Assessment and Authorization Policy and Procedures (CA-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A security assessment and authorization policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the security assessment and authorization policy and associated security assessment and authorization controls
b. Review and update the current:
    1. Security assessment and authorization policy every three years
    2. Security assessment and authorization procedures at least annually

9.3.4.2 Security Assessments (CA-2)

The agency must:

a. Develop a security assessment plan that describes the scope of the assessment, including:
    1. Security controls and control enhancements under assessment
    2. Assessment procedures to be used to determine security control effectiveness
    3. Assessment environment, assessment team, and assessment roles and responsibilities
b. Assess the security controls in the information system and its environment at a minimum on an annual basis to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting established security requirements

c. Produce a security assessment report that documents the results of the assessment
d. Provide the results of the security control assessment to the agency's Authorizing Official

9.3.4.3 System Interconnections (CA-3)

The agency must:

a. Authorize connections from the information system to other information systems through the use of Interconnection Security Agreements
b. Document, for each interconnection, the interface characteristics, security requirements, and the nature of the information communicated
c. Review and update the system interconnection on an annual basis
d. Employ deny-all and allow-by-exception policy for allowing systems that receive, process, store, or transmit FTI to connect to external information systems (CE5)

9.3.4.4 Plan of Action and Milestones (CA-5)

The agency must:

a. Develop a POA&M for the information system to document the agency's planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities in the system
b. Update the existing POA&M on a quarterly basis, at a minimum, based on the findings from security controls assessments, security impact analyses, and continuous monitoring activities

   The POA&M must comprise of an all-inclusive tool or document for the agency to track vulnerabilities identified by the self-assessments, internal inspections, external audits and any other vulnerabilities identified for information systems that receive, process, store, or transmit FTI.

Additional information is available in Section 6.5, Plan of Action and Milestones.

9.3.4.5 Security Authorization (CA-6)

The agency must:

a. Assign a senior-level executive or manager as the authorizing official for the information system
b. Ensure that the authorizing official authorizes the information system for processing before commencing operations
c. Update the security authorization whenever there is a significant change to the system, or every three years, whichever occurs first

9.3.4.6 Continuous Monitoring (CA-7)

The agency must develop a continuous monitoring strategy and implement a continuous monitoring program that includes:

a. Establishment of agency-defined metrics to be monitored annually, at a minimum
b. Ongoing security control assessments in accordance with the agency continuous monitoring strategy
c. Ongoing security status monitoring of agency-defined metrics in accordance with the agency continuous monitoring strategy

9.3.5 Configuration Management

9.3.5.1 Configuration Management Policy and Procedures (CM-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A configuration management policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the configuration management policy and associated configuration management controls
b. Review and update the current:
    1. Configuration management policy every three years
    2. Configuration management procedures at least annually

9.3.5.2 Baseline Configuration (CM-2)

The agency must develop, document, and maintain under configuration control, a current baseline configuration of the information system.

The agency must review and update the baseline configuration of the information system: (CE1)

a. At a minimum annually
b. When required due to system upgrades, patches, or other significant changes
c. As an integral part of information system component installations and upgrades

The Office of Safeguards recommends using SCSEMs provided on the Office of Safeguards website for developing an information system baseline configuration.

9.3.5.3 Configuration Change Control (CM-3)

The agency must:

a. Determine the types of changes to the information system that are configuration controlled
b. Review proposed configuration-controlled changes to the information system and approve or disapprove such changes with explicit consideration for security impact analyses
c. Document configuration change decisions associated with the information system
d. Implement approved configuration-controlled changes to the information system
e. Retain records of configuration-controlled changes to the information system for the life of the system
f. Audit and review activities associated with configuration-controlled changes to the information system
g. Coordinate and provide oversight for configuration change control activities through a Configuration Control Board that convenes when configuration changes occur
h. Test, validate, and document changes to the information system before implementing the changes on the operational system (CE2)

9.3.5.4 Security Impact Analysis (CM-4)

The agency must analyze changes to the information system to determine potential security impacts prior to change implementation.

9.3.5.5 Access Restrictions for Change (CM-5)

The agency must define, document, approve, and enforce physical and logical access restrictions associated with changes to the information system.

9.3.5.6 Configuration Settings (CM-6)

The agency must:

a. Establish and document configuration settings for IT products that receive, process, store, or transmit FTI using Office of Safeguards–approved compliance requirements (e.g., SCSEMs, assessment tools) that reflect the most restrictive mode consistent with operational requirements
b. Implement the configuration settings
c. Identify, document, and approve any deviations from established configuration settings for information systems that receive, process, store, or transmit FTI
d. Monitor and control changes to the configuration settings in accordance with agency policies and procedures

The authoritative source for platform checklists used by the Office of Safeguards is the NIST Checklist Program Repository (http://checklists.nist.gov). Office of Safeguards SCSEMs may include compliance requirements from one or more of the following security benchmarks:

- *United States Government Configuration Baseline (USGCB)*
- *Center for Internet Security (CIS) Benchmarks*
- *Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGS)*
- *National Security Agency (NSA) Configuration Guides*

9.3.5.7 Least Functionality (CM-7)

The agency must:

a. Configure the information system to provide only essential capabilities
b. Prohibit or restrict the use of the functions, ports, protocols, or services as defined in Office of Safeguards–approved compliance requirements (e.g., SCSEMs, assessment tools)
c. Review the information system as part of vulnerability assessments to identify unnecessary or non-secure functions, ports, protocols, and services (see *Section 9.3.14.3, Vulnerability Scanning (RA-5)*)
d. Disable defined functions, ports, protocols, and services within the information system deemed to be unnecessary or non-secure

9.3.5.8 Information System Component Inventory (CM-8)

The agency must:

a. Develop and document an inventory of information system components that:
    1. Accurately reflects the current information system
    2. Includes all components that store, process, or transmit FTI
    3. Is at the level of granularity deemed necessary for tracking and reporting
    4. Includes information deemed necessary to achieve effective information system component accountability
b. Review and update the information system component inventory through periodic manual inventory checks or a network monitoring tool that automatically maintains the inventory
c. Update the inventory of information system components as an integral part of component installations, removals, and information system updates (CE1)

Additional requirements for maintaining a system component inventory are provided in *Section 9.4.12, System Component Inventory*, as well as *NIST SP 800-70 Security Configuration Checklists Program for IT Products- Guidance for Checklists Users and Developers.*

9.3.5.9 Configuration Management Plan (CM-9)

The agency must develop, document, and implement a configuration management plan for the information system that:

a. Addresses roles, responsibilities, and configuration management processes and procedures
b. Establishes a process for identifying configuration items throughout the system development life cycle (SDLC) and for managing the configuration of the configuration items
c. Defines the configuration items for the information system and places the configuration items under configuration management
d. Protects the configuration management plan from unauthorized disclosure and modification

9.3.5.10 Software Usage Restrictions (CM-10)

The agency must:

a. Use software and associated documentation in accordance with contract agreements and copyright laws
b. Track the use of software and associated documentation protected by quantity licenses to control copying and distribution
c. Control and document the use of peer-to-peer file sharing technology to ensure that this capability is not used for the unauthorized distribution, display, performance, or reproduction of copyrighted work

The agency must establish restrictions on the use of open source software. Open source software must: (CE1)

a. Be legally licensed
b. Approved by the agency IT department
c. Adhere to a secure configuration baseline checklist from the U.S. Government or industry

9.3.5.11 User-Installed Software (CM-11)

The agency must:

a. Establish policies governing the installation of software by users
b. Enforce software installation policies through automated methods
c. Monitor policy compliance on a continual basis

9.3.6 Contingency Planning

All FTI that is transmitted to agencies is backed up and protected within IRS facilities. As such, the focus of contingency planning controls is on the protection of FTI stored in backup media or used at alternative facilities and not focused on the availability of data. Agencies must develop applicable contingencies for ensuring that FTI is available, based upon their individual risk-based approaches.

9.3.6.1 Contingency Planning Policy and Procedures (CP-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A contingency planning policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the contingency planning policy and associated contingency planning controls
b. Review and update the current:
    1. Contingency planning policy every three years
    2. Contingency planning procedures at least annually

9.3.6.2 Contingency Plan (CP-2)

The agency must:

a. Develop a contingency plan for the information system that:
    1. Identifies essential missions and business functions and associated contingency requirements
    2. Provides recovery objectives, restoration priorities, and metrics
    3. Addresses contingency roles, responsibilities, and assigned individuals with contact information
    4. Addresses maintaining essential missions and business functions despite an information system disruption, compromise, or failure
    5. Addresses eventual, full information system restoration without deterioration of the security safeguards originally planned and implemented
    6. Is reviewed and approved by designated agency officials
b. Distribute copies of the contingency plan to key contingency personnel
c. Coordinate contingency planning activities with incident handling activities
d. Review the contingency plan for the information system at least annually

e. Update the contingency plan to address changes to the agency, information system, or environment of operation and problems encountered during contingency plan implementation, execution, or testing
f. Communicate contingency plan changes to key contingency personnel
g. Protect the contingency plan from unauthorized disclosure and modification

9.3.6.3 Contingency Training (CP-3)

The agency must provide contingency training to information system users consistent with assigned roles and responsibilities:

a. Prior to assuming a contingency role or responsibility
b. When required by information system changes
c. Annually thereafter

9.3.6.4 Contingency Plan Testing (CP-4)

The agency must:

a. Test the contingency plan for the information system, at a minimum annually, to determine the effectiveness of the plan and the agency's readiness to execute the plan
b. Review the contingency plan test results
c. Initiate corrective actions, if needed

9.3.6.5 Alternate Storage Site (CP-6)

The agency must:

a. Establish an alternate storage site, including necessary agreements to permit the storage and retrieval of information system backup information
b. Ensure that the alternate storage site provides information security safeguards that meet the minimum protection standards and the disclosure provisions of IRC 6103

9.3.6.6 Alternate Processing Site (CP-7)

The agency must:

a. Establish an alternate processing site, including necessary agreements to permit the transfer and resumption of information system operations, in accordance with the agency's contingency plan when the primary processing capabilities are unavailable
b. Ensure that equipment and supplies required to transfer and resume operations are available at the alternate processing site or contracts are in place to support delivery to the site within the agency-defined time period for transfer/resumption

c. Ensure that the alternate storage site provides information security safeguards that meet the minimum protection standards and the disclosure provisions of IRC 6103

9.3.6.7 Information System Backup (CP-9)

The agency must:

a. Conduct backups of user-level information, system-level information, and security-related documentation consistent with the defined frequency in the agency's contingency plan
b. Protect the confidentiality of backup information at storage locations pursuant to IRC 6103 requirements

9.3.6.8 Information System Recovery and Reconstitution (CP-10)

The agency must provide for the recovery and reconstitution of the information system to a known state after a disruption, compromise, or failure.

9.3.7 Identification and Authentication

9.3.7.1 Identification and Authentication Policy and Procedures (IA-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. An identification and authentication policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the identification and authentication policy and associated identification and authentication controls
b. Review and update the current:
    1. Identification and authentication policy every three years
    2. Identification and authentication procedures at least annually

9.3.7.2 Identification and Authentication (Organizational Users) (IA-2)

The information system must:

a. Uniquely identify and authenticate agency users (or processes acting on behalf of agency users)
b. Implement multi-factor authentication for all remote network access to privileged and non-privileged accounts for information systems that receive, process, store, or transmit FTI. (CE1, CE2)
c. Implement multi-factor authentication for remote access to privileged and non-privileged accounts such that one of the factors is provided by a device separate from the system gaining access. NIST SP 800-63 allows the use of software tokens. (CE11)

9.3.7.3 Device Identification and Authentication (IA-3)

The information system must uniquely identify and authenticate devices before establishing a connection.

Organizational devices requiring unique device-to-device identification and authentication may be defined by type, device, or a combination. Information systems typically use of the following to identify and authenticate:

i. Shared known information (e.g., MAC or IP address)
ii. An organizational authentication solution (e.g., IEEE 802.1x and EAP, Radius server, Kerberos).

9.3.7.4 Identifier Management (IA-4)

The agency must manage information system identifiers by:

a. Receiving authorization from designated agency officials to assign an individual, group, role, or device identifier
b. Selecting an identifier that identifies an individual, group, role, or device
c. Assigning the identifier to the intended individual, group, role, or device
d. Preventing reuse of identifiers
e. Disabling the identifier after 120 days

9.3.7.5 Authenticator Management (IA-5)

The agency must manage information system authenticators by:

a. Verifying, as part of the initial authenticator distribution, the identity of the individual, group, role, or device receiving the authenticator
b. Establishing initial authenticator content for authenticators defined by the agency
c. Ensuring that authenticators have sufficient strength of mechanism for their intended use
d. Establishing and implementing administrative procedures for initial authenticator distribution, for lost/compromised or damaged authenticators, and for revoking authenticators

e. Changing default content of authenticators prior to information system installation
f. Establishing minimum and maximum lifetime restrictions and reuse conditions for authenticators
g. Changing/refreshing authenticators
h. Protecting authenticator content from unauthorized disclosure and modification

i. Requiring individuals to take, and having devices implement, specific security safeguards to protect authenticators
j. Changing authenticators for group/role accounts when membership to those accounts changes

The information system must, for password-based authentication:

a. Enforce minimum password complexity of:

    1. Eight characters
    2. At least one numeric and at least one special character
    3. A mixture of at least one uppercase and at least one lowercase letter
    4. Storing and transmitting only encrypted representations of passwords
b. Enforce password minimum lifetime restriction of one day
c. Enforce non-privileged account passwords to be changed at least every 90 days
d. Enforce privileged account passwords to be changed at least every 60 days
e. Prohibit password reuse for 24 generations
f. Allow the use of a temporary password for system logon requiring an immediate change to a permanent password
g. Password-protect system initialization (boot) settings

9.3.7.6 Authenticator Feedback (IA-6)

The information system obscures feedback of authentication information during the authentication process to protect the information from possible exploitation/use by unauthorized individuals.

9.3.7.7 Cryptographic Module Authentication (IA-7)

The information system must implement mechanisms for authentication to a cryptographic module that meets the requirements of applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance for such authentication.

Validation provides assurance that when agency implements cryptography to protect FTI, the encryption functions have been examined in detail and will operate as intended.

All electronic transmissions of FTI must be encrypted using FIPS 140-2 validated cryptographic modules. A product does not meet the FIPS 140-2 requirements by simply implementing an approved security function. Only modules tested and validated to FIPS 140-2 meet the applicability requirements for cryptographic modules to protect sensitive information. NIST maintains a list of validated cryptographic modules on its website http://csrc.nist.gov/.

9.3.7.8 Identification and Authentication (Non-Organizational Users) (IA-8)

The information system must uniquely identify and authenticate non-agency users (or processes acting on behalf of non-agency users).

9.3.8 Incident Response

These incident response controls apply to both physical and information system security relative to the protection of FTI.

9.3.8.1 Incident Response Policy and Procedures (IR-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. An incident response policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the incident response policy and associated incident response controls
b. Review and update the current:
    1. Incident response policy every three years
    2. Incident response procedures at least annually

9.3.8.2 Incident Response Training (IR-2)

Agencies must train personnel with access to FTI, including contractors and consolidated data center employees if applicable, in their incident response roles on the information system and FTI. The agency must provide incident response training to information system users consistent with assigned roles and responsibilities:

a. Prior to assuming an incident response role or responsibility
b. When required by information system changes
c. Annually thereafter

9.3.8.3 Incident Response Testing (IR-3)

Agencies entrusted with FTI must test the incident response capability at least annually.

a. Agencies must perform tabletop exercises using scenarios that include a breach of FTI and should test the agency's incident response policies and procedures.
b. A subset of all employees and contractors with access to FTI must be included in table top exercises.
c. Each tabletop exercise must produce an after-action report to improve existing processes, procedures, and policies.

See *Section 10.3, Incident Response Procedures*, for specific instructions on incident response requirements where FTI is involved.

9.3.8.4 Incident Handling (IR-4)

The agency must:

a. Implement an incident handling capability for security incidents that includes preparation, detection and analysis, containment, eradication, and recovery
b. Coordinate incident handling activities with contingency planning activities
c. Incorporate lessons learned from ongoing incident handling activities into incident response procedures, training, and testing/exercises
d. implement the resulting changes accordingly

9.3.8.5 Incident Monitoring (IR-5)

The agency must track and document all physical and information system security incidents potentially affecting the confidentiality of FTI.

9.3.8.6 Incident Reporting (IR-6)

The agency must:

a. Require personnel to report suspected security incidents to internal agency incident response resources upon discovery of the incident
b. Contact the appropriate special agent-in-charge, TIGTA, and the IRS Office of Safeguards immediately but no later than 24 hours after identification of a possible issue involving FTI

Refer to *Section 10.0, Reporting Improper Inspections or Disclosures*, for more information on incident reporting requirements required by the Office of Safeguards.

9.3.8.7 Incident Response Assistance (IR-7)

The agency must provide an incident response support resource, integral to the agency incident response capability that offers advice and assistance to users of the information system for the handling and reporting of security incidents.

9.3.8.8 Incident Response Plan (IR-8)

The agency must:

a. Develop an incident response plan that:
    1. Provides the agency with a roadmap for implementing its incident response capability
    2. Describes the structure of the incident response capability
    3. Provides a high-level approach for how the incident response capability fits into the overall agency

4. Meets the unique requirements of the agency, which relate to mission, size, structure, and functions
5. Defines reportable incidents
6. Provides metrics for measuring the incident response capability within the agency
7. Defines the resources and management support needed to effectively maintain and mature an incident response capability
8. Is reviewed and approved by designated agency officials

b. Distribute copies of the incident response plan to authorized incident response personnel
c. Review the incident response plan at a minimum on an annual basis or as an after-action review
d. Update the incident response plan to address system/agency changes or problems encountered during plan implementation, execution, or testing
e. Communicate incident response plan changes to authorized incident response personnel
f. Protect the incident response plan from unauthorized disclosure and modification

9.3.8.9 Information Spillage Response (IR-9)

The agency must respond to information spills by:

a. Identifying the specific information involved in the information system contamination
b. Alerting authorized incident response personnel of the information spill using a method of communication not associated with the spill
c. Isolating the contaminated information system or system component
d. Eradicating the information from the contaminated information system or component
e. Identifying other information systems or system components that may have been subsequently contaminated

9.3.9 Maintenance

9.3.9.1 System Maintenance Policy and Procedures (MA-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A system maintenance policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance

2. Procedures to facilitate the implementation of the system maintenance policy and associated system maintenance controls

b. Review and update the current:

1. System maintenance policy every three years
2. System maintenance procedures at least annually

9.3.9.2 Controlled Maintenance (MA-2)

The agency must:

a. Schedule, perform, document, and review records of maintenance and repairs on information system components in accordance with manufacturer or vendor specifications and agency requirements
c. Approve and monitor all maintenance activities, whether performed on site or remotely and whether the equipment is serviced on site or removed to another location
d. Require that designated agency officials explicitly approve the removal of the information system or system components from agency facilities for off-site maintenance or repairs
e. Sanitize equipment to remove all FTI from associated media prior to removal from agency facilities for off-site maintenance or repairs
f. Check all potentially impacted security controls to verify that the controls are still functioning properly following maintenance or repair actions and update agency maintenance records accordingly

9.3.9.3 Maintenance Tools (MA-3)

The agency must approve, control, and monitor information system maintenance tools.

9.3.9.4 Non-Local Maintenance (MA-4)

The agency must:

a. Approve and monitor non-local maintenance and diagnostic activities
b. Allow the use of non-local maintenance and diagnostic tools only as consistent with agency policy and documented in the security plan for the information system
c. Employ multi-factor authenticator in the establishment of non-local maintenance and diagnostic sessions
d. Maintain records for non-local maintenance and diagnostic activities
e. Terminates session and network connections when non-local maintenance is completed
g. Documents policies and procedures for the establishment and use of non-local maintenance and diagnostic connections (CE2)

9.3.9.5 Maintenance Personnel (MA-5)

The agency must:

a. Establish a process for maintenance personnel authorization and maintain a list of authorized maintenance organizations or personnel
b. Ensure that non-escorted personnel performing maintenance on the information system have required access authorizations
c. Designate agency personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations

9.3.10 Media Protection

Information system media is defined to include both digital and non-digital media.

9.3.10.1 Media Protection Policy and Procedures (MP-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A media protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the media protection policy and associated media protection controls
b. Review and update the current:
    1. Media protection policy every three years
    2. Media protection procedures at least annually

9.3.10.2 Media Access (MP-2)

The agency must restrict access to digital and non-digital media containing FTI to authorized individuals.

9.3.10.3 Media Marking (MP-3)

The agency must label information system media containing FTI to indicate the distribution limitations and handling caveats.

The agency must label removable media (CDs, DVDs, diskettes, magnetic tapes, external hard drives and flash drives) and information system output containing FTI (reports, documents, data files, back-up tapes) indicating "Federal Tax Information". Notice 129-A and Notice 129-B IRS provided labels can be used for this purpose.

9.3.10.4 Media Storage (MP-4)

The agency must:

a. Physically control and securely store media containing FTI
b. Protect information system media until the media is destroyed or sanitized using approved equipment, techniques, and procedures

See *Section 4.0, Secure Storage—IRC 6103(p)(4)(B)*, on additional secure storage requirements.

9.3.10.5 Media Transport (MP-5)

The agency must:

a. Protect and control digital (e.g., diskettes, magnetic tapes, external/removable hard drives, flash/thumb drives, CDs, DVDs) and non-digital (e.g., paper) media during transport outside of controlled areas
b. Maintain accountability for information system media during transport outside of controlled areas
b. Document activities associated with the transport of information system media—the agency must use transmittals or an equivalent tracking method to ensure FTI reaches its intended destination
c. Restrict the activities associated with the transport of information system media to authorized personnel

The information system must implement cryptographic mechanisms to protect the confidentiality and integrity of information stored on digital media during transport outside of controlled areas. (CE4)

See *Section 4.4, FTI in Transit*, for more information on transmittals and media transport requirements.

9.3.10.6 Media Sanitization (MP-6)

The agency must:

a. Sanitize media containing FTI prior to disposal, release out of agency control, or release for reuse using IRS-approved sanitization techniques in accordance with applicable federal and agency standards and policies
b. Employ sanitization mechanisms with the strength and integrity commensurate with the security category or classification of the information
c. Review, approve, track, document, and verify media sanitization and disposal actions (CE1)

Agencies must review and approve media to be sanitized to ensure compliance with records-retention policies. Tracking/documenting actions include, for example, listing personnel who reviewed and approved sanitization and disposal actions, types of media sanitized, specific files stored on the media, sanitization methods used, date and time of the sanitization actions, personnel who performed the sanitization, verification actions taken, personnel who performed the verification, and disposal action taken. Agencies verify that the sanitization of the media was effective prior to disposal (see *Section 9.3.17.9, Information Handling and Retention (SI-12)*).

The agency must restrict the use of information system media (e.g., diskettes, magnetic tapes, external/removable hard drives, flash/thumb drives, CDs, DVDs) on information systems that receive, process, store, or transmit FTI using physical or automated controls.

Additional requirements for protecting FTI during media sanitization are provided in *Section 9.3.10.6, Media Sanitization (MP-6)*; *Section 9.4.7, Media Sanitization*; and *Exhibit 10, Data Warehouse Security Requirements*.

9.3.11 Physical and Environmental Protection

9.3.11.1 Physical and Environmental Protection Policy and Procedures (PE-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A physical and environmental protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the physical and environmental protection policy and associated physical and environmental protection controls
b. Review and update the current:
    1. Physical and environmental protection policy every three years
    2. Physical and environmental protection procedures at least annually

9.3.11.2 Physical Access Authorizations (PE-2)

The agency must:

a. Develop, approve, and maintain a list of individuals with authorized access to the facility where the information system resides
b. Issue authorization credentials for facility access
c. Review the access list detailing authorized facility access by individuals, at least annually
d. Remove individuals from the facility access list when access is no longer required
e. Enforce physical access authorizations to the information system in addition to the physical access controls for the facility at spaces where FTI is received, processed, stored, or transmitted (CE1)

9.3.11.3 Physical Access Control (PE-3)

The agency must:

a. Enforce physical access authorizations at entry/exit points to facilities where the information systems that receive, process, store, or transmit FTI reside by:
    1. Verifying individual access authorizations before granting access to the facility
    2. Controlling ingress/egress to the facility using physical access control systems/devices or guards
b. Maintain physical access audit logs for entry/exit points
c. Provide security safeguards to control access to areas within the facility officially designated as publicly accessible
d. Escort visitors and monitor visitor activity
e. Secure keys, combinations, and other physical access devices
f. Inventory physical access devices
g. Change combinations and keys when an employee who knows the combination retires, terminates employment, or transfers to another position or at least annually

9.3.11.4 Access Control for Transmission Medium (PE-4)

The agency must control physical access within agency facilities.

9.3.11.5 Access Control for Output Devices (PE-5)

The agency must control physical access to information system output devices to prevent unauthorized individuals from obtaining the output.

Monitors, printers, copiers, scanners, fax machines, and audio devices are examples of information system output devices.

9.3.11.6 Monitoring Physical Access (PE-6)

The agency must:

a. Monitor physical access to the facility where the information system resides to detect and respond to physical security incidents
b. Review physical access logs annually
c. Coordinate results of reviews and investigations with the agency incident response capability
d. Monitor physical intrusion alarms and surveillance equipment (CE1)

9.3.11.7 Visitor Access Records (PE-8)

The agency must:

a. Maintain visitor access records to the facility where the information system resides for 5 years
b. Review visitor access records, at least annually

Also see *Section 4.3, Restricted Area Access*, for visitor access (AAL) requirements.

9.3.11.8 Delivery and Removal (PE-16)

The agency must authorize, monitor, and control information system components entering and exiting the facility and maintain records of those items.

9.3.11.9 Alternate Work Site (PE-17)

The agency must:

a. Employ Office of Safeguards requirements at alternate work sites
b. Assess, as feasible, the effectiveness of security controls at alternate work sites
c. Provide a means for employees to communicate with information security personnel in case of security incidents or problems

Alternate work sites may include, for example, government facilities or private residences of employees (see *Section 4.7, Telework Locations*, for additional requirements).

9.3.11.10 Location of Information System Components (PE-18)

The agency must position information system components within the facility to minimize potential damage from physical and environmental hazards and to minimize the opportunity for unauthorized access.

For additional guidance, see *Section 4.3, Restricted Area Access*, and *Section 4.5, Physical Security of Computers, Electronic, and Removable Media.*

9.3.12 Planning

9.3.12.1 Security Planning Policy and Procedures (PL-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A security planning policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the security planning policy and associated security planning controls
b. Review and update the current:
    1. Security planning policy every three years
    2. Security planning procedures at least annually

9.3.12.2 System Security Plan (PL-2)

An approved and accurate SSR satisfies the requirements for the SSP (see *Section 7.0, Reporting Requirements—6103(p)(4)(E)*).

The agency must:

a. Develop an SSR to include information systems that:
    1. Is consistent with the agency's safeguarding requirements
    2. Explicitly defines the information systems that receive, process, store, or transmit FTI
    3. Describes the operational context of the information system in terms of missions and business processes
    4. Describes the operational environment for the information system and relationships with or connections to other information systems
    5. Provides an overview of the security requirements for the system
    6. Identifies any relevant overlays, if applicable
    7. Describes the security controls in place or planned for meeting those requirements, including a rationale for the tailoring and supplementation decisions
    8. Is reviewed and approved by the authorizing official or designated representative prior to plan implementation
b. Distribute copies of the SSR and communicate subsequent changes to the SSR to designated agency officials and the Office of Safeguards
c. Review the SSR for the information system on an annual basis

d. Update the SSR to address changes to the information system/environment of operation or problems identified during plan implementation or security control assessments
e. Protect the SSR from unauthorized disclosure and modification

9.3.12.3 Rules of Behavior (PL-4)

The agency must:

a. Establish and make readily available to individuals requiring access to the information system, the rules that describe their responsibilities and expected behavior with regard to information and information system usage
b. Receive a signed acknowledgement from such individuals, indicating that they have read, understand, and agree to abide by the rules of behavior, before authorizing access to information and the information system
c. Review and update the rules of behavior at a minimum annually
d. Require individuals who have signed a previous version of the rules of behavior to read and re-sign when the rules of behavior are revised/updated
e. Include in the rules of behavior, explicit restrictions on the use of social media/networking sites and posting agency information on public websites—the Office of Safeguards prohibits sharing FTI using any social media/networking sites (CE1)

9.3.13 Personnel Security

(See also *Section 5.1.1 Background Investigation Minimum Requirements*)

9.3.13.1 Personnel Security Policy and Procedures (PS-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:

    1. A personnel security policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the personnel security policy and associated personnel security controls

b. Review and update the current:

    1. Personnel security policy every three years
    2. Personnel security procedures at least annually

9.3.13.2 Position Risk Designation (PS-2)
(See also *Section 5.1.1 Background Investigation Minimum Requirements*)

The agency must:

a. Assign a risk designation to all agency positions
b. Establish screening criteria for individuals filling those positions
c. Review and update position risk designations annually
d. Review and update position risk designations annually

9.3.13.3 Personnel Screening (PS-3)
(See also *Section 5.1.1 Background Investigation Minimum Requirements*)

The agency must:

a. Screen individuals prior to authorizing access to the information system
b. Rescreen individuals according to agency-defined conditions requiring rescreening

9.3.13.4 Termination (PS-4)

The agency, upon termination of individual employment must:

a. Disable information system access
b. Terminate/revoke any authenticators/credentials associated with the individual
c. Conduct exit interviews, as needed
d. Retrieve all security-related agency information system–related property
e. Retain access to agency information and information systems formerly controlled by the terminated individual
f. Notify agency personnel upon termination of the employee

9.3.13.5 Personnel Transfer (PS-5)

The agency must:

a. Review and confirm ongoing operational need for current logical and physical access authorizations to information systems/facilities when individuals are reassigned or transferred to other positions within the agency
b. Initiate transfer or reassignment actions following the formal transfer action
c. Modify access authorizations as needed to correspond with any changes in operational need due to reassignment or transfer
d. Notify designated agency personnel, as required

9.3.13.6 Access Agreements (PS-6)

Before authorizing access to FTI, the agency must:

a. Develop and document access agreements for agency information systems
b. Review and update the access agreements, at least annually
c. Ensure that individuals requiring access to agency information and information systems:
    1. Sign appropriate access agreements prior to being granted access
    2. Re-sign access agreements to maintain access to agency information systems when access agreements have been updated or at least annually

9.3.13.7 Third-Party Personnel Security (PS-7)

The agency must:

a. Establish personnel security requirements, including security roles and responsibilities for third-party providers
b. Require third-party providers to comply with personnel security policies and procedures established by the agency
c. Document personnel security requirements
e. Require third-party providers to notify the agency of any personnel transfers or terminations of third-party personnel who possess agency credentials or badges or who have information system privileges
f. Monitor provider compliance

9.3.13.8 Personnel Sanctions (PS-8)

The agency must:

a. Employ a formal sanctions process for individuals failing to comply with established information security policies and procedures
b. Notify designated agency personnel when a formal employee sanctions process is initiated, identifying the individual sanctioned and the reason for the sanction

9.3.14 Risk Assessment

9.3.14.1 Risk Assessment Policy and Procedures (RA-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:

    1. A risk assessment policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the risk assessment policy and associated risk assessment controls

b. Review and update the current:

1. Risk assessment policy every three years
2. Risk assessment procedures at least annually

9.3.14.2 Risk Assessment (RA-3)

The agency must:

a. Conduct an assessment of risk, including the likelihood and magnitude of harm, from the unauthorized access, use, disclosure, disruption, modification, or destruction of the information system and the information it processes, stores, or transmits
b. Document risk assessment results in a risk assessment report
c. Review risk assessment results at least annually
e. Disseminate risk assessment results to designated agency officials
f. Update the risk assessment report at least every three years or whenever there are significant changes to the information system or environment of operation (including the identification of new threats and vulnerabilities) or other conditions that may impact the security state of the system

9.3.14.3 Vulnerability Scanning (RA-5)

The agency must:

a. Scan for vulnerabilities in the information system and hosted applications at a minimum of monthly for all systems and when new vulnerabilities potentially affecting the system/applications are identified and reported
b. Employ vulnerability scanning tools and techniques that facilitate interoperability among tools and automate parts of the vulnerability management process by using standards for:
    1. Enumerating platforms, software flaws, and improper configurations
    2. Formatting checklists and test procedures
    3. Measuring vulnerability impact
c. Analyze vulnerability scan reports and results from security control assessments
d. Remediate legitimate vulnerabilities in accordance with an assessment of risk
e. Share information obtained from the vulnerability scanning process and security control assessments with designated agency officials to help eliminate similar vulnerabilities in other information systems (i.e., systemic weaknesses or deficiencies)
f. Employ vulnerability scanning tools that include the capability to readily update the information system vulnerabilities to be scanned (CE1)

9.3.15 System and Services Acquisition

9.3.15.1 System and Services Acquisition Policy and Procedures (SA-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A system and services acquisition policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the system and services acquisition policy and associated system and services acquisition controls

b. Review and update the current:

    1. System and services acquisition policy every three years
    2. System and services acquisition procedures at least annually

9.3.15.2 Allocation of Resources (SA-2)

The agency must:

a. Determine information security requirements for the information system or information system service in mission/business process planning
b. Determine, document, and allocate the resources required to protect the information system or information system service as part of its capital planning and investment control process
c. Establish a discrete line item for information security in agency programming and budgeting documentation

9.3.15.3 System Development Life Cycle (SA-3)

The agency must:

a. Manage the information system using an SDLC that incorporates information security considerations
b. Define and document information security roles and responsibilities throughout the SDLC
c. Identify individuals having information security roles and responsibilities
d. Integrate the agency information security risk management process into SDLC activities

9.3.15.4 Acquisition Process (SA-4)

The agency must include the following requirements, descriptions, and criteria, explicitly or by reference, in the acquisition contract for the information system, system component, or information system service in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, standards, guidelines, and agency mission/business needs:

a. Security functional requirements
b. Security strength requirements
c. Security assurance requirements
e. Security-related documentation requirements
f. Requirements for protecting security-related documentation
g. Description of the information system development environment and environment in which the system is intended to operate
h. Acceptance criteria

When applicable, the agency must require the developer of the information system, system component, or information system service to provide a description of the functional properties of the security controls to be employed (CE1)

9.3.15.5 Information System Documentation (SA-5)

The agency must:

a. Obtain administrator documentation for the information system, system component, or information system service that describes:
    1. Secure configuration, installation, and operation of the system, component, or service
    2. Effective use and maintenance of security functions/mechanisms
    3. Known vulnerabilities regarding configuration and use of administrative (i.e., privileged) functions
b. Obtain user documentation for the information system, system component, or information system service that describes:
    1. User-accessible security functions/mechanisms and how to effectively use those security functions/mechanisms
    2. Methods for user interaction, which enable individuals to use the system, component, or service in a more secure manner
    3. User responsibilities in maintaining the security of the system, component, or service
c. Document attempts to obtain information system, system component, or information system service documentation when such documentation is either unavailable or nonexistent
d. Protect documentation, as required
e. Distribute documentation to designated agency officials

9.3.15.6 Security Engineering Principles (SA-8)

The agency must apply information system security engineering principles in the specification, design, development, implementation, and modification of the information system.

Security engineering principles include, for example:

(i) developing layered protections
(ii) establishing sound security policy, architecture, and controls as the foundation for design
(iii) incorporating security requirements into the system development lifecycle
(iv) delineating physical and logical security boundaries
(v) ensuring that system developers are trained on how to build secure software
(vi) tailoring security controls to meet organizational and operational needs
(vii) performing threat modeling to identify use cases, threat agents, attack vectors, and attack patterns as well as compensating controls and design patterns needed to mitigate risk
(viii) reducing risk to acceptable levels, thus enabling informed risk management decisions.

9.3.15.7 External Information System Services (SA-9)

The agency must:

a. Require that providers of external information system services comply with agency information security requirements and employ to include (at a minimum) security requirements contained within this publication and applicable federal laws, Executive Orders, directives, policies, regulations, standards, and established service-level agreements
b. Define and document government oversight and user roles and responsibilities with regard to external information system services
c. Monitor security control compliance by external service providers on an ongoing basis
d. Restrict the location of information systems that receive, process, store, or transmit FTI to areas within the United States territories, embassies, or military installations (CE5)

Agencies must prohibit the use of non-agency-owned information systems, system components, or devices that receive, process, store, or transmit FTI unless explicitly approved by the Office of Safeguards. For notification requirements, refer to Section 7.4.5, Non-Agency-Owned Information Systems.

The contract for the acquisition must contain Exhibit 7 language, as appropriate (see *Section 9.3.15.4, Acquisition Process (SA-4)*, and *Exhibit 7, Safeguarding Contract Language).*

9.3.15.8 Developer Configuration Management (SA-10)

The agency must require the developer of the information system, system component, or information system service to:

a. Perform configuration management during system, component, or service development, implementation, and operation
b. Document, manage, and control the integrity of changes to the system, component, or service
c. Implement only agency-approved changes to the system, component, or service
d. Document approved changes to the system, component, or service and the potential security impacts of such changes
b. Track security flaws and flaw resolution within the system, component, or service and report findings to designated agency officials

9.3.15.9 Developer Security Testing and Evaluation (SA-11)

The agency must require the developer of the information system, system component, or information system service to:

a. Create and implement a security assessment plan
b. Perform security testing/evaluation
c. Produce evidence of the execution of the security assessment plan and the results of the security testing/evaluation
d. Implement a verifiable flaw remediation process
e. Correct flaws identified during security testing/evaluation

9.3.15.10 Unsupported System Components (SA-22)

The agency must replace information system components (specifically security patches and/or product updates) when support for the components is no longer available from the developer, vendor, or manufacturer. During a Safeguards on-site review, any unsupported system that is identified will not be tested and will result in a critical finding.

9.3.16 System and Communications Protection

9.3.16.1 System and Communications Protection Policy and Procedures (SC-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A system and communications protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the system and communications protection policy and associated system and communications protection controls

b. Review and update the current:

1. System and communications protection policy every three years
2. System and communications protection procedures at least annually

9.3.16.2 Application Partitioning (SC-2)

The information system must separate user functionality (including user interface services) from information system management functionality.

9.3.16.3 Information in Shared Resources (SC-4)

The information system must prevent unauthorized and unintended information transfer via shared system resources.

9.3.16.4 Denial of Service Protection (SC-5)

The information system must protect against or limit the effects of denial of service attacks.

Refer to *NIST SP 800-61 R2, Computer Security Incident Handling Guide*, for additional information on denial of service.

9.3.16.5 Boundary Protection (SC-7)

The information system must:

a. Monitor and control communications at the external boundary of the system and at key internal boundaries within the system
b. Implement subnetworks for publicly accessible system components that are physically and logically separated from internal agency networks
c. Connect to external networks or information systems only through managed interfaces consisting of boundary protection devices arranged in accordance with agency security architecture requirements

Managed interfaces include, for example, gateways, routers, firewalls, guards, network-based malicious code analysis and virtualization systems, or encrypted tunnels implemented within the security architecture (e.g., routers protecting firewalls or application gateways residing on protected subnetworks).

The agency must limit the number of external network connections to the information system. (CE3)

The agency must: (CE4)

a. Implement a secure managed interface for each external telecommunication service
b. Establish a traffic flow policy for each managed interface
d. Protect the confidentiality and integrity of the information being transmitted across each interface

e. Document each exception to the traffic flow policy with a supporting mission/business need and duration of that need, and accept the associated risk
f. Review exceptions to the traffic flow policy at a minimum annually, and remove exceptions that are no longer supported by an explicit mission/business need

The information system at managed interfaces must deny network communications traffic by default and allow network communications traffic by exception (i.e., deny all, permit by exception). (CE5)

The information system must, in conjunction with a remote device, prevent the device from simultaneously establishing non-remote connections with the system and communicating via some other connection to resources in external networks. (CE7)

Additional requirements for protecting FTI on networks are provided in *Section 9.4.10, Network Protections.*

9.3.16.6 Transmission Confidentiality and Integrity (SC-8)

Information systems that receive, process, store, or transmit FTI, must:

a. Protect the confidentiality and integrity of transmitted information
b. Implement FIPS 140-2 cryptographic mechanisms to prevent unauthorized disclosure of FTI and detect changes to information during transmission across the wide area network (WAN) and within the local area network (LAN) (CE1)

The agency must ensure that all network infrastructure, access points, wiring, conduits, and cabling are within the control of authorized agency personnel. Network monitoring capabilities must be implemented to detect and monitor for suspicious network traffic. For physical security protections of transmission medium, see *Section 9.3.11.4, Access Control for Transmission Medium (PE-4).*

This control applies to both internal and external networks and all types of information system components from which information can be transmitted (e.g., servers, mobile devices, notebook computers, printers, copiers, scanners, fax machines).

9.3.16.7 Network Disconnect (SC-10)

The information system must terminate the network connection associated with a communications session at the end of the session or after 30 minutes of inactivity.

This control addresses the termination of network connections that are associated with communications sessions (i.e., network disconnect) in contrast to user-initiated logical sessions in AC-12.

9.3.16.8 Cryptographic Key Establishment and Management (SC-12)

The agency must establish and manage cryptographic keys for required cryptography employed within the information system.

Cryptographic key management and establishment can be performed using manual procedures or automated mechanisms with supporting manual procedures.

9.3.16.9 Cryptographic Protection (SC-13)

The information system must implement cryptographic modules in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.

9.3.16.10 Collaborative Computing Devices (SC-15)

The information system must:

a. Prohibit remote activation of collaborative computing devices
b. Provide an explicit indication of use to users physically present at the devices

Collaborative computing devices include, for example, networked white boards, cameras, and microphones. Explicit indication of use includes, for example, signals to users when collaborative computing devices are activated

9.3.16.11 Public Key Infrastructure Certificates (SC-17)

The agency must issue public key infrastructure certificates or obtain public key infrastructure certificates from an approved service provider.

9.3.16.12 Mobile Code (SC-18)

The agency must:

a. Define acceptable and unacceptable mobile code and mobile code technologies
c. Establish usage restrictions and implementation guidance for acceptable mobile code and mobile code technologies
d. Authorize, monitor, and control the use of mobile code within the information system

Mobile code technologies include, for example, Java, JavaScript, ActiveX, Postscript, PDF, Shockwave movies, Flash animations, and VBScript, which are common installations on most end user workstations. Usage restrictions and implementation guidance apply to both the selection and use of mobile code installed on servers and mobile code downloaded and executed on individual workstations and devices (e.g., tablet computers and smartphones).

9.3.16.13 Voice over Internet Protocol (SC-19)

The agency must:

a. Establish usage restrictions and implementation guidance for VoIP technologies based on the potential to cause damage to the information system if used maliciously
b. Authorize, monitor, and control the use of VoIP within the information system

Additional requirements for protecting FTI transmitted by VoIP systems are provided in *Section 9.4.15, VoIP Systems*.

9.3.16.14 Session Authenticity (SC-23)

The information system must protect the authenticity of communications sessions. This control addresses communications protection at the session level versus the packet level (e.g., sessions in service-oriented architectures providing Web-based services) and establishes grounds for confidence at both ends of communications sessions in ongoing identities of other parties and in the validity of information transmitted.

9.3.16.15 Protection of Information at Rest (SC-28)

The information system must protect the confidentiality and integrity of FTI at rest. Information at rest refers to the state of information when it is located on storage devices as specific components of information systems.

> *Agencies may employ different mechanisms to achieve confidentiality and integrity protections, including the use of cryptographic mechanisms, file share scanning, and integrity protection. Agencies may also employ other security controls, including, for example, secure offline storage in lieu of online storage, when adequate protection of information at rest cannot otherwise be achieved or when continuously monitoring to identify malicious code at rest.*
>
> *The confidentiality and integrity of information at rest shall be protected when located on a secondary (non-mobile) storage device (e.g., disk drive, tape drive) with cryptography mechanisms*

FTI stored on deployed user workstations, in non-volatile storage, shall be encrypted with FIPS-validated or National Security Agency (NSA)-approved encryption during storage (regardless of location) except when no approved encryption technology solution is available that addresses the specific technology.

Mobile devices do require encryption at rest (see *Section 9.3.1.14, Access Control for Mobile Devices (AC-19)*, and *Section 9.4.8, Mobile Devices)*.

9.3.17 System and Information Integrity

9.3.17.1 System and Information Integrity Policy and Procedures (SI-1)

The agency must:

a. Develop, document, and disseminate to designated agency officials:
    1. A system and information integrity policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among agency entities, and compliance
    2. Procedures to facilitate the implementation of the system and information integrity policy and associated system and information integrity controls
b. Review and update the current:
    1. System and information integrity policy every three years
    2. System and information integrity procedures at least annually

9.3.17.2 Flaw Remediation (SI-2)

The agency must:

a. Identify, report, and correct information system flaws
b. Test software and firmware updates related to flaw remediation for effectiveness and potential side effects before installation
c. Install security-relevant software and firmware updates based on severity and associated risk to the confidentiality of FTI
d. Incorporate flaw remediation into the agency configuration management process
e. Centrally manage the flaw remediation process (CE1)

Security-relevant software updates include, for example, patches, service packs, hot fixes, and antivirus signatures.

9.3.17.3 Malicious Code Protection (SI-3)

Malicious code protection includes antivirus software and antimalware and intrusion detection systems.

The agency must:

a. Employ malicious code protection mechanisms at information system entry and exit points to detect and eradicate malicious code
b. Update malicious code protection mechanisms whenever new releases are available in accordance with agency configuration management policy and procedures

c. Configure malicious code protection mechanisms to:

    1. Perform periodic scans of the information system weekly and real-time scans of files from external sources at endpoint and network entry/exit points as the files are downloaded, opened, or executed in accordance with agency security policy
    2. Either block or quarantine malicious code and send an alert to the administrator in response to malicious code detection

d. Address the receipt of false positives during malicious code detection and eradication and the resulting potential impact on the availability of the information system
e. Centrally manage malicious code protection mechanisms (CE1)

The information system must automatically update malicious code protection mechanisms. (CE2)

Information system entry and exit points include, for example, firewalls, electronic mail servers, Web servers, proxy servers, remote access servers, workstations, notebook computers, and mobile devices. Malicious code includes, for example, viruses, worms, Trojan horses, and spyware. Malicious code can also be encoded in various formats (e.g., UUENCODE, Unicode), contained within compressed or hidden files or hidden in files using steganography. Malicious code can be transported by different means, including, for example, Web accesses, electronic mail, electronic mail attachments, and portable storage devices.

9.3.17.4 Information System Monitoring (SI-4)

The agency must:

a. Monitor the information system to detect:

    1. Attacks and indicators of potential attacks
    2. Unauthorized local, network, and remote connections

b. Identify unauthorized use of the information system
c. Deploy monitoring devices: (i) strategically within the information system to collect agency-determined essential information; and (ii) at ad hoc locations within the system to track specific types of transactions of interest to the agency
d. Protect information obtained from intrusion-monitoring tools from unauthorized access, modification, and deletion
e. Heighten the level of information system monitoring activity whenever there is an indication of increased risk to agency operations and assets, individuals, other organizations, or the nation, based on law enforcement information, intelligence information, or other credible sources of information
f. Provide information system monitoring information to designated agency officials as needed

g. Analyze outbound communications traffic at the external boundary of the information system and selected interior points within the network (e.g., subnetworks, subsystems) to discover anomalies—anomalies within agency information systems include, for example, large file transfers, long-time persistent connections, unusual protocols and ports in use, and attempted communications with suspected malicious external addresses
h. Employ automated mechanisms to alert security personnel of inappropriate or unusual activities with security implications (CE11)
i. Implement host-based monitoring mechanisms (e.g., Host intrusion prevention system (HIPS)) on information systems that receive, process, store, or transmit FTI (CE23)

The information system must:

a. Monitor inbound and outbound communications traffic continuously for unusual or unauthorized activities or conditions (CE4)
b. Alert designated agency officials when indications of compromise or potential compromise occur—alerts may be generated from a variety of sources, including, for example, audit records or inputs from malicious code protection mechanisms; intrusion detection or prevention mechanisms; or boundary protection devices, such as firewalls, gateways, and routers and alerts can be transmitted, for example, telephonically, by electronic mail messages, or by text messaging; agency personnel on the notification list can include, for example, system administrators, mission/business owners, system owners, or information system security officers (CE5)
c. Notify designated agency officials of detected suspicious events and take necessary actions to address suspicious events (CE7)

Information system monitoring includes external and internal monitoring. External monitoring includes the observation of events occurring at the information system boundary (i.e., part of perimeter defense and boundary protection). Internal monitoring includes the observation of events occurring within the information system.

Information system monitoring capability is achieved through a variety of tools and techniques (e.g., intrusion detection systems, intrusion prevention systems, malicious code protection software, scanning tools, audit record monitoring software, network monitoring software).

Strategic locations for monitoring devices include, for example, selected perimeter locations and nearby server farms supporting critical applications, with such devices typically being employed at the managed interfaces.

9.3.17.5 Security Alerts, Advisories, and Directives (SI-5)

The agency must:

a. Receive information system security alerts, advisories, and directives from designated external organizations on an ongoing basis
b. Generate internal security alerts, advisories, and directives as deemed necessary
d. Disseminate security alerts, advisories, and directives to designated agency officials
e. Implement security directives in accordance with established time frames or notify the issuing agency of the degree of noncompliance

9.3.17.6 Spam Protection (SI-8)

The agency must:

a. Employ spam protection mechanisms at information system entry and exit points to detect and take action on unsolicited messages
b. Update spam protection mechanisms when new releases are available in accordance with agency configuration management policy and procedures

9.3.17.7 Information Input Validation (SI-10)

The information system must check the validity of information inputs.

9.3.17.8 Error Handling (SI-11)

The information system must:

a. Generate error messages that provide information necessary for corrective actions without revealing information that could be exploited by adversaries
b. Reveal error messages only to designated agency officials

9.3.17.9 Information Handling and Retention (SI-12)

The agency must handle and retain information within the information system and information output from the system in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, standards, and operational requirements.

9.3.17.10 Memory Protection (SI-16)

The information system must implement safeguards to protect its memory from unauthorized code execution.

Some adversaries launch attacks with the intent of executing code in non-executable regions of memory or in memory locations that are prohibited. Security safeguards employed to protect memory include, for example, data execution prevention and address space layout randomization. Data execution prevention safeguards can either be hardware-enforced or software-enforced, with hardware providing the greater strength of mechanism.

9.3.18 Program Management

9.3.18.1 Senior Information Security Officer (PM-2)

The agency must appoint a senior information security officer with the mission and resources to coordinate, develop, implement, and maintain an agency-wide information security program.

The security officer described in this control is an agency official. This official is the senior information security officer. Agencies may also refer to this official as the senior information security officer or chief information security officer.

9.4 Additional Computer Security Requirements

9.4.1 Cloud Computing Environments

Background

As defined by NIST, "Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is composed of five essential characteristics, three service models, and four deployment models."

While cloud computing offers many potential benefits, it is not without risk. The primary security concerns with cloud computing are:

- Data is not stored in an agency-managed data center
- The agency must rely on the provider's security controls for protection
- Data is not transferred securely between the cloud provider and service consumer
- Interfaces to access FTI in a cloud environment, including authentication and authorization controls, may not be secured per customer requirements
- Data from multiple customers is potentially commingled in the cloud environment

An agency's cloud implementation is a combination of a service model and a deployment model. Service models consist of Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). Deployment models consist of private, community, public, and hybrid clouds.

The risk to data varies in each of the four deployment models, with private cloud typically being the lowest risk model and public cloud being the highest risk model. Depending on the deployment model, compensating controls can be accepted in place of the mandatory requirements, but those compensating controls must provide the same level of protection as mandatory controls for safeguarding FTI.

The service and deployment model used in a cloud computing environment will determine the responsibility for security controls implementation between the agency and the cloud provider for the protection of FTI that is stored or processed in the cloud environment. The delineation of security control responsibility is heavily dependent on the service and deployment models of the solution the agency is adopting. For example, if the solution is an SaaS email solution, the agency may be responsible for a small subset of security control responsibilities. If the agency is deploying its own applications to a PaaS or IaaS solution, it will have greater responsibility for securing the application layer and potentially the platform and middleware.

Requirements

The following mandatory controls are applicable for all cloud service and deployment models. However, as stated earlier, depending on the deployment model, compensating controls can be accepted in place of the mandatory requirements provided that those compensating controls afford the same level of protection as mandatory controls for safeguarding FTI. Potential compensating controls will be evaluated by the Office of Safeguards, as part of the cloud computing notification (see first requirement).

To use a cloud computing model to receive, process, store, or transmit FTI, the agency must be in compliance with all requirements in this publication. The following mandatory requirements are in effect for introducing FTI to a cloud environment:

a. Notification Requirement: The agency must notify the Office of Safeguards at least 45 days prior to transmitting FTI into a cloud environment
b. Data Isolation: Software, data, and services that receive, process, store, or transmit FTI must be isolated within the cloud environment so that other cloud customers sharing physical or virtual space cannot access other customer data or applications
c. SLA: The agency must establish security policies and procedures based on IRS Publication 1075 for how FTI is stored, handled, and accessed inside the cloud through a legally binding contract or SLA with its third-party cloud provider.
d. Data Encryption in Transit: FTI must be encrypted in transit within the cloud environment. All mechanisms used to encrypt FTI must be FIPS 140-2 compliant, and operate using the FIPS 140-2 compliant module. This requirement must be included in the SLA.

e. Data Encryption at Rest: FTI may need to be encrypted while at rest in the cloud, depending upon the security protocols inherent in the cloud. If the cloud environment cannot appropriately isolate FTI, encryption is a potential compensating control. All mechanisms used to encrypt FTI must be FIPS 140-2 compliant and operate using the FIPS 140-2 compliant module. This requirement must be included in the SLA, if applicable.
f. Persistence of Data in Relieved Assets: Storage devices where FTI has resided must be securely sanitized or destroyed using methods acceptable by NSA and Central Security Service (CSS). This requirement must be included in the SLA.
g. Risk Assessment: The agency must conduct an annual assessment of the security controls in place on all information systems used for receiving, processing, storing, or transmitting FTI. For the annual assessment immediately prior to implementation of the cloud environment and each annual risk assessment (or update to an existing risk assessment) thereafter, the agency must include the cloud environment. The Office of Safeguards will evaluate the risk assessment as part of the notification requirement in Requirement (a.).
h. Security Control Implementation: Customer-defined security controls must be identified, documented, and implemented. The customer-defined security controls, as implemented, must comply with requirements in this publication.

Additional cloud computing security requirements are available on the Office of Safeguards website.

9.4.2 Data Warehouse

The concept of data warehousing consists of a collection of multi-dimensional integrated databases that are used to provide accessible information to clients or end users. The data can be manipulated through different categories or dimensions to facilitate analyzing data in relational databases. The result can provide the client or end user with an enterprise view or snapshot of the information.

Security requirements apply to data warehousing environments, as well as to typical networked environments.

Section 5.2 and Exhibit 10, *Data Warehouse Security Requirements*, provide unique requirements for this environment.

Additional data warehouse security requirements are available on the Office of Safeguards website.

9.4.3 Email Communications

A written policy must be established and distributed which covers the agency's rules concerning email of FTI. If FTI is prohibited from inclusion within emails or email attachments, the policy must clearly state the actions that will be taken if FTI is inadvertently emailed.

If FTI is allowed to be included within emails or email attachments, the agency must only transmit FTI to an authorized recipient and must adhere to the following requirements:

a. Policies and procedures must be implemented to ensure FTI is properly protected and secured when being transmitted via email
b. Generally, FTI should not be transmitted or used on the agency's internal e-mail systems. FTI must not be transmitted outside of the agency, either in the body of an email or as an attachment
c. Mail servers and clients must be securely configured according to the requirements within this publication to protect the confidentially of FTI transmitted in the email system
d. The network infrastructure must be securely configured according to the requirements within this publication to block unauthorized traffic, limit security vulnerabilities, and provide an additional security layer to an agency's mail servers and clients
e. Emails that contain FTI should be properly labeled (e.g., email subject contains "FTI") to ensure that the recipient is aware that the message content contains FTI
f. Audit logging must be implemented to properly track all email that contains FTI
g. Email transmissions that contain FTI must be encrypted using a FIPS 140-2 validated mechanism
h. Malware protection must be implemented at one or more points within the email delivery process to protect against viruses, worms, and other forms of malware

9.4.4 Fax Equipment

A written policy must be established and distributed which covers the agency's rules concerning faxing of FTI. If FTI is prohibited from inclusion within fax communications, the policy must clearly state the actions that will be taken if FTI is inadvertently faxed.

If FTI is allowed to be included within fax communications, the agency must only transmit FTI to an authorized recipient and must adhere to the following requirements:

a. Have a trusted staff member at both the sending and receiving fax machines
b. Accurately maintain broadcast lists and other preset numbers of frequent recipients of FTI
c. Place fax machines in a secured area
d. Include a cover sheet on fax transmissions that explicitly provides guidance to the recipient, which includes:
    1. A notification of the sensitivity of the data and the need for protection
    2. A notice to unintended recipients to telephone the sender—collect, if necessary—to report the disclosure and confirm destruction of the information

9.4.5 Integrated Voice Response Systems

To use an Integrated Voice Response (IVR) system that provides FTI over the telephone to a customer, the agency must meet the following requirements:

a. The LAN segment where the IVR system resides is firewalled to prevent direct access from the Internet to the IVR system
b. The operating system and associated software for each system within the architecture that receives, processes, stores, or transmits FTI to an external customer through the IVR is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing
c. Independent security testing must be conducted on the IVR system prior to implementation
d. Access to FTI via the IVR system requires a strong identity verification process. The authentication must use a minimum of two pieces of information although more than two are recommended to verify the identity. One of the authentication elements must be a shared secret only known to the parties involved and issued by the agency directly to the customer. Examples of shared secrets include a unique username, PIN number, password, or pass phrase issued by the agency to the customer through a secure mechanism. Case number does not meet the standard as a shared secret because that case number is likely shown on all documents the customer receives and does not provide assurance that it is only known to the parties involved in the communication.

Additional IVR security requirements are available on the Office of Safeguards website.

9.4.6 Live Data Testing

The use of live FTI in test environments should generally be avoided and is not authorized unless specifically approved by the Office of Safeguards through the submission of a Data Testing Request (DTR) form.

The IRS defines *live data* as primarily unmodified, non-sanitized data extracted from taxpayer files that identifies specific individual or corporate taxpayers and includes taxpayer information or tax return information. The use of live data in testing environments is limited to tax administration or other authorized IRS purposes and may be disclosed only to those individuals with a need-to-know.

Any systems within pre-production testing environments ideally will be configured according to requirements in this publication. However the Office of Safeguards understands most agencies may not be able to fully implement all Publication 1075 requirements in a test environment.

Agencies wishing to use live FTI data in pre-production must submit a DTR to the IRS Office of Safeguards for authority to use live data for testing, providing a detailed explanation of the safeguards in place to protect the data and the necessity for using live data during testing.

Need and Use Justification statements should be revised to cover this use of IRS data, if not already addressed. State taxing agencies should check their statements (agreements) to see if "testing purposes" is covered.

Testing efforts that use live FTI data primarily fall into two categories: one-time testing and ongoing testing.

An example of a one-time testing use of live FTI data would be for system testing that is done prior to a new system implementation and, once testing has validated that the data will work properly, the live FTI data is not required to continue to remain in the test environment. For one-time testing efforts, the Office of Safeguards requires the FTI to be deleted from systems and databases upon completion of testing efforts and that the hard drive of the test systems be cleared electronically prior to repurposing the system for other state agency testing efforts.

Duration for ongoing test activities will be agreed upon as part of the live data request process. Some examples of ongoing testing efforts include:

a. Testing of extract, transform, load (ETL) process to validate federal data load to a database
b. Application testing of income modeling that requires data match between the entire population of state and federal returns, where building a set of dummy data is not feasible
c. Testing audit selection queries that run against the entire population of federal returns to identify potential state non-filers, where building a set of dummy data that would correspond to actual state returns is not feasible

9.4.7 Media Sanitization

The type of sanitization performed depends on whether or not the media:

a. Is to be reused by the agency for continued use with FTI?
b. Will be leaving agency control?

If the media will be reused by the agency for the same purpose of storing FTI and will not be leaving organization control, then clearing is a sufficient method of sanitization. If the media will be reused and repurposed for a non-FTI function or will be leaving organization control (i.e., media being exchanged for warranty, cost rebate, or other purposes and where the specific media will not be returned to the agency), then purging should be selected as the sanitization method. If the media will not be reused at all, then destroying is the method for media sanitization.

The following media sanitization requirements are required:

a. The requirements are applicable for media used in a "pre-production" or "test" environments
b. The technique for clearing, purging, and destroying media depends on the type of media being sanitized

c. A representative sampling of media must be tested after sanitization has been completed
d. Media sanitization should be witnessed or verified by an agency employee
e. Media sanitization requirements are the same, regardless of where the information system media is located. However, the party responsible for each step of the sanitization process may differ

Additional media sanitization requirements are available on the Office of Safeguards website.

9.4.8 Mobile Devices

Background

Mobile devices (e.g., smartphones, tablets) provide several unique security and management challenges when used to access corporate resources, including sensitive data. Mobile devices can store vast amounts of data and, by default, security options are not enabled. This leaves the devices vulnerable to allowing an unauthorized person to gain access to the information stored on them or accessed through them. In addition, due to the portable nature of mobile devices, they are susceptible to loss or theft. Another challenge to maintaining security of mobile devices is effectively tracking mobile device inventory. Bring your own device (BYOD) presents additional security and privacy challenges, as it may not be possible to fully manage security of personally owned devices; BYOD for access to FTI must, therefore, be restricted to access to e-mail where FTI is encrypted. These unique challenges highlight the need to increase the security posture of mobile devices to ensure the protection of FTI that may be stored on or accessed from a mobile device.

Requirements

To use FTI in a mobile device environment, the agency must meet the following mandatory requirements:

a. Mobile device management controls must be in place that include security policies and procedures, inventory, and standardized security configurations for all devices
b. An annual risk assessment must be conducted of the security controls in place on all devices in the mobile environment used for receiving, processing, storing, or transmitting FTI
c. Protection mechanisms must be in place in case a mobile device is lost or stolen—all data stored on the device must be encrypted, including internal storage and removable media storage, such as Micro Secure Digital (SD) cards
d. All data communication with the agency's internal network must be encrypted using a cryptographic module that is FIPS 140-2 compliant
e. The agency must control end user ability to download only authorized applications to the device and must limit the accessibility to FTI by applications to only authorized applications
f. All mobile device management servers that receive, process, store, or transmit FTI must be hardened in accordance with requirements in this publication

g. A centralized mobile device management solution must be used to authenticate agency-issued and personally owned mobile devices prior to allowing access to the internal network
h. Security events must be logged for all mobile devices and the mobile device management server
i. The agency must disable wireless personal area networks that allow a mobile device to connect to a computer via Bluetooth or near field communication (NFC) for data synchronization and storage
j. Access to hardware, such as the digital camera, global positioning system (GPS), and universal serial bus (USB) interface, must be disabled to the extent possible
k. Disposal of all mobile device component hardware follows media sanitization and disposal procedures (see *Section 9.3.10.6, Media Sanitization (MP-6)*, and *Section 9.4.7, Media Sanitization*).

See *Section 9.3.1.14, Access Control for Mobile Devices (AC-19)*. Additional mobile device security requirements are also available on the Office of Safeguards website.

9.4.9 Multi-Functional Devices and High Volume Printers

To use FTI in a multi-functional device (MFD) or High Volume Printer, the agency must meet the following requirements:

a. The agency should have a current security policy in place for secure configuration and operation of the MFD or High Volume Printer
b. Least functionality controls that must be in place that include disabling all unneeded network protocols, services, and assigning a dedicated static IP address to the MFD or High Volume Printer
c. Strong security controls should be incorporated into the MFD or High Volume Printer management and administration
d. Access enforcement controls must be configured correctly, including access controls for file shares, administrator and non-administrator privileges, and document retention functions
e. MFD's or High Volume Printers should be locked with a mechanism to prevent physical access to the hard disk
f. Firmware should be up to date with the most current firmware available and should be currently supported by the vendor
g. Devices and print spoolers have auditing enabled, including auditing of user access and fax logs (if fax is enabled), and audit logs should be collected and reviewed by a security administrator
h. All FTI data in transit should be encrypted when moving across a WAN and within the LAN
i. Disposal of all hardware follows media sanitization and disposal procedure requirements (see *Section 9.3.10.6, Media Sanitization (MP-6)*, and *Section 9.4.7, Media Sanitization*)

9.4.10 Network Protections

Agencies must implement boundary protection devices throughout their system architecture, including routers, firewalls, switches, and intrusion detection systems.

Any publicly accessible servers used in the receipt, process, transmission, or storage of FTI must be placed into an enclave.

Network address translation (NAT) must be implemented at the public traffic demarcation point on the network. If NAT is not implemented at the agency's boundary firewall or router, then it must be implemented on each firewall or router that protects network segments that contain infrastructure components which receive, process, store, or transmit FTI.

The agency's managed interfaces employing boundary protection must deny network traffic by default and allow network traffic by exception (e.g., deny all, permit by exception). All remote traffic must migrate through a managed interface. Firewalls shall be configured to prohibit any transmission control protocol (TCP) or user datagram protocol service or other protocol/service that is not explicitly permitted (i.e., deny by default).

Inbound services shall be prohibited, unless a valid business case can establish their necessity.

See *Section 9.3.16.5, Boundary Protection (SC-7)*. Additional network protection requirements are available on the Office of Safeguards website.

9.4.11 Storage Area Networks

Background

A storage area network (SAN) is a network whose purpose is to transfer data among information systems and the storage elements in high speed. SANs achieve economy of scale by eliminating the need to manage storage from multiple vendors and platforms.

The typical components of a SAN can be broken down into the host layer, the fabric layer, and the storage layer that comprise the networking infrastructure, management devices that organize connection, storage devices/elements, and client computer systems. The storage layer, where FTI resides, comprises physical disk drives, disk arrays, tape libraries, and other storage media.

SAN components that are most vulnerable to attack include connection points between servers, management devices, and IP-based devices. The fundamental issues are that most SAN protocols do not require device authentication and that it is relatively simple to join the SAN fabric with a spoofing and session hijacking technique.

Requirements

To use FTI in a SAN environment, the agency must meet the following mandatory requirements:

a. FTI must be segregated from other agency data within the SAN environment
b. Access controls must be implemented and strictly enforced for all SAN components to limit access to disks containing FTI to authorized users
c. Fibre channel devices must be configured to authenticate other devices with which they communicate in the SAN and authenticate administrator connections
d. FTI must be encrypted while in transit within the SAN environment. SAN management traffic must also be encrypted for SAN components.
e. SAN components must be physically protected in accordance with the minimum protection standards for physical security described in Section 4.0, *Secure Storage—IRC 6103(p)(4)(B).*
f. All components of the SAN that receive, process, store, or transmit FTI must be hardened in accordance with the requirements in this publication (see SAN SCSEM available on the Office of Safeguards website)
g. SAN components must maintain an audit trail, and the agency must review it weekly to track access to FTI in the SAN environment

Additional SAN security requirements are available on the Office of Safeguards website.

9.4.12 System Component Inventory

The agency must maintain a current inventory of information systems that receive, process, store, or transmit FTI in both production and pre-production environments. Updates to the inventory should be a critical step when implementing installations, removals, and updates to the information system. The inventory should accurately reflect and be consistent with the security domain of the current information system to enable the detection of unauthorized access to FTI within production and pre-production environments.

The IRS does not mandate the particular details or a specific format required to capture the inventory of systems with FTI. However, as part of the on-site safeguard review, the IRS will evaluate the agency's inventory to provide a level of assurance that the inventory is comprehensive of all systems that receive, process, store, or transmit FTI in production and pre-production environments.

Additional system component inventory guidance is available on the Office of Safeguards website.

9.4.13 Virtual Desktop Infrastructure

Background

A virtual desktop infrastructure (VDI) provides users access to enterprise resources, including a virtual desktop from locations both internal to and external to the agency's networks. In a VDI environment, a user can access FTI by connecting to a virtual workstation via a vendor-specific agent, connection client, or through an Internet browser from practically any mobile device with Internet access.

This requirement is applicable to VDI environments in which agency-owned and/or non-agency-owned equipment (including personally-owned devices) may be used as the client for the virtual desktop. The agency must demonstrate that despite the ownership and operational location of the client, FTI remains subject to the safeguard requirements and the highest level of attainable security.

Requirements

To use VDI as a means of remote access to FTI and systems that store, transmit, process and/or receive FTI, the agency must meet the following mandatory requirements:

a. VDI components should be segregated so that boundary protections can be implemented and access controls are granulized
b. An access control system must be specifically configured to address the complicated nature of the environment—ensure only authorized clients who conform to agency security policy are permitted access to the VDI
c. Configure the hypervisor, management consoles, and other VDI components using the secure configuration guidelines provided by the vendor
d. The least privilege principle must be strictly enforced in a virtualized environment
e. Configure the virtualized desktop to provide the functionalities only required for operations—non-essential functionality or components must be removed or prohibited
f. Users who access FTI remotely must use multi-factor authentication to validate their identities
g. Privileged and administrative functions must be recorded by the system. Security events must be reviewed regularly by security personnel
h. FTI must be transmitted securely using end-to-end encryption

Additional VDI requirements are available on the Office of Safeguards website.

9.4.14 Virtualization Environments

Background

NIST SP 800-125 defines full virtualization as, "the simulation of the software and/or hardware upon which other software runs." This simulated environment is called a virtual machine (VM). There are many forms of virtualization, distinguished primarily by computing architecture layer.

Requirements

To use a virtual environment that receives, processes, stores, or transmits FTI, the agency must meet the following mandatory requirements:

a. When FTI is stored in a shared location, the agency must have policies in place to restrict access to FTI to authorized users
b. Programs that control the hypervisor should be secured and restricted to authorized administrators only
c. FTI data transmitted via hypervisor management communication systems on untrusted networks must be encrypted using FIPS-approved methods provided by either the virtualization solution or third-party solution, such as a VPN that encapsulates the management traffic
d. Separation between VMs must be enforced, and functions that allow one VM to share data with the hypervisor or another VM, such as clipboard sharing or shared disks, must be disabled
e. Virtualization providers must be able to monitor for threats and other activity that is occurring within the virtual environment—this includes being able to monitor the movement of FTI into and out of the virtual environment
f. The VMs and hypervisor/host operating system (OS) software for each system within the virtual environment that receives, processes, stores, or transmits FTI must be hardened in accordance with the requirements in this publication and be subject to frequent vulnerability testing
g. Special VM functions available to system administrators in a virtualized environment that can leverage the shared memory space in a virtual environment between the hypervisor and VM should be disabled
h. Virtual systems are configured to prevent FTI from being dumped outside of the VM when system errors occur
i. Vulnerability assessment must be performed on systems in a virtualized environment prior to system implementation
j. Backups (virtual machine snapshot) must be properly secured and must be stored in a logical location where the backup is only accessible to those with a need-to-know

Additional virtualization requirements are available on the Office of Safeguards website.

9.4.15 VoIP Systems

Background

VoIP is the transmission of voice over packet-switched networks. VoIP systems include a variety of components, such as call processors/call managers, gateways, routers, firewalls, and protocols. Data, in the form of a digitized voice conversation, is enclosed in a packet and transported via a data network to a voice gateway that converts voice calls between the IP network and the public switched telephone network. In FTI implementations, this means that telephone conversations between agency personnel and their taxpayer customers where FTI is discussed as part of the conversation are transmitted across the network as a data packet.

Requirements

To use a VoIP network that provides FTI to a customer, the agency must meet the following mandatory requirements:

a. VoIP traffic that contains FTI should be segmented off from non-VoIP
b. When FTI is in transit across the network (either Internet or state agency's network), the VoIP traffic must be encrypted using a NIST-approved method operating in a NIST-approved mode
c. VoIP network hardware (servers, routers, switches, firewalls) must be physically protected in accordance with the minimum protection standards for physical security outlined in *Section 4.0, Secure Storage—IRC 6103(p)(4)(B)*
d. Each system within the agency's network that transmits FTI to an external customer through the VoIP network is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing
e. VoIP-ready firewalls must be used to filter VoIP traffic on the network
f. Security testing must be conducted on the VoIP system prior to implementation with FTI and annually thereafter
g. VoIP phones must be logically protected, and agencies must be able to track and audit all FTI-applicable conversations and access

Additional VoIP guidance is available on the Office of Safeguards website.

9.4.16 Web-Based Systems

To use an external Web-based system or website (web portal) that provides FTI over the Internet to a customer the agency must meet the following requirements:

a. The system architecture is configured as a three-tier architecture with physically separate systems that provide layered security of the FTI, and access to the database through the application is limited
b. Each system within the architecture that receives, processes, stores, or transmits FTI to an external customer through the Web-based system or website is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing

c. Access to FTI via the Web-based system or website requires a strong identity verification process. The authentication must use a minimum of two pieces of information although more than two is recommended to verify the identity. One of the authentication elements must be a shared secret only known to the parties involved and issued by the agency directly to the customer. Examples of shared secrets include a unique username, PIN number, password, or pass phrase issued by the agency to the customer through a secure mechanism. Case number does not meet the standard as a shared secret because that case number is likely shown on all documents the customer receives and does not provide assurance that it is only known to the parties involved in the communication.

9.4.17 Web Browser

Background

The core functions of the Web browser include retrieving information over a network connection (Internet or private network), presenting the information to the users, and sending the information back to the source for a complete transaction. With an increasing amount of information being delivered to the end user via the Web browser, client-side exploits are a growing concern. Web browsers are at the frontline of information security. Most importantly, the default configuration of a Web browser does not provide adequate security. These requirements apply when FTI is accessed through a Web browser.

Requirements

To access FTI using a Web browser, the agency must meet the following mandatory requirements:

a. Install vendor-specified security patches and hot fixes regularly for the Web browser, add-ons, and Java
b. Security enhancements, such as pop-up blocker and content filtering, must be enabled on the Web browser
c. Configure the designated Web browser in accordance to the principle of least functionality and disable items, such as third-party add-ons
d. Deploy a Web gateway to inspect Web traffic and protect the user workstation from direct exposure to the Internet
e. FTI transmission within the agency's internal network must be encrypted using a cryptographic module that is FIPS 140-2 validated
f. Determine the business use of Java and approve the use of Java if is required for core business functions

Additional Web browser security guidance is available on the Office of Safeguards website.

9.4.18 Wireless Networks

Background

A wireless environment is one in which a user can connect to a LAN without physically connecting a device(s) through a wired Ethernet connection. A wireless local area network (WLAN) uses radio waves to broadcast network connectivity to anyone who is within a limited receiving range, such as an office building. WLANs are usually implemented as extensions to existing wired LANs using wireless switches or access points to deliver connectivity to wireless clients, such as laptops or mobile devices. Because of the broadcast and radio nature of wireless technology, ensuring confidentiality is significantly more difficult in a wireless network than a wired network.

These requirements address the security requirements for 802.11 wireless networks that are to be used to receive, process, store, or transmit FTI. This includes wireless networks located at the agency's office or data center from where FTI is received, processed, stored, or transmitted.

Requirements

To use FTI in an 802.11 WLAN, the agency must meet the following mandatory requirements:

a. The agency should have WLAN management controls that include security policies and procedures, a complete inventory of all wireless network components, and standardized security configurations for all components.
b. WLAN hardware (access points, servers, routers, switches, firewalls) must be physically protected in accordance with the minimum protection standards for physical security outlined in *Section 4.0, Secure Storage—IRC 6103(p)(4)(B).*
c. Each system within the agency's network that transmits FTI through the WLAN is hardened in accordance with the requirements in this publication.
d. The WLAN is architected to provide logical separation between WLANs with different security profiles and from the wired LAN.
e. WLAN infrastructure that receives, processes, stores, or transmits FTI must comply with the Institute of Electrical and Electronic Engineers 802.11i wireless security standard and perform mutual authentication for all access to FTI via 802.1X and extensible authentication protocol
f. Vulnerability scanning should be conducted as part of periodic technical security assessments for the organization's WLAN.
g. Wireless intrusion detection is deployed to monitor for unauthorized access, and security event logging is enabled on WLAN components in accordance with Section 9.3.3, *Audit and Accountability*.
h. Disposal of all WLAN hardware follows media sanitization and disposal procedures in *Section 9.3.10.6, Media Sanitization (MP-6)*, and *Section 9.4.7, Media Sanitization.*

Additional wireless network security requirements are in *Section 9.3.1.13, Wireless Access (AC-18)*, and available on the Office of Safeguards website.

10.0 Reporting Improper Inspections or Disclosures

10.1 General

Upon discovering a possible improper inspection or disclosure of FTI, including breaches and security incidents, by a federal employee, a state employee, or any other person, the individual making the observation or receiving information must contact the office of the appropriate special agent-in-charge, TIGTA immediately, but no later than 24 hours after identification of a possible issue involving FTI. **Call the local TIGTA Field Division Office first.**

Table 11 – TIGTA Field Division Contact Information

Field Division	Field Division Service Locations	Telephone
Atlanta	Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, Puerto Rico, and U.S. Virgin Islands	(470) 639-3792
Mid-States	Arkansas, Illinois, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, Northern Ohio, Oklahoma, Texas, Louisiana, Kansas, Missouri, Nebraska	(713) 209-3711
Denver	Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming	(801) 620-7734
New York	Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont	(917) 408-5640
San Francisco	California, Hawaii, Guam, American Samoa, Commonwealth of Northern Mariana Islands, Trust Territory of the Pacific Islands	(213) 576-4147
Washington	Delaware, Indiana, Kentucky, Martinsburg Computing Center, Maryland, New Jersey, Pennsylvania, Southern Ohio, Virginia, West Virginia, Washington, DC	(215) 861-1003
Electronic Crimes & Intelligence Division	Any agency reporting a cyber-incident such as data breach may report directly to this division	(240) 613-5230 cybercrimes@tigta.treas.gov

If unable to contact the local TIGTA Field Division, contact the Hotline Number.

Hotline Number: 800-589-3718
TIGTA Homepage: https://www.treasury.gov/tigta
Mailing Address: Treasury Inspector General for Tax Administration
Ben Franklin Station
P.O. Box 589
Washington, DC 20044-0589

10.2 Office of Safeguards Notification Process

Concurrent to notifying TIGTA, the agency must notify the Office of Safeguards by email to Safeguards mailbox, safeguardreports@irs.gov. To notify the Office of Safeguards, the agency must document the specifics of the incident known at that time into a data incident report, including but not limited to:

- Name of agency and agency Point of Contact for resolving data incident with contact information
- Date and time the incident occurred
- Date and time the incident was discovered
- How the incident was discovered
- Description of the incident and the data involved, including specific data elements, if known
- Potential number of FTI records involved; if unknown, provide a range if possible
- Address where the incident occurred
- IT involved (e.g., laptop, server, mainframe)

Reports must be sent electronically and encrypted via IRS-approved encryption techniques. Use the term data incident report in the subject line of the email. Do not include any FTI in the data Incident report.

> *Even if all information is not available, immediate notification is the most important factor, not the completeness of the data incident report. Additional information must be provided to the Office of Safeguards as soon as it is available.*

The agency will cooperate with TIGTA and Office of Safeguards investigators, providing data and access as needed to determine the facts and circumstances of the incident.

10.3 Incident Response Procedures

The agency must not wait to conduct an internal investigation to determine if FTI was involved in an unauthorized disclosure or data breach. If FTI may have been involved, the agency must contact TIGTA and the IRS immediately.

Incident response policies and procedures required in *Section 9.3.8, Incident Response*, must be used when responding to an identified unauthorized disclosure or data breach incident.

The Office of Safeguards will coordinate with the agency regarding appropriate follow-up actions required to be taken by the agency to ensure continued protection of FTI. Once the incident has been addressed, the agency will conduct a post-incident review to ensure the incident response policies and procedures provide adequate guidance. Any identified deficiencies in the incident response policies and procedures should be resolved immediately. Additional training on any changes to the incident response policies and procedures should be provided to all employees, including contractors and consolidated data center employees, immediately.

10.4 Incident Response Notification to Impacted Individuals

Notification to impacted individuals regarding an unauthorized disclosure or data breach incident is based upon the agency's internal incident response policy since the FTI is within the agency's possession or control.

However, the agency must inform the Office of Safeguards of notification activities undertaken before release to the impacted individuals. In addition, the agency must inform the Office of Safeguards of any pending media releases, including sharing the text, prior to distribution.

10.5 FTI Suspension, Termination, and Administrative Review

The federal tax regulation 26 CFR 301.6103(p)(7)-1 establishes a process for the suspension or termination of FTI and an administrative review if an authorized recipient has failed to safeguard returns or return information. For more information, refer to *Exhibit 3, U.S.C Title 26, CFR 301.6103(p)(7)-1*.

11.0 Disclosure to Other Persons

11.1 General

Disclosure of FTI is prohibited unless authorized by statute. Agencies having access to FTI are not allowed to make further disclosures of that information to their agents or to a contractor unless authorized by statute.

Agencies are encouraged to use specific language in their contractual agreements that clearly state the requirements necessary to protection the confidentiality of FTI and avoid ambivalence or ambiguity. See the model language of Exhibit 7, for additional guidance on appropriate language to be used in the contract, see *Exhibit 6, Contractor 45-Day Notification Procedures*.

> *Absent specific language in the IRC or where the IRC is silent in authorizing an agency to make further disclosures, the IRS' position is that further disclosures are unauthorized.*

11.2 Authorized Disclosure Precautions

When disclosure is authorized, the agency must take certain precautions prior to engaging a contractor, namely:

- Has the IRS been given sufficient notice prior to releasing information to a contractor?
- Has the agency been given reasonable assurance through an on-site visitation or received a report certifying that all security standards (physical and computer) have been addressed?
- Does the contract authorizing the disclosure of FTI have the appropriate safeguard language? See the model language of *Exhibit 7, Safeguarding Contract Language*.

Agencies should fully report to the IRS in their SSRs all disclosures of FTI to contractors. Additional disclosures to contractors should be reported on the annual SSR.

Engaging a contractor who may have incidental or inadvertent access to FTI, and will not be performing services which require authorized access to FTI, does not fall under these requirements. An agency may not contract for the disclosure of FTI which is not authorized by IRC 6103. Only contracts for services which require access to FTI to perform their duties under the contract are required to comply with these standards.

11.3 Disclosing FTI to Contractors

The agency must notify the Office of Safeguards prior to re-disclosing FTI to contractors. The agency must notify and obtain written approval from the Office of Safeguards prior to re-disclosing FTI to sub-contractors. (see *Section 7.0, Reporting Requirements—6103(p)(4)(E),* and *Section 7.4, 45-Day Notification Reporting Requirements*, for additional information).

In addition to the notification, the agency must:

a. Establish privacy roles and responsibilities for contractors and service providers
b. Include privacy requirements in contracts and other acquisition-related documents
c. Share FTI externally, only for the authorized purposes identified in the Privacy Act, or described in its notice(s), or in a manner compatible with those purposes
d. Where appropriate, enter into a contract, an SLA, memoranda of understanding, memoranda of agreement, letters of intent, computer matching agreement, or similar agreement, with third parties that specifically describe the FTI covered and specifically enumerate the purposes for which the FTI may be used
e. Monitor, audit, and train its staff on the authorized uses and sharing of FTI with third parties and on the consequences of unauthorized use or sharing of FTI
f. Evaluate any proposed new instances of sharing FTI with third parties to assess whether they are authorized and whether additional or new public notice is required

11.4 Re-Disclosure Agreements

In rare circumstances, under the authority of IRC 6103(p)(2)(B), the IRS may execute and an agreement with an agency which authorizes the re-disclosure of FTI to another entity. These agreements are negotiated and approved by the IRS Headquarters Office of Disclosure with concurrence of the Office of Safeguards.

Federal agencies authorized by statute to enter into re-disclosure agreements are required to provide a copy of the executed agreement to the Office of Safeguards within 30 days of execution. The electronic copy must be sent to the Office of Safeguards via SDT. If SDT is not available, the agreement may be emailed to the SafeguardReports@irs.gov mailbox.

12.0 Return Information in Statistical Reports

12.1 General

IRC 6103 authorizes the disclosure of FTI to specific federal agencies for use in statistical reports, tax administration purposes, and certain other purposes specified in IRC 6103(j). Statistical reports may only be released in a form that cannot be associated with, or otherwise identify, directly or indirectly, a particular taxpayer.

Agencies authorized to produce statistical reports must adhere to the following guidelines or an equivalent alternative that has been approved by the IRS:

- Access to FTI must be restricted to authorized personnel
- No statistical tabulation may be released outside the agency with cells containing data from fewer than three returns. The exception to this rule is for corporation returns where no tabulation with cells containing data for less than five returns may be released
- Statistical tabulations prepared at the state level may not be released for cells containing data for fewer than 10 returns. Data for geographic areas below the state level such as county may not be released with cells containing data from fewer than 20 returns. In addition for tabular data at the ZIP Code level, additional procedures must be employed. Individual ZIP Codes areas with fewer than 100 returns cannot be shown. Additionally, any cell in the ZIP Code table based on fewer than 20 returns cannot be shown. Finally, individual returns that represent a large percentage of the total of a particular cell must be excluded from the data
- Tabulations that would pertain to specifically identified taxpayers or that would tend to identify a particular taxpayer, either directly or indirectly, may not be released

12.2 Making a Request under IRC 6103(j)

Federal agencies seeking statistical information from the IRS must make their requests under IRC 6103(j). The requests must be addressed to:

Director, Statistics of Income Division
Internal Revenue Service, OS:P:S
1111 Constitution Avenue, NW
Washington, D.C. 20224

12.3 State Tax Agency Statistical Analysis

State tax agencies must provide written notification and obtain IRS approval prior to performing tax modeling, revenue estimation, or other statistical activities involving FTI. The agency must demonstrate that the activity is required for tax administration purposes. The agency must adhere to the following process to submit a request:

1) Contact the local IRS disclosure manager[‡] and complete a Need and Use Justification for Federal Tax Information Form.
2) The completed and signed form must be returned to the IRS disclosure manager for review and approval. The Office of Safeguards will be notified by the IRS disclosure manager of the request and approval.
3) Changes to the terms of the statistical analysis activities documented in the form must be submitted to the IRS Office of Safeguards as part of the annual SSR (see *Section 2.4, State Tax Agency Limitations*, and *Section 7.2, Safeguard Security Report).*
4) Updates to the form should be made as requested by the IRS disclosure manager.

If the agency requires the use of a contractor to conduct tax modeling, revenue estimation, or other statistical activities, 45-day notification requirements apply (see Section 11.3, Disclosing FTI to Contractors).

12.4 Making a Request under IRC 6108

State agencies seeking statistical information from the IRS must make requests under IRC 6108 and submit the request to the mailing address specified in *Section 12.2, Making a Request under IRC 6103(j)*. A charge will be assessed for this service.

[‡] Refer to http://www.irs.gov/uac/IRS-Disclosure-Offices for contact information.

Exhibit 1 USC Title 26, IRC 6103(a) and (b)

IRC SEC. 6103. CONFIDENTIALITY AND DISCLOSURE OF RETURNS AND RETURN INFORMATION

(a) General rule Returns and return information shall be confidential, and except as authorized by this title—

(1) no officer or employee of the United States,

(2) no officer or employee of any State, any local law enforcement agency receiving information under subsection (i)(7)(A), any local child support enforcement agency, or any local agency administering a program listed in subsection (l)(7)(D) who has or had access to returns or return information under this section, and

(3) no other person (or officer or employee thereof) who has or had access to returns or return information under subsection (e)(1)(D)(iii), paragraph (6), (12), (16), (19), (20) or

(4) (21) of subsection (l), paragraph (2) or (4)(B) of subsection (m), or subsection (n), shall disclose any return or return information obtained by him in any manner in connection with his service as such an officer or an employee or otherwise or under the provisions of this section. For purposes of this subsection, the term "officer or employee" includes a former officer or employee.

(b) Definitions For purposes of this section—

(1) Return The term "return" means any tax or information return, declaration of estimated tax, or claim for refund required by, or provided for or permitted under, the provisions of this title which is filed with the Secretary by, on behalf of, or with respect to any person, and any amendment or supplement thereto, including supporting schedules, attachments, or lists which are supplemental to, or part of, the return so filed.

(2) Return information The term "return information" means—

(A) a taxpayer's identity, the nature, source, or amount of his income, payments, receipts, deductions, exemptions, credits, assets, liabilities, net worth, tax liability, tax withheld, deficiencies, over assessments, or tax payments, whether the taxpayer's return was, is being, or will be examined or subject to other investigation or processing, or any other data, received by, recorded by, prepared by, furnished to, or collected by the Secretary with respect to a return or with respect to the determination of the existence, or possible existence, of liability (or the amount thereof) of any person under this title for any tax, penalty, interest, fine, forfeiture, or other imposition, or offense,

(B) any part of any written determination or any background file document relating to such written determination (as such terms are

defined in section 6110 (b)) which is not open to public inspection under section 6110,

(C) any advance pricing agreement entered into by a taxpayer and the Secretary and any background information related to such agreement or any application for an advance pricing agreement, and

(D) any agreement under section 7121, and any similar agreement, and any background information related to such an agreement or request for such an agreement, but such term does not include data in a form which cannot be associated with, or otherwise identify, directly or indirectly, a particular taxpayer. Nothing in the preceding sentence, or in any other provision of law, shall be construed to require the disclosure of standards used or to be used for the selection of returns for examination, or data used or to be used for determining such standards, if the Secretary determines that such disclosure will seriously impair assessment, collection, or enforcement under the internal revenue laws.

(3) Taxpayer return information The term "taxpayer return information" means return information as defined in paragraph (2) which is filed with, or furnished to, the Secretary by or on behalf of the taxpayer to whom such return information relates.

(4) Tax administration The term "tax administration"—

(A) means—

(i) the administration, management, conduct, direction, and supervision of the execution and application of the internal revenue laws or related statutes (or equivalent laws and statutes of a State) and tax conventions to which the United States is a party, and

(ii) the development and formulation of Federal tax policy relating to existing or proposed internal revenue laws, related statutes, and tax conventions, and

(B) includes assessment, collection, enforcement, litigation, publication, and statistical gathering functions under such laws, statutes, or conventions.

(5) State

(A) In general The term "State" means—

(i) any of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands,

(ii) for purposes of subsections (a)(2), (b)(4), (d)(1), (h)(4), and (p), any municipality—

(I) with a population in excess of 250,000 (as determined under the most recent decennial United States census data available),

(II) which imposes a tax on income or wages, and

(III) with which the Secretary (in his sole discretion) has entered into an agreement regarding disclosure, and

(iii) for purposes of subsections (a)(2), (b)(4), (d)(1), (h)(4), and (p), any governmental entity—

(I) which is formed and operated by a qualified group of municipalities, and

(II) with which the Secretary (in his sole discretion) has entered into an agreement regarding disclosure.

(B) Regional income tax agencies For purposes of subparagraph (A)(iii)—

(i) Qualified group of municipalities The term "qualified group of municipalities" means, with respect to any governmental entity, 2 or more municipalities—

(I) each of which imposes a tax on income or wages,

(II) each of which, under the authority of a State statute, administers the laws relating to the imposition of such taxes through such entity, and

(III) which collectively have a population in excess of 250,000 (as determined under the most recent decennial United States census data available).

(ii) References to State law, etc. For purposes of applying subparagraph (A)(iii) to the subsections referred to in such subparagraph, any reference in such subsections to State law, proceedings, or tax returns shall be treated as references to the law, proceedings, or tax returns, as the case may be, of the municipalities which form and operate the governmental entity referred to in such subparagraph.

(iii) Disclosure to contractors and other agents Notwithstanding any other provision of this section, no return or return information shall be disclosed to any contractor or other agent of a governmental entity referred to in subparagraph (A)(iii) unless such entity, to the satisfaction of the Secretary—

(I) has requirements in effect which require each such contractor or other agent which would have access to returns or return information to provide safeguards (within the meaning of subsection (p)(4)) to protect the confidentiality of such returns or return information,

(II) agrees to conduct an on-site review every 3 years (or a mid-point review in the case of contracts or agreements of less than 3 years in duration) of each contractor or other agent to determine compliance with such requirements,

(III) submits the findings of the most recent review conducted under sub-clause (II) to the Secretary as part of the report required by subsection (p)(4)(E), and

(IV) certifies to the Secretary for the most recent annual period that such contractor or other agent is in compliance with all such requirements. The certification required by sub-clause (IV) shall include the name and address of each contractor and other agent, a description of the contract or agreement with such contractor or other agent, and the duration of such contract or agreement. The requirements of this clause shall not apply to disclosures pursuant to subsection (n) for purposes of Federal tax administration and a rule similar to the rule of subsection (p)(8)(B) shall apply for purposes of this clause.

(6) **Taxpayer identity**

The term "taxpayer identity" means the name of a person with respect to whom a return is filed, his mailing address, his taxpayer identifying number (as described in section 6109), or a combination thereof.

(7) **Inspection**

The terms "inspected" and "inspection" means any examination of a return or return information.

(8) **Disclosure**

The term "disclosure" means providing return or return information known to any person.

(9) **Federal agency**

The term "Federal agency" means an agency within the meaning of section 551 (1) of Title 5, United States Code.

(10) **Chief executive officer**

The term "chief executive officer" means, with respect to any municipality, any elected official and the chief official (even if not elected) of such municipality

(11) **Terrorist incident, threat, or activity**

The term "terrorist incident, threat, or activity" means an incident, threat, or activity involving an act of domestic terrorism (as defined in section 2331 (5) of Title 18, United States Code) or international terrorism (as defined in section 2331(1) of such title).

Exhibit 2 USC Title 26, IRC 6103(p)(4)

Any Federal agency described in subsection (h)(2), (h)(5), (i)(1), (2), (3), (5), or (7), (j)(1), (2), or (5), (k)(8), (l)(1), (2), (3), (5), (10), (11), (13), (14), or (17), or (o)(1), the General Accounting Office, the Congressional Budget Office, or any agency, body, or commission described in subsection (d), (i)(3)(B)(i) or (7)(A)(ii), or (l)(6), (7), (8), (9), (12), (15), or (16) or any other person described in subsection (l)(16), (17), (19), (20) or (21) shall, as a condition for receiving returns or return information—

(A) establish and maintain, to the satisfaction of the Secretary, a permanent system of standardized records with respect to any request, the reason for such request, and the date of such request made by or of it and any disclosure of return or return information made by or to it;

(B) establish and maintain, to the satisfaction of the Secretary, a secure area or place in which such returns or return information shall be stored;

(C) restrict, to the satisfaction of the Secretary, access to the returns or return information only to persons whose duties or responsibilities require access and to whom disclosure may be made under the provisions of this title;

(D) provide such other safeguards which the Secretary determines (and which he prescribes in regulations) to be necessary or appropriate to protect the confidentiality of the returns or return information;

(E) furnish a report to the Secretary, at such time and containing such information as the Secretary may prescribe, which describes the procedures established and utilized by such agency, body, or commission, the General Accounting Office, or the Congressional Budget Office for ensuring the confidentiality of returns and return information required by this paragraph; and

(F) upon completion of use of such returns or return information—

  (i) in the case of an agency, body, or commission described in subsection (d), (i)(3)(B)(i), or (l)(6), (7), (8), (9), or (16), or any other person described in subsection (l)(16), (17), (19), or (20) return to the Secretary such returns or return information (along with any copies made therefrom) or make such returns or return information undisclosable in any manner and furnish a written report to the Secretary describing such manner,

  (ii) in the case of an agency described in subsections [5] (h)(2), (h)(5), (i)(1), (2), (3), (5) or (7), (j)(1), (2), or (5), (k)(8), (l)(1), (2), (3), (5), (10), (11), (12), (13), (14), (15), or (17), or (o)(1),[6] the General Accounting Office, or the Congressional Budget Office, either—

    (I) return to the Secretary such returns or return information (along with any copies made therefrom),

    (II) otherwise make such returns or return information undisclosable, or

(III) to the extent not so returned or made undisclosable, ensure that the conditions of subparagraphs (A), (B), (C), (D), and (E) of this paragraph continue to be met with respect to such returns or return information, and

(iii) in the case of the Department of Health and Human Services for purposes of subsection (m)(6), destroy all such return information upon completion of its use in providing the notification for which the information was obtained, so as to make such information undisclosable; except that the conditions of subparagraphs (A), (B), (C), (D), and (E) shall cease to apply with respect to any return or return information if, and to the extent that, such return or return information is disclosed in the course of any judicial or administrative proceeding and made a part of the public record thereof. If the Secretary determines that any such agency, body, or commission, including an agency or any other person described in subsection (l)(16), (17), (19), or (20), or the General Accounting Office or the Congressional Budget Office has failed to, or does not, meet the requirements of this paragraph, he may, after any proceedings for review established under paragraph (7), take such actions as are necessary to ensure such requirements are met, including refusing to disclose returns or return information to such agency, body, or commission, including an agency or any other person described in subsection (l)(16), (17), (19), or (20), or the General Accounting Office or the Congressional Budget Office until he determines that such requirements have been or will be met. In the case of any agency which receives any mailing address under paragraph (2), (4), (6), or (7) of subsection (m) and which discloses any such mailing address to any agent or which receives any information under paragraph (6)(A), (12)(B), or (16) of subsection (l) and which discloses any such information to any agent, or any person including an agent described in subsection (l)(16), this paragraph shall apply to such agency and each such agent or other person (except that, in the case of an agent, or any person including an agent described in subsection (l)(16), any report to the Secretary or other action with respect to the Secretary shall be made or taken through such agency). For purposes of applying this paragraph in any case to which subsection (m)(6) applies, the term "return information" includes related blood donor records (as defined in section 1141(h)(2) of the Social Security Act).

Exhibit 3 USC Title 26, CFR 301.6103(p)(7)-1

USC Title 26, Section 6103(p)(4), requires external agencies and other authorized recipients of federal tax return and return information (FTI) to establish procedures to ensure the adequate protection of the FTI they receive. That provision of the United States Code also authorizes the IRS to take actions, including suspending or terminating FTI disclosures to any external agencies and other authorized recipients, if there is misuse, or if the safeguards in place are inadequate to protect the confidentiality of the information, or both.

Procedures for administrative review of a determination that an authorized recipient has failed to safeguard returns or return information:

(a) *In general.* Notwithstanding any section of the Internal Revenue Code (Code), the Internal Revenue Service (IRS) may terminate or suspend disclosure of returns and return information to any authorized recipient specified in section (p)(4) of section 6103, if the IRS determines that:

  (1) The authorized recipient has allowed an unauthorized inspection or disclosure of returns or return information and that the authorized recipient has not taken adequate corrective action to prevent the recurrence of an unauthorized inspection or disclosure; or
  (2) The authorized recipient does not satisfactorily maintain the safeguards prescribed by section 6103(p)(4), and has made no adequate plan to improve its system to maintain the safeguards satisfactorily.

(b) *Notice of IRS's intention to terminate or suspend disclosure.* Prior to terminating or suspending authorized disclosures, the IRS will notify the authorized recipient in writing of the IRS's preliminary determination and of the IRS's intention to discontinue disclosure of returns and return information to the authorized recipient. Upon so notifying the authorized recipient, the IRS, if it determines that tax administration otherwise would be seriously impaired, may suspend further disclosures of returns and return information to the authorized recipient pending a final determination by the Commissioner or a Deputy Commissioner described in paragraph (d)(2) of this section.

(c) *Authorized recipient's right to appeal.* An authorized recipient shall have 30 days from the date of receipt of a notice described in paragraph (b) of this section to appeal the preliminary determination described in paragraph (b) of this section. The appeal shall be made directly to the Commissioner.

(d) *Procedures for administrative review.*

  (1) To appeal a preliminary determination described in paragraph (b) of this section, the authorized recipient shall send a written request for a conference to: Commissioner of Internal Revenue (Attention: SE:S:CLD:GLD), 1111 Constitution Avenue, NW., Washington, DC 20224. The request must include a complete description of the authorized recipient's present system of safeguarding returns or return information received by the authorized

recipient (and its authorized contractors or agents, if any). The request must state the reason or reasons the authorized recipient believes that such system or practice (including improvements, if any, to such system or practice expected to be made in the near future) is or will be adequate to safeguard returns or return information.

(2) Within 45 days of the receipt of the request made in accordance with the provisions of paragraph (d)(1) of this section, the Commissioner or Deputy Commissioner personally shall hold a conference with representatives of the authorized recipient, after which the Commissioner or Deputy Commissioner shall make a final determination with respect to the appeal.

(e) Effective/applicability date. This section applies to all authorized recipients of returns and return information that are subject to the safeguard requirements set forth in section 6103(p)(4) on or after February 11, 2009.

Exhibit 4 Sanctions for Unauthorized Disclosure

IRC SEC. 7213 UNAUTHORIZED DISCLOSURE OF INFORMATION

(a) RETURNS AND RETURN INFORMATION

(1) **FEDERAL EMPLOYEES AND OTHER PERSONS** – It shall be unlawful for any officer or employee of the United States or any person described in section 6103(n) (or an officer or employee of any such person), or any former officer or employee, willfully to disclose to any person, except as authorized in this title, any return or return information [as defined in section 6103(b)]. Any violation of this paragraph shall be a felony punishable upon conviction by a fine in any amount not exceeding $5,000, or imprisonment of not more than 5 years, or both, together with the costs of prosecution, and if such offense is committed by any officer or employee of the United States, he shall, in addition to any other punishment, be dismissed from office or discharged from employment upon conviction for such offense.

(2) **STATE AND OTHER EMPLOYEES**—It shall be unlawful for any person [not described in paragraph (1)] willfully to disclose to any person, except as authorized in this title, any return or return information [as defined in section 6103(b)] acquired by him or another person under subsection (d), (i)(3)(B)(i), (1)(6), (7), (8), (9), (10), (12), (15) or (16) or (m)(2), (4), (5), (6), or (7) of section 6103. Any violation of this paragraph shall be a felony punishable by a fine in any amount not exceeding $5,000, or imprisonment of not more than 5 years, or both, together with the cost of prosecution.

(3) **OTHER PERSONS** – It shall be unlawful for any person to whom any return or return information [as defined in section 6103(b)] is disclosed in an manner unauthorized by this title thereafter willfully to print or publish in any manner not provided by law any such return or return information. Any violation of this paragraph shall be a felony punishable by a fine in any amount not exceeding $5,000, or imprisonment of not more than 5 years, or both, together with the cost of prosecution.

(4) **SOLICITATION** – It shall be unlawful for any person willfully to offer any item of material value in exchange for any return or return information [as defined in 6103(b)] and to receive as a result of such solicitation any such return or return information. Any violation of this paragraph shall be a felony punishable by a fine in any amount not exceeding $5,000, or imprisonment of not more than 5 years, or both, together with the cost of prosecution.

(5) **SHAREHOLDERS** – It shall be unlawful for any person to whom return or return information [as defined in 6103(b)] is disclosed pursuant to the provisions of 6103(e)(1)(D)(iii) willfully to disclose such return or return information in any manner not provided by law. Any violation of this paragraph shall be a felony punishable by a fine in any amount not exceeding $5,000, or imprisonment of not more than 5 years, or both, together with the cost of prosecution.

IRC SEC. 7213A. UNAUTHORIZED INSPECTION OF RETURNS OR RETURN INFORMATION

(a) PROHIBITIONS

(1) FEDERAL EMPLOYEES AND OTHER PERSONS – It shall be unlawful for

(A) any officer or employee of the United States, or
(B) any person described in section 6103(n) or an officer willfully to inspect, except as authorized in this title, any return or return information.

(2) STATE AND OTHER EMPLOYEES – It shall be unlawful for any person [not described in paragraph (l)] willfully to inspect, except as authorized by this title, any return information acquired by such person or another person under a provision of section 6103 referred to in section 7213(a)(2).

(b) PENALTY

(1) IN GENERAL – Any violation of subsection (a) shall be punishable upon conviction by a fine in any amount not exceeding $1000, or imprisonment of not more than 1 year, or both, together with the costs of prosecution.

(2) FEDERAL OFFICERS OR EMPLOYEES – An officer or employee of the United States who is convicted of any violation of subsection (a) shall, in addition to any other punishment, be dismissed from office or discharged from employment.

(c) DEFINITIONS – For purposes of this section, the terms "inspect" "return" and "return information" have respective meanings given such terms by section 6103(b).

Exhibit 5 Civil Damages for Unauthorized Disclosure

IRC SEC. 7431 CIVIL DAMAGES FOR UNAUTHORIZED INSPECTION OR DISCLOSURE OF RETURNS AND RETURN INFORMATION.

(a) In general

(1) Inspection or Disclosure by employee of United States

If any officer or employee of the United States knowingly, or by reason of negligence, inspects or discloses any return or return information with respect to a taxpayer in violation of any provision of section 6103, such taxpayer may bring a civil action for damages against the United States in a district court of the United States.

(2) Inspection or disclosure by a person who is not an employee of United States

If any person who is not an officer or employee of the United States knowingly, or by reason of negligence, inspects or discloses any return or return information with respect to a taxpayer in violation of any provision of section 6103 or in violation of section 6104 (c), such taxpayer may bring a civil action for damages against such person in a district court of the United States.

(b) Exceptions

No liability shall arise under this section with respect to any inspection or disclosure-

(1) which results from good faith, but erroneous, interpretation of section 6103, or
(2) which is requested by the taxpayer.

(c) Damages

In any action brought under subsection (a), upon a finding of liability on the part of the defendant, the defendant shall be liable to the plaintiff in an amount equal to the sum of –

(1) the greater of –
  (A) $1,000 for each act of unauthorized inspection or disclosure of a return or return information with respect to which such defendant is found liable, or
  (B) the sum of –
    (i) the actual damages sustained by the plaintiff as a result of such unauthorized inspection or disclosure, plus
    (ii) in the case of a willful inspection or disclosure or an inspection or disclosure which is the result of gross negligence, punitive damages, plus

(2) the cost of the action.

(d) Period for Bringing Action

Notwithstanding any other provision of law, an action to enforce any liability created under this section may be brought, without regard to the amount in controversy, at any time within 2 years after the date of discovery by the plaintiff of the unauthorized inspection or disclosure.

(e) Notification of Unlawful Inspection and Disclosure

If any person is criminally charged by indictment or information with inspection or disclosure of a taxpayer's return or return information in violation of –

(1) paragraph (1) or (2) of section 7213 (a),

(2) section 7213A (a), or

(3) subparagraph (B) of section 1030(a)(2) of Title 18, United States Code, the Secretary shall notify such taxpayer as soon as practicable of such inspection or disclosure.

(f) Definitions

For purposes of this section, the terms "inspect", "inspection", "return" and "return information" have the respective meanings given such terms by section 6103 (b).

(g) Extension to information obtained under section 3406

For purposes of this section –

(1) any information obtained under section 3406 (including information with respect to any payee certification failure under subsection (d) thereof) shall be treated as return information, and

(2) any inspection or use of such information other than for purposes of meeting any requirement under section 3406 or (subject to the safeguards set forth in section 6103) for purposes permitted under section 6103 shall be treated as a violation of section 6103.

For purposes of subsection (b), the reference to section 6103 shall be treated as including a reference to section 6311 (e).

Exhibit 6 Contractor 45-Day Notification Procedures

Federal agencies, state tax agencies, and state child support enforcement agencies in the possession of FTI may use contractors, sometimes in limited circumstances.

- State tax authorities are authorized by statute to disclose information to contractors for the purpose of, and to the extent necessary in, administering state tax laws, pursuant to Treasury Regulation 301.6103(n)-1.
- Agencies that receive FTI under authority of IRC 6103(l)(7) (human services agencies) may not disclose FTI to contractors for any purpose.

Contractors consist of, but are not limited to, cloud computing providers, consolidated data centers, off-site storage facilities, shred companies, information technology support, or tax modeling or revenue forecasting providers.

Agencies must notify the IRS prior to executing any agreement to disclose FTI to a contractor, or at least 45 days prior to the disclosure of FTI, to ensure that appropriate contractual language is included and that contractors are held to safeguarding requirements. Further, any contractors authorized access to or possession of FTI must notify and secure the approval of the IRS prior to making any redisclosures to subcontractors. For additional information, see *Section 7.4.3, Contractor or Subcontractor Access*.

To provide agency notification of intent to enter into an agreement to make disclosures of FTI to a contractor, submit a letter in electronic format, on agency letterhead over the head of agency's signature, to SafeguardReports@irs.gov. Ensure that the letter contains the following specific information:

- Name, address, phone number, and email address of agency point of contact
- Name and address of contractor
- Contract number and date awarded
- Contract period covered (e.g., 2014–2017)
- Type of service covered by the contract
- Number of contracted workers
- Name and description of agency program that contractor will support
- Detailed description of FTI to be disclosed to contractor
- Description of work to be performed by contractor, including phased timing, how FTI will be accessed, and how tasks may change throughout the different phases
- Procedures for agency oversight on contractor access, storage, and destruction of FTI, disclosure awareness training, and incident reporting
- Location where work will be performed (contractor site or agency location) and how data will be secured if it is moved from the secure agency location
- Statement whether subcontractor(s) will have access to FTI
- Name(s) and address(es) of all subcontractor(s), if applicable
- Description of FTI to be disclosed to subcontractor(s)
- Description of work to be performed by subcontractor(s)

- Location(s) where work will be performed by subcontractor(s) and how data will be secured if it is moved from a secure agency location
- Certification that contractor personnel accessing FTI and contractor information systems containing FTI are all located within the United States or territories, given that FTI is not allowed offshore.

After receipt of an agency's request, the IRS will analyze the information provided to ensure that contractor access is authorized and consistent with all requirements. The IRS will send the agency an email acknowledgement of receipt of agency notification. A written response, along with a reminder of the requirements associated with the contract, is issued once the notification review process is complete. Agency disclosure personnel may wish to discuss local procedures with their procurement colleagues to ensure that they are part of the contract review process and that the appropriate contract language is included from the beginning of the contract.

If the 45-day notification pertains to the use of a contractor to conduct tax modeling, estimate revenue, or employ FTI for other statistical purposes, the agency must also submit a separate statement detailing the methodology and data to be used by the contractor. The Office of Safeguards will forward the methodology and data statement to the IRS Statistics of Income office for approval of the methodology (see Section 7.4.3). Templates can be located on the Office of Safeguards website.

If the 45-day notification is not possible, please contact the Safeguards mailbox at SafeguardReports@irs.gov for assistance.

Exhibit 7 Safeguarding Contract Language

CONTRACT LANGUAGE FOR GENERAL SERVICES

I. PERFORMANCE

In performance of this contract, the Contractor agrees to comply with and assume responsibility for compliance by his or her employees with the following requirements:

(1) All work will be performed under the supervision of the contractor or the contractor's responsible employees.

(2) The contractor and the contractor's employees with access to or who use FTI must meet the background check requirements defined in IRS Publication 1075.

(3) Any Federal tax returns or return information (hereafter referred to as returns or return information) made available shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such 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.

(4) All returns and return information will be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output and products will be given the same level of protection as required for the source material.

(5) No work involving returns and return information furnished under this contract will be subcontracted without prior written approval of the IRS.

(6) The contractor will maintain a list of employees authorized access. Such list will be provided to the agency and, upon request, to the IRS reviewing office.

(7) The agency will have the right to void the contract if the contractor fails to provide the safeguards described above.

(8) (Include any additional safeguards that may be appropriate.)

II. CRIMINAL/CIVIL SANCTIONS

(1) Each officer or employee of any person to whom returns or return information is or may be disclosed shall be notified in writing by such person that returns or return information disclosed to such officer or employee can be used only for a purpose and to the extent authorized herein, and that further disclosure of any such returns or return information for a purpose or to an extent unauthorized herein constitutes a felony punishable upon conviction by a fine of as much as $5,000 or imprisonment for as long as five years, or both, together with the costs

of prosecution. Such person shall also notify each such officer and employee

that any such unauthorized future disclosure of returns or return information may also result in an award of civil damages against the officer or employee in an amount not less than $1,000 with respect to each instance of unauthorized disclosure. These penalties are prescribed by IRCs 7213 and 7431 and set forth at 26 CFR 301.6103(n)-1.

(2) Each officer or employee of any person to whom returns or return information is or may be disclosed shall be notified in writing by such person that any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such 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 without an official need-to-know constitutes a criminal misdemeanor punishable upon conviction by a fine of as much as $1,000.00 or imprisonment for as long as 1 year, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized inspection or disclosure of returns or return information may also result in an award of civil damages against the officer or employee [United States for Federal employees] in an amount equal to the sum of the greater of $1,000.00 for each act of unauthorized inspection or disclosure with respect to which such defendant is found liable or the sum of the actual damages sustained by the plaintiff as a result of such unauthorized inspection or disclosure plus in the case of a willful inspection or disclosure which is the result of gross negligence, punitive damages, plus the costs of the action. The penalties are prescribed by IRCs 7213A and 7431 and set forth at 26 CFR 301.6103(n)-1.

(3) Additionally, it is incumbent upon the contractor to inform its officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a(i)(1), which is made applicable to contractors by 5 U.S.C. 552a(m)(1), provides that any officer or employee of a contractor, who by virtue of his/her employment or official position, has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is so prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than $5,000.

(4) Granting a contractor access to FTI must be preceded by certifying that each individual understands the agency's security policy and procedures for safeguarding IRS information. Contractors must maintain their authorization to access FTI through annual recertification. The initial certification and recertification must be documented and placed in the agency's files for review. As part of the certification and at least annually afterwards, contractors must be advised of the provisions of IRCs 7431, 7213, and 7213A (see Exhibit 4, *Sanctions for Unauthorized Disclosure*, and Exhibit 5, *Civil Damages for Unauthorized Disclosure*). The training provided before the initial certification and

annually thereafter must also cover the incident response policy and procedure for reporting unauthorized disclosures and data breaches. (See Section 10) For both the initial certification and the annual certification, the contractor must sign, either with ink or electronic signature, a confidentiality statement certifying their understanding of the security requirements.

III. INSPECTION

The IRS and the Agency, with 24 hour notice, shall have the right to send its inspectors into the offices and plants of the contractor to inspect facilities and operations performing any work with FTI under this contract for compliance with requirements defined in IRS Publication 1075. The IRS' right of inspection shall include the use of manual and/or automated scanning tools to perform compliance and vulnerability assessments of information technology (IT) assets that access, store, process or transmit FTI. On the basis of such inspection, corrective actions may be required in cases where the contractor is found to be noncompliant with contract safeguards.

CONTRACT LANGUAGE FOR TECHNOLOGY SERVICES

I. PERFORMANCE

In performance of this contract, the contractor agrees to comply with and assume responsibility for compliance by his or her employees with the following requirements:

(1) All work will be done under the supervision of the contractor or the contractor's employees.

(2) The contractor and the contractor's employees with access to or who use FTI must meet the background check requirements defined in IRS Publication 1075.

(3) Any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such material will be treated as confidential and will not be divulged or made known in any manner to any person except as may be necessary in the performance of this contract. Disclosure to anyone other than an officer or employee of the contractor will be prohibited.

(4) All returns and return information will be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output will be given the same level of protection as required for the source material.

(5) The contractor certifies that the data processed during the performance of this contract will be completely purged from all data storage components of his or her computer facility, and no output will be retained by the contractor at the time the work is completed. If immediate purging of all data storage components is not possible, the contractor certifies that any IRS data remaining in any storage component will be safeguarded to prevent unauthorized disclosures.

(6) Any spoilage or any intermediate hard copy printout that may result during the processing of IRS data will be given to the agency or his or her designee. When this is not possible, the contractor will be responsible for the destruction of the spoilage or any intermediate hard copy printouts, and will provide the agency or his or her designee with a statement containing the date of destruction, description of material destroyed, and the method used.

(7) All computer systems receiving, processing, storing or transmitting FTI must meet the requirements defined in IRS Publication 1075. To meet functional and assurance requirements, the security features of the environment must provide for the managerial, operational, and technical controls. All security features must be available and activated to protect against unauthorized use of and access to Federal Tax Information.

(8) No work involving Federal Tax Information furnished under this contract will be subcontracted without prior written approval of the IRS.

(9) The contractor will maintain a list of employees authorized access. Such list will be provided to the agency and, upon request, to the IRS reviewing office.(10) The agency will have the right to void the contract if the contractor fails to provide the safeguards described above.

(10) (Include any additional safeguards that may be appropriate.)

II. CRIMINAL/CIVIL SANCTIONS

(1) Each officer or employee of any person to whom returns or return information is or may be disclosed will be notified in writing by such person that returns or return information disclosed to such officer or employee can be used only for a purpose and to the extent authorized herein, and that further disclosure of any such returns or return information for a purpose or to an extent unauthorized herein constitutes a felony punishable upon conviction by a fine of as much as $5,000 or imprisonment for as long as 5 years, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized further disclosure of returns or return information may also result in an award of civil damages against the officer or employee in an amount not less than $1,000 with respect to each instance of unauthorized disclosure. These penalties are prescribed by IRCs 7213 and 7431 and set forth at 26 CFR 301.6103(n)-1.

(2) Each officer or employee of any person to whom returns or return information is or may be disclosed shall be notified in writing by such person that any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such 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 the contract. Inspection by or disclosure to anyone without an official need-to-know constitutes a criminal misdemeanor punishable upon conviction by a fine of as much as $1,000 or imprisonment for as long as 1 year, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized inspection or disclosure of returns or return information may also result in an award of civil damages against the officer or employee [United States for Federal employees] in an amount equal to the sum of the greater of $1,000 for each act of unauthorized inspection or disclosure with respect to which such defendant is found liable or the sum of the actual damages sustained by the plaintiff as a result of such unauthorized inspection or disclosure plus in the case of a willful inspection or disclosure which is the result of gross negligence, punitive damages, plus the costs of the action. These penalties are prescribed by IRC 7213A and 7431 and set forth at 26 CFR 301.6103(n)-1.

(3) Additionally, it is incumbent upon the contractor to inform its officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a(i)(1), which is made applicable to contractors by 5 U.S.C. 552a(m)(1), provides that any officer or employee of a contractor, who by virtue of his/her employment or official position, has possession of or access to agency records which contain individually identifiable information,

the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than $5,000.

(4) Granting a contractor access to FTI must be preceded by certifying that each individual understands the agency's security policy and procedures for safeguarding IRS information. Contractors must maintain their authorization to access FTI through annual recertification. The initial certification and recertification must be documented and placed in the agency's files for review. As part of the certification and at least annually afterwards, contractors must be advised of the provisions of IRCs 7431, 7213, and 7213A (see *Exhibit 4, Sanctions for Unauthorized Disclosure*, and *Exhibit 5, Civil Damages for Unauthorized Disclosure*). The training provided before the initial certification and annually thereafter must also cover the incident response policy and procedure for reporting unauthorized disclosures and data breaches. (See Section 10) For both the initial certification and the annual certification, the contractor must sign, either with ink or electronic signature, a confidentiality statement certifying their understanding of the security requirements.

III. INSPECTION

The IRS and the Agency, with 24 hour notice, shall have the right to send its inspectors into the offices and plants of the contractor to inspect facilities and operations performing any work with FTI under this contract for compliance with requirements defined in IRS Publication 1075. The IRS' right of inspection shall include the use of manual and/or automated scanning tools to perform compliance and vulnerability assessments of information technology (IT) assets that access, store, process or transmit FTI. On the basis of such inspection, corrective actions may be required in cases where the contractor is found to be noncompliant with contract safeguards.

Exhibit 8 Warning Banner Examples

A warning banner is required when access is provided to any information system that receives, processes, stores, or transmits FTI. The following elements, as explained in Section 9.3.1.8, *System Use Notification (AC-8)*, must be contained within the warning banner: (i) the system contains U.S. Government information, (ii) user actions are monitored and audited, (iii) unauthorized use of the system is prohibited, and (iv) unauthorized use of the system is subject to criminal and civil sanctions.

The following warning banners are acceptable examples for use by agencies.

WARNING

This system may contain U.S. Government information, which is restricted to authorized users ONLY. Unauthorized access, use, misuse, or modification of this computer system or of the data contained herein or in transit to/from this system constitutes a violation of Title 18, United States Code, Section 1030, and may subject the individual to criminal and civil penalties pursuant to Title 26, United States Code, Sections 7213, 7213A (the Taxpayer Browsing Protection Act), and 7431. This system and equipment are subject to monitoring to ensure proper performance of applicable security features or procedures. Such monitoring may result in the acquisition, recording, and analysis of all data being communicated, transmitted, processed, or stored in this system by a user. If monitoring reveals possible evidence of criminal activity, such evidence may be provided to Law Enforcement Personnel.

ANYONE USING THIS SYSTEM EXPRESSLY CONSENTS TO SUCH MONITORING.

The following two banners are approved by the Department of Justice for systems that have limited space for the warning banner.

WARNING! BY ACCESSING AND USING THIS GOVERNMENT COMPUTER SYSTEM, YOU ARE CONSENTING TO SYSTEM MONITORING FOR LAW ENFORCEMENT AND OTHER PURPOSES. UNAUTHORIZED USE OF, OR ACCESS TO, THIS COMPUTER SYSTEM MAY SUBJECT YOU TO CRIMINAL PROSECUTION AND PENALTIES.

WARNING! THIS SYSTEM CONTAINS U.S. GOVERNMENT INFORMATION. BY ACCESSING AND USING THIS COMPUTER SYSTEM, YOU ARE CONSENTING TO SYSTEM MONITORING FOR LAW ENFORCEMENT AND OTHER PURPOSES. UNAUTHORIZED USE OF, OR ACCESS TO, THIS COMPUTER SYSTEM MAY SUBJECT YOU TO STATE AND FEDERAL CRIMINAL PROSECUTION AND PENALTIES AS WELL AS CIVIL PENALTIES.

Exhibit 9 Record Retention Schedules

The Office of Safeguards requires the retention of FTI logs only. FTI should be destroyed after use or according to the agency record retention schedule.

Table 12 – Record Retention Schedules

Document Type	Required Document Elements	Retention
Electronic and Non-Electronic FTI Logs Section 3.2	• Taxpayer name • Tax year(s) • Type of information (e.g., revenue agent reports, Form 1040, work papers) • Reason for request • Date requested • Date received • Exact location of FTI • Person(s) with access to the data, and • Date and method of disposition, if disposed of	5 years
Converted Media Section 3.2	Requirements listed for FTI in its current form (electronic or non-electronic)	5 years
State Auditor Disclosures Section 3.4	Approximate number of records, date of inspection, description of records, name of individual making inspection	5 years
Visitor Access Logs Section 4.3.1	• Name and organization of visitor • Signature of visitor • Form of identification • Date of access • Time of entry and departure • Purpose of visit • Name and organization of person visited	5 years
Disclosure Awareness Certification Section 6.3	Signed disclosure awareness confidentiality statement that certify understanding of FTI security requirements	5 years

Document Type	Required Document Elements	Retention
Internal Inspections Section 6.4	Internal Inspections • Recordkeeping • Secure storage • Disposal • Limited access • Computer systems security • POA&M	5 years
Audit Trail Logs Section 9.3.3.11	See Section 9.3.3.2, Audit Events (AU-2) See Section 9.3.3.4	7 years

Exhibit 10 Data Warehouse Security Requirements

When an agency implements a data warehouse, the agency must provide written notification to the Office of Safeguards, identifying the security controls, including FTI identification and auditing within the data warehouse. The written notification shall be submitted using SDT or to the SafeguardReports@irs.gov mailbox at least 45 days before implementation. In addition, the agency should update section 9.4.2 Data Warehouse when they submit their annual SSR.

Purpose

The purpose of this document is to provide an overview of data warehousing and data storage concepts and to define the security requirements necessary to protect these environments. Although some security controls may replicate those contained in this publication, such redundancy is necessary so that Exhibit 10 can be used as a stand-alone document. As a rule, all requirements contained within the main text of this publication also apply to any data warehousing environments used by federal, state, or local agencies, and these environments incorporate FTI. These requirements also apply to authorized representatives, agents, or contractors with access to FTI.

This document is intended to describe the controls that are specific to data warehousing-type environments. As the term *data warehousing* is used, the concepts are applied to all complex data environments, including data warehousing, data mining, and data marts.

Audience

This document is intended for federal, state, and local agencies, as well as authorized representatives, agents, or contractors with access to FTI. The document is to be used as a planning document and is intended to support the development and deployment of data warehousing architectures, as well as architectures of a similar environment, such as data marts.

Background

A data warehouse is a structure that is designed to distribute data from multiple arenas to the primary enterprise system. A data mart is a structure designed for access, which is used to facilitate client user support. A data warehouse receives, collects, extracts, transforms, transports, and loads data for a distribution to various data marts.

In the context of FTI within agencies, the data warehouse stores data sets, which contain specific taxpayer information as well as summary information and historical data.

A data warehouse is structured to separate analysis from transaction work and allows a large amount of data to be consolidated from several sources. The security controls remain constant with operational enterprises and are applicable to a data warehouse.

In a data warehouse, the scope of security changes with respect to the different dimensions of data management. Information enters a data warehouse through a staging area where it goes through a process of extraction, transformation, and loading. This process is referred to as ETL. In addition, a data warehouse is operated by query or a search engine tool. Through the use of end-to-end security, the data warehouse ensures the confidentiality, privacy, and integrity of FTI. The security of the data warehouse must include all aspects of the warehouse, including hardware, software, data transport, and data storage.

Data Warehousing Implications

FTI placed in a data warehouse environment may be used only for "tax administration" purposes or for other authorized purposes defined within this publication. As part of the data warehouse, FTI data must retain its identity as FTI to the data element level (i.e., it must be obvious that the IRS is the source of the data). Whenever calculations or data manipulations are performed that could commingle FTI with any other data, the access to FTI must be restricted to agency staff with a need-to-know and their contractors or agents as authorized by law. This requirement is defined in the primary publication but is reinforced here for clarification.

Security

Security controls for data warehousing concepts are derived from NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*. These controls address the areas of management, operational, and technical controls.

When all controls are implemented and managed, these controls provide effective safeguards for the confidentiality, integrity reliability, and availability of the data. For this document, the defined controls have been mapped to the classes and families of the NIST SP 800-53 to allow technical personnel to easily review NIST controls and understand how these apply to security environments.

The next sections define specific and unique controls related to data warehousing environments. If no additional controls are required, the sections identify this fact.

Management Controls

The following section identifies high-level management controls that shall be used within a data warehousing environment.

Risk Assessment

The agency shall have a risk management program in place to ensure that each aspect of the data warehouse is assessed for risk. Any risk documents shall identify and document all vulnerabilities associated with the data warehousing environment.

Planning

Planning is crucial to the development of a new environment. A security plan shall be in place to address organizational policies, security testing, rules of behavior, contingency plans, architecture and network diagrams, and requirements for security reviews. Although such a security plan will provide planning guidelines, it does not replace requirements documents, which contain specific details and procedures for security operations.

Policies and procedures are required to define how activities and day-to-day procedures will occur. They contain the specific policies, relevant to all of the security disciplines covered in this document. Because they relate to data warehousing, any data warehousing documents can be integrated into overall security procedures. A section shall be dedicated to the data warehouses to define the controls specific to that environment.

The agency must develop policies and procedures to document all existing business processes. The agency must ensure that roles are identified for the organization and develop responsibilities for the roles.

Within the security planning and policies, the purpose or function of the warehouse shall be defined. The business process shall include a detailed definition of configurations and the functions of the hardware and software involved. In general, the planning shall define any unique issues related to data warehousing.

The agency must define how "legacy system data" will be brought into the data warehouse and how the legacy data that is FTI will be cleansed for the ETL transformation process.

The policy shall ensure that FTI will not be subject to public disclosure. Only authorized users with a demonstrated need-to-know can query FTI data within the data warehouse.

System and Services Acquisition

Acquisition security needs to be explored. Because FTI is used within data warehousing environments, it is important that the services and acquisitions have adequate security in place, including the capacity to block information to contractors in cases in which they are not authorized to access FTI.

Certification, Accreditation, and Security Assessments

Certification, accreditation, and security and risk assessments are accepted best practices used to ensure that appropriate levels of control exist, that they are being managed, and that they are compliant with all federal and state laws or statutes.

State and local agencies shall develop a process or policy to ensure that data warehousing security meets the baseline security requirements defined in the current revision of NIST SP 800-53. The process or policy must contain the methodology used

by the state or local agency to inform management, define accountability, and address known security vulnerabilities. Risk assessments must follow the guidelines provided in NIST Publication 800-30, *Risk Management Guide for Information Technology Systems*.

Operational Controls

The following section identifies high-level operational controls that shall be used within a data warehousing environment.

Personnel Security See *Section 5.1.1 Background Investigation Minimum Requirements*

Physical Security and Environmental Protection

There are no additional physical security controls for a data warehousing environment. However, the physical security requirements throughout this publication apply to the physical location that hosts the data warehouse hardware.

Contingency Planning

Online data resources shall be provided adequate tools for the backup, storage, restoration, and validation of data. Agencies will ensure that the data provided is reliable.

Both incremental and special purpose data backup procedures are required, combined with off-site storage protections and regular test-status restoration to validate disaster recovery and business process continuity. Standards and guidelines for these processes are bound by agency policy and are tested and verified. Although already addressed in this publication, the agency's contingency plan must be evaluated to ensure that all data resources are synchronized and restored to allow re-creation of the data to take place.

Configuration Management

The agency shall have a process and documentation to identify and analyze how FTI is used and how FTI is queried or targeted by end users. Parts of the system containing FTI shall be mapped to follow the flow of the query from a client through the authentication server to the release of the query from the database server. During the life cycle of the data warehouse, online and architectural adjustments and changes will occur. The agency shall document these changes and ensure that FTI always is secured from unauthorized access or disclosure.

Maintenance

There are no unique maintenance requirements for data warehousing environments.

System and Information Integrity

There are no unique system and information integrity requirements for data warehousing environments.

Media Protection

The agency shall have policy and procedures in place that describe the cleansing process at the staging area and how the ETL process cleanses the FTI when it is extracted, transformed, and loaded. In addition, the agency shall describe the process of object reuse once FTI is replaced from data sets. IRS requires that all FTI be removed by a random overwrite software program.

Incident Response

Intrusion-detection software shall be installed and maintained to monitor networks for any unauthorized attempt to access tax data. The agency's incident reporting policy and procedures must cover the data warehousing environment as well.

Awareness and Training

The agency shall have a disclosure awareness training program in place that includes how FTI security requirements are communicated to end users. Training shall be user-specific to ensure that all personnel receive appropriate training for a particular job, such as training required for administrators or auditors.

Technical Controls

The following section identifies high-level technical controls that shall be used within a data warehousing environment.

Identification and Authentication

The agency shall configure the Web services to be authenticated before access is granted to users via an authentication server. The Web portal and two-factor authentication requirements in Section 9.0 apply in a data warehouse environment.

Business roles and rules shall be imbedded at either the authentication level or application level. In either case, roles must be in place to ensure that only authorized personnel have access to FTI information.

Authentication shall be required both at the operating system level and at the application level, whenever the data warehousing environment is accessed.

Access Control

Access to systems shall be granted based upon the need to perform job functions. Agencies shall identify which application programs use FTI and how access to FTI is controlled. The access control to application programs relates to how file shares and directories apply file permissions to ensure that only authorized personnel have access to the areas that contain FTI.

The agency shall have security controls in place that include preventive measures to keep an attack from being a success. These security controls shall also include detective measures in place to let the IT staff know that an attack is occurring. If an interruption of service occurs, the agency shall have additional security controls in place that include recovery measures to restore operations.

Within the data warehouse, the agency shall protect FTI as sensitive data and be granted access to FTI for the aspects of its job responsibilities. The agency shall enforce effective access controls so that end users have access to programs with the least privilege needed to complete the job. The agency shall set up access controls in its data warehouse based on personnel clearances. Access controls in a data warehouse are classified in general as follows.

1. General users
2. Limited access users
3. Unlimited access users.

FTI shall always fall into the limited access users category.

All FTI shall have an owner assigned to provide responsibility and accountability for its protection. Typically, this role is assigned to a management official such as an accrediting authority.

The agency shall configure control files and data sets to enable the data owner to analyze and review both authorized and unauthorized accesses.

The database servers that control FTI applications will copy the query request and load it to the remote database to run the application and transform its output to the client. Therefore, access controls must be implemented at the authentication server.

Web-enabled application software shall do the following:

- Prohibit generic meta-characters in input data
- Arrange to have all database queries constructed with parameterized stored procedures to prevent structured query language (SQL) injection
- Protect any variable used in scripts to prevent direct OS command attacks
- Arrange to have all comments removed for any code passed to the browser

- Prevent users from seeing any debugging information on the client
- Undergo a check before production deployment to ensure that all sample, test, and unused files have been removed from the production system.

Audit and Accountability

The agency shall ensure that audit reports are created and reviewed for data warehousing related access attempts.

A data warehouse must capture all changes made to data, including additions, modifications, or deletions by each unique user. If a query is submitted, the audit log must identify the actual query made, the originator of the query, and relevant time and stamp information. For example, if John Doe makes a query to determine the number of people that earn more than $50,000, the audit log would store the fact that John Doe made such a query and its content. The results of the query would not be as significant as the type of query made.

System and Communication Protection

Whenever FTI is located on both production and test environments, these environments are to be segregated. Such action is especially important in the development stages of the data warehouse.

All Internet transmissions are to be encrypted with the use of HTTPS protocol and secure sockets layer encryption based on a certificate that contains a key no less than 128 bits in length, or FIPS 140-2 compliant, whichever is stronger. This encryption will allow information to be protected between the server and the workstation. Data is at its highest risk during the ETL stages when it enters the warehouse. Encryption shall occur as soon as possible. All sessions shall be encrypted and provide end-to-end encryption (i.e., from workstation to point of data).

Web server(s) that receive online transactions shall be configured in a "demilitarized zone" to receive external transmissions but still have some measure of protection against unauthorized intrusion.

Application server(s) and database server(s) shall be configured behind the firewalls for optimal security against unauthorized intrusion. Only authenticated applications and users shall be allowed access to these servers.

Transaction data shall be "swept" from the Web server(s) at frequent intervals, consistent with good system performance, and removed to a secured server behind the firewalls to minimize the risk that these transactions could be destroyed or altered by intrusion.

Antivirus software shall be installed and maintained with current updates on all servers and clients that contain tax data.

For critical online resources, redundant systems shall be employed with automatic failover capability.

Exhibit 11 Media Sanitization Techniques

The technique for clearing, purging, and destroying media depends on the type of media to be sanitized.

Table 13 – Media Sanitization Techniques

Media Type	Clear	Purge	Destroy
Magnetic Disks			
Floppy disks	**Overwrite** media with agency-approved software and validate the overwritten data	**Degauss** with a NSA/CSS- approved degausser	• **Incinerate** floppy disks and diskettes by burning them in a licensed incinerator • **Shred**
ATA hard drives	**Overwrite** media with agency-approved and validated overwriting technologies/methods/ tools	• **Secure erase,** • **Degauss,** or • **Disassemble** and degauss the enclosed platters	• **Incinerate** hard disk drives by burning them in a licensed incinerator • **Shred** • **Pulverize** • **Disintegrate**
USB removable drives	**Overwrite** media with agency-approved and validated overwriting technologies/methods/ tools	• **Secure erase,** • **Degauss** with a NSA/CSS-approved degausser, or **disassemble and degauss** enclosed platters with a NSA/CSS-approved **degausser**	• **Incinerate** hard disk drives by burning them in a licensed incinerator • **Shred** • **Pulverize** • **Disintegrate**
Zip drives	**Overwrite** media with agency-approved and validated overwriting technologies/methods/ tools	**Degauss** with a NSA/CSS-approved degausser	• **Incinerate** disks and diskettes by burning the zip disks in a licensed incinerator • **Shred**
SCSI drives	**Overwrite** media with agency-approved and validated overwriting technologies/methods/ tools	• **Secure erase** • **Degauss** with a NSA/CSS-approved degausser, or • **Disassemble and degauss** the enclosed platters with a NSA/CSS-approved **degausser**	• **Incinerate** hard disk drives by burning them in a licensed incinerator • **Shred** • **Pulverize** • **Disintegrate**

(Table 13, Media Sanitization Techniques continued)

Media Type	Clear	Purge	Destroy
Magnetic Tape			
Reel and cassette	**Overwrite** on a system similar to the one originally used to record the data (e.g., overwrite classified or sensitive VHS format video signals on a comparable VHS format recorder); overwrite all portions of the magnetic tape one time with known, nonsensitive signals	**Degauss** with a NSA/CSS-approved degausser	• **Incinerate** by burning the tapes in a licensed incinerator • **Shred**
Optical Disks			
CD/DVDs	N/A; see Destroy method column	N/A; see Destroy method column	Destroy in the following order of recommendations: • Remove the information-bearing layers of DVD media with a commercial optical disk grinding device • Incinerate optical disk media (reduce to ash) with a licensed facility • Use optical disk media shredders or disintegrator devices to reduce to particles that have a nominal edge dimension of five millimeters and surface area of 25 mm^2.[§]

[§] This particle size is the one currently acceptable. Any disk media shredders obtained in future should reduce CDs and DVDs to a surface area of .25 mm.

A

Accountability: A process of holding users responsible for actions performed on an information system.

Adequate security: Security commensurate with the risk and magnitude of harm resulting from the loss, misuse, unauthorized access to, or modification of information.

Affordable Care Act: U.S. federal statute signed into law on March 23, 2010, with the goal of expanding public and private insurance coverage and reducing the cost of healthcare for individuals and the government.

Alternative work site: Any working area that is attached to the wide area network either through a public switched data network or through the Internet.

Assurance: A measure of confidence that management, operational and technical controls are operating as intended and achieving the security requirements for the system.

Assurance testing: A process used to determine if security features of a system are implemented as designed, and are adequate for the proposed operating environment. This process may include hands-on functional testing, penetration testing, and/or verification.

Audit: An independent examination of security controls associated with a representative subset of organizational information systems to determine the operating effectiveness of system controls; to ensure compliance with established policy and operational procedures; and to recommend changes in controls, policy, or procedures where needed.

Audit trail: A chronological record of system activities sufficient to enable the reconstruction, review, and examination of security events related to an operation, procedure, or event in a transaction from its inception to final results.

Authentication: Verification of the identity of a user, process, or device, often as a prerequisite to allowing access to resources in an information system; see *Identification.*

Authorization: Access privileges granted to a user, program, or process.

Availability: Timely, reliable access to information and information services for authorized users.

B

Banner: Display of an information system, which outlines the parameters for system or information use.

Baseline security requirements: A description of the minimum security requirements necessary for an information system to enforce the security policy and maintain an acceptable risk level.

Blurring: The act of obscuring data so that it cannot be read or reconstructed.

C

Classified: National security information classified pursuant to Executive Order 12958.

Compromise: The disclosure of sensitive information to persons not authorized to receive such information.

Comingling: The presence of FTI and non-FTI data together on the same paper or electronic media.

Confidentiality: The preservation of authorized restrictions on information access and disclosure.

Configuration management: A structured process of managing and controlling changes to hardware, software, firmware, communications, and documentation throughout the system development life cycle.

Container: An object that can be used to hold or transport something.

Containerize: To package (freight) in uniform, sealed containers for shipment.

Control number: A code that identifies a unique document or record.

Control schedule: A record retention and disposal schedule established by the agency.

Corrective Action Plan (CAP): A report required to be filed semi-annually, detailing the agency's planned and completed actions to resolve findings identified during an IRS safeguard review.

Countermeasure: Action, device, procedure, mechanism, technique, or other measure that reduces the vulnerability of an information system.

Cryptography: The process of rendering plain text information unreadable and restoring such unreadable information to a readable form.

D

Data: A representation of facts, concepts, information, or instruction suitable for communication, processing, or interpretation by people or information systems.

Decryption: The process of converting encrypted information into a readable form. This term is also referred to as deciphering.

Degauss: To erase information electromagnetically from a magnetic disk or other storage device.

Digital subscription line: A public telecommunications technology that delivers high bandwidth over conventional copper wire that covers limited distances.

Discretionary access control: A method of restricting logical access to information system objects (e.g., files, directories, devices, permissions, rules) based on the identity and need-to-know of users, groups, or processes.

E

Encryption: See *Cryptography*.

Encryption algorithm: A formula used to convert information into an unreadable format.

Enterprise life cycle: A robust methodology used to implement business change and information technology modernization.

External network: Any network that resides outside the security perimeter established by the telecommunications system.

Extranet: A private data network that uses the public telephone network to establish a secure communications medium among authorized users (e.g., organization, vendors, business partners). An Extranet extends a private network (often referred to as an Intranet) to external parties in cases in which all parties may benefit from the exchange of information quickly and privately.

External information systems: See Non-Agency-Owned Equipment.

Exchange: An online marketplace in which individuals and small businesses can compare policies and buy insurance (with a government subsidy, if eligible).

F

File permission: A method of implementing discretionary access control by establishing and enforcing rules to restrict logical access of information system resources to authorized users and processes.

File server: A local area network computer dedicated to providing files and data storage to other network stations.

Firewall: Telecommunication device used to regulate logical access authorities between network systems.

Firmware: Microcode programming instructions permanently embedded into the read-only memory control block of a computer system. Firmware is a machine component of computer system, similar to a computer circuit component.

G

Gateway: An interface that provides compatibility between heterogeneous networks by converting transmission speeds, protocols, codes, or security rules. This interface is sometimes referred to as a protocol converter.

H

Host: A computer dedicated to providing services to many users. Examples of such systems include mainframes, minicomputers, or servers that provide dynamic host configuration protocol services.

I

Identification: A mechanism used to request access to system resources by providing a recognizable unique form of identification such as a Login ID, User ID, or token; see *Authentication*.

Information: See *Data*.

Information system: A collection of computer hardware, software, firmware, applications, information, communications, and personnel organized to accomplish a specific function or set of functions under direct management control.

Information system security: The protection of information systems and information against unauthorized access, use modification, or disclosure to ensure the confidentiality, integrity, and availability of information systems and information.

Integrity: The protection of information systems and information from unauthorized modification to ensure the quality, accuracy, completeness, nonrepudiation, and authenticity of information.

Internet: Two or more networks connected by a router; the world's largest network, which uses TCP/IP to connect government, university, and commercial institutions.

Intranet: A private network that uses TCP/IP, the Internet, and World Wide Web technologies to share information quickly and privately between authorized user communities, including organizations, vendors, and business partners.

K

Key: Information used to establish and periodically change the operations performed in cryptographic devices for the purpose of encrypting and decrypting information.

L

Least privilege: A security principle under which users or processes are assigned the most restrictive set of privileges necessary to perform routine job responsibilities.

M

Management controls: Security controls focused on managing organizational risk and information system security and devising sufficient countermeasures or safeguards to mitigate risk to acceptable levels. Management control families include risk assessment, security planning, system and services acquisition, and security assessment.

Malicious code: Rogue computer programs designed to inflict a magnitude of harm by diminishing the confidentiality, integrity, and availability of information systems and information.

N

Network: A communications infrastructure and all components attached thereto whose primary objective is to transfer information among a collection of interconnected systems. Examples of networks include local area networks, wide area networks, metropolitan area networks, and wireless area networks.

Node: A device or object connected to a network.

Non-Agency-Owned Equipment: Any technology used to receive, process, store, or transmit FTI that is not owned and managed by the agency but is owned by a contractor and centrally managed by their own IT department.

Nonrepudiation: The use of audit trails or secure messaging techniques to ensure the origin and validity of source and destination targets (i.e., senders and recipients of information cannot deny their actions).

O

Object reuse: The reassignment of a storage medium, which contains residual information, to potentially unauthorized users or processes.

Operational controls: Security controls focused on mechanisms primarily implemented by people as opposed to systems. These controls are established to improve the security of a group, a specific system, or group of systems. Operational controls require technical or specialized expertise and often rely on management and technical controls. Operational control families include personnel security, contingency planning, configuration management, maintenance, system and information integrity, incident response, and awareness and training.

Organization: An agency or, as appropriate, any of its operational elements.

P

Packet: A unit of information that traverses a network.

Password: A private, protected, alphanumeric string used to authenticate users or processes to information system resources.

Patient Protection and Affordable Care Act: See *Affordable Care Act.*

Penetration testing: A testing method by which security evaluators attempt to circumvent the technical security features of the information system in efforts to identify security vulnerabilities.

Personally identifiable information: Any information about an individual maintained by an agency with respect to, but not limited to, education, financial transactions, medical history, and criminal or employment history, and information that can be used to distinguish or trace an individual's identity (e.g., name, Social Security Number, date and place of birth, mother's maiden name, biometric records) including any other personal information linked or linkable to an individual.

Personally-Owned Devices: Any equipment purchased and owned by an individual, not owned by the agency or contractor and not managed by an IT department.

Plan of Action and Milestones (POA&M): A management tool used to assist organizations in identifying, assessing, prioritizing, and monitoring the progress of actions taken to correct security weaknesses found in programs and systems. The POA&M arises from agency-conducted internal inspections and highlights the corrections that result from such inspections (defined in OMB 02-01).

Potential impact: The loss of confidentiality, integrity, or availability that could be expected to have a limited adverse effect, a serious adverse effect, or a catastrophic adverse effect on organizational operations, organizational assets, or individuals.

Privileged user: A user that has advanced privileges with respect to computer systems. Such users in general include administrators.

Protocol: A set of rules and standards governing the communication process between two or more network entities.

R

Remnants: Residual information remaining on storage media after reallocation or reassignment of such storage media to different organizations, organizational elements, users, or processes. See *Object reuse.*

Residual risk: Portions of risk that remain after security controls or countermeasures are applied.

Risk: The potential adverse impact on the operation of information systems, which is affected by threat occurrences on organizational operations, assets, and people.

Risk assessment: The process of analyzing threats to and vulnerabilities of an information system to determine the potential magnitude of harm, and identify cost-effective countermeasures to mitigate the impact of such threats and vulnerabilities.

Risk management: The identification, assessment, and prioritization of risks.

Router: A device that forwards data packets between computer networks, creating an overlay internetwork.

S

Safeguards: Protective measures prescribed to enforce the security requirements specified for an information system; synonymous with security controls and countermeasures.

Security policy: The set of laws, rules, directives. and practices governing how organizations protect information systems and information.

Security requirement: The description of a specification necessary to enforce the security policy. See *Baseline security requirements.*

Standard user: A general program user, who does not have administrative rights.

Switch: A computer networking device that links network segments or network devices.

System: See *Information system.*

System Security Plan: An official document that provides an overview of the security requirements for an information system and describes the security controls in place or planned for meeting those requirements (NIST SP 800-18).

T

Tax modeling: A large-scale microsimulation model of a tax system. Tax models come in all shapes and sizes, depending on the nature of the policy issues examined. The policy questions may relate to specific problems, concerning perhaps the revenue implications of a particular tax, or they may involve an extensive analysis of the cost and redistributive effects of a large number of taxes and transfer payments.

Technical controls: Security controls executed by the computer system through mechanisms contained in the hardware, software, and firmware components of the system. Technical security control families include identification and authentication, access control, audit and accountability, and system and communications protection.

Threat: An activity, event, or circumstance with the potential for causing harm to information system resources.

U

User: A person or process authorized to access an information system.

User identifier: A unique string of characters used by an information system to identify a user or process for authentication.

V

Virus: A self-replicating, malicious program that attaches itself to executable programs.

Voice over Internet Protocol (VoIP): A methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet protocol networks, such as the Internet.

Vulnerability: A known deficiency in an information system, which threat agents can exploit to gain unauthorized access to sensitive or classified information.

Vulnerability assessment: Systematic examination of an information system to determine its security posture, identify control deficiencies, propose countermeasures, and validate the operating effectiveness of such security countermeasures after implementation.

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#	Name	Description	Task Reference ID
MC-101	Posting of Financials	System shall support automated posting of proposed financials during case closure	MC-030-040
MC-102	Supervisor Closure Notification	System shall support automated notifications of case closure to supervisor based on business rules	MC-030-040
MC-103	Case Identification	System shall support search functionality based on specified case criteria	MC-030-040
MC-104	Select All Capability	System shall allow manual 'select all' capabilities for case search results for bulk case closure	MC-030-040
MC-105	Selection Capability	System shall allow manual selection of cases based on case search results for bulk case closure	MC-030-040
MC-106	Bulk Case Closure	System shall allow manual bulk closure of selected cases based on business rules	MC-030-040

PS - Process Submissions

Defines the activities to process submission of tax returns, including loading returns into the system, verifying their accuracy, and processing the returns and exceptions.
- Front End Document Processing: Defines the activities to load and process physical and electronic documents into the system.
- Process Exceptions: Defines the activities to access exception work lists and resolve exceptions.
- Process Tax Return: Defines the activities to process tax returns, create exceptions for tax returns that need to be reviewed, and post tax assessments on taxpayer accounts.

#	Name	Description	Task Ref
		"Front End Document Processing" Functional Requirements	
PS-1	Electronic Processing	System shall process electronically filed returns and registrations	PS-01
PS-2	Internal Application Interfacing	System shall directly interface with other state internal applications (i.e. INBiz) to process returns	PS-01
PS-3	CD ROM Data	System shall process return data in from CD-ROMs	PS-01
PS-4	Manual Data Entry	System shall allow direct, manual data entry of specified form types	PS-01
PS-5	Manual Voucher Generation	System shall allow manual voucher generation that includes required fields (e.g. tax type, penalty, interest)	PS-01
PS-6	Manual Comment Creation	System shall allow employees to manually create comments against fields when reviewing forms	PS-01
PS-7	Validation Following Manual Data Entry	System shall provide form validation during manual data entry	PS-01
PS-8	File Listening	System shall support automated generation of an exception if a file is expected to be received, but is not received	PS-01
PS-9	Document Headers	System shall conduct automated quality checks of input document headers based on business rules	PS-01
PS-10	Document Content Validation	System shall support automated validation of data field entry based on business rules	PS-01
PS-11	Return Math Data Check	System shall support automated validation that mathematical calculations are to confirm record is correct before processing	PS-01
PS-12	Cross-Form Validation	System shall validate file data with other internal DOR data as available	PS-01
PS-13	Attachments	System shall allow for attachment of electronic documents or images to return or registration information	PS-01
PS-14	Suspension Notification	System shall support automated email notifications when an exception occurs	PS-01
PS-15	Full Suspension	System shall support automated document suspension of an entire record based on business rules	PS-01
PS-16	Duplicate Recognition	System shall support automated recognition of duplicate records	PS-01
PS-17	Duplicate Suspension	System shall support automated suspension of duplicate records for review	PS-01
PS-18	Suspension Acknowledgement	System shall support automated contact with entity via desired channel regarding suspension of data or record based on business rules	PS-01
PS-19	File Re-validation	System shall re-validate input files that have undergone manual intervention or adjustment	PS-01
PS-20	Taxpayer Correspondence	System shall allow for input and storage of unstructured correspondence	PS-01
		"Process Exceptions" Functional Requirements	
PS-21	Single View	System shall display all relevant taxpayer data on a single page with executable links	PS-02
PS-22	Demographics Information	System shall display taxpayer demographic data	PS-02
PS-23	Correspondence Information	System shall display taxpayer correspondence history	PS-02
PS-24	Return Information	System shall display historical taxpayer return data	PS-02
PS-25	Supplemental Return Information	System shall display taxpayer supplemental return data	PS-02
PS-26	Original Return Data	System shall display taxpayer return file as submitted by taxpayer	PS-02
PS-27	Taxpayer Account Balance	System shall display current taxpayer balance (if the taxpayer has a liability or credit)	PS-02
PS-28	Taxpayer Account Financial Postings	System shall display historical taxpayer financial postings	"2
PS-29	Associated Entities Information	System shall display information indicating if taxpayer is associated with another filing entity	"
PS-30	Withholding Document Information	System shall display taxpayer withholding document(s)	PS-02
PS-31	Suspense Correspondence Generation	System shall allow employee to generate correspondence from a Suspense Item requesting additional information from the taxpayer	PS-02
PS-32	Return Recalculation	System shall support automated recalculation of return based on receipt of an amended return	PS-02
PS-33	Audit/Legal Alerts	System shall support automated alerts to employees indicting audit action required for specific work items	PS-02
PS-34	Audit/Legal Flagging	System shall support automated flagging of legal and/or audit action required for specific work items	PS-02
PS-35	Suspense Item Action Tracking	System shall support automated tracking (history) of actions taken on a Suspense Item into a business user-viewable log	PS-02
PS-36	Suspense Item Attachment	System shall allow additional documentation to be attached to Suspense Items	PS-02
PS-37	Suspense Item Time Out	System shall support automated re-queueing of work items to holding queues after a set period of time based on business rules	PS-02
PS-38	Suspense Item Escalation	System shall support automated escalation of work items from queues after a set period of time based on business rules	PS-02
PS-39	Closed Suspense Item Search	System shall allow users to search for closed Suspense Items	PS-02
PS-40	Suspense Dashboards	System shall allow users to create ad-hoc dashboards of Suspense Items based on pre-defined filters	PS-02
PS-41	Suspense Item Closure Reasons	System shall allow employees to select pre-defined reasons for closing a Suspense Item (closure codes)	PS-02
PS-42	Suspense Item Closure Notes	System shall allow employees to log closure notes on a Suspense Item	PS-02
PS-43	Change Return Field	System shall allow employees to update information through field level adjustment	PS-02
PS-44	Return Field Notes	System shall allow employees to create notes against specific return fields	PS-02
PS-45	Return Field Replacement	System shall allow employees to replace return fields	PS-02

#	Name	Description	Task Ref
PS-46	Return Preview	System shall provide a side-by-side view of return line items if figures are altered, providing an 'as filed' and 'as computed' view for the employee	PS-02
PS-47	Return Track Changes	System shall support automated tracking of changes to return fields on a field-by-field and employee-by-employee basis, viewable as notes on the return	PS-02
PS-48	Return Change Log	System shall support automated tracking of changes to return fields on a field-by-field and employee-by-employee basis, viewable as a log	PS-02
PS-49	Return Revalidation	System shall re-validate return files that have undergone manual intervention or adjustment	PS-02
PS-50	Process Review Item--Assignment	System shall support automated assignment of Process Review Items based on business rules	PS-02
PS-51	Process Review Item--Prioritization	System shall support automated prioritization of Process Review Items within queue based on business rules	PS-02
PS-52	Process Review Item--Query	System shall allow users to query Process Review Items in queue	PS-02
PS-53	Process Review Item--Sort	System shall allow users to sort Process Review Items in queue	PS-02
PS-54	Process Review Item--Reassignment	System shall allow employees to assign Process Review Items from queue to themselves for processing	PS-02
PS-55	Taxpayer Process Review Item View	System shall show all Process Review Items related to a taxpayer or entity in a single view	PS-02
PS-56	Process Review Item--Notes	System shall allow employees to log release notes on a Process Review Item	PS-02
PS-57	Process Review Item--Hold Release Codes	System shall allow employees to select pre-defined reasons for releasing the hold on a Process Review Item (release codes)	PS-02
PS-58	Process Review Item--Escalation Codes	System shall allow employees to select pre-defined reasons for requesting further Process Review Item investigation (escalation codes)	PS-02
PS-59	Process Review Item--Correspondence Generation	System shall allow employee to generate correspondence from a Process Review Item requesting additional information from the taxpayer	PS-02
PS-60	Process Review Item--Escalation Reassignment	System shall allow employees to re-assign Process Review Items to other employees based on business rules	PS-02
PS-61	Posting Reversal	System shall allow employee to reverse the financial posting from the return (bill or refund)	PS-02
PS-62	Sending Exception Processible Correspondence	System shall support automated generation of correspondence informing taxpayer of a exception correction to their return	PS-02
PS-63	Sending Non-Processible Correspondence	System shall support automated generation of correspondence to taxpayer via their desired channel informing them their return could not be processed with an explanation of the issue	PS-02
PS-64	Update Return Status	System shall support automated update of a status such as received, accepted, or rejected, to the state of a return based on business rules	PS-02
PS-65	Update Return Date	System shall support automated update of determination date a return could not be processed	PS-02
PS-66	Update Return Workers	System shall support automated update of employees who determined a return could not be processed	PS-02
		"Process Tax Return" Functional Requirements	
PS-67	Acknowledgement Status	System shall support automated assignment of a status such as received, accepted, or rejected, to the state of a return	PS-03
PS-68	Queue Assignment	System shall support automated assignment of returns to work queues based on business rules	PS-03
PS-69	Queue Re-Assignment	System shall allow re-assignment of returns to work queues based on employee input	PS-03
PS-70	Exception Code Re-Assignment	System shall allow employees to manually assign pre-determined reason code(s) to returns	PS-03
PS-71	Posting Balance Preview	System shall provide a side-by-side view of the taxpayer's account balance, providing a 'current' and 'after posting' view for the employee by tax period	PS-03
PS-72	Posting Status Preview	System shall provide a side-by-side view of the taxpayer's refund or bill status, providing a 'current' and 'after posting' view for the employee	PS-03
PS-73	Posting Status ID	System shall support automated assignment of taxpayer status to the individual taxpayers (by ID), rather than to a filing household	PS-03
PS-74	Automatic Return Resolve	System shall support automated re-prioritization of returns after a period of time to the auto-resolve queue based on time-lapse business rules	PS-03
PS-75	Holding Queue	System shall support automated reassignment of returns waiting for taxpayer correspondence to a holding queue based on business rules	PS-03
PS-76	Return Change Log	System shall support automated tracking (history) of actions taken on a return into a business user-viewable log	PS-03
PS-77	Return Review Dashboard	System shall allow users to create ad-hoc dashboards of returns under review based on pre-defined filters	PS-03
PS-78	Return Taxpayer Linking	System shall support automated linking of a return with a taxpayer account	PS-03
PS-79	Return Taxpayer Re-Linking	System shall allow re-linking of returns to a taxpayer account based on employee input	PS-03
PS-80	Multiple Return Posting	System shall support automated posting of multiple returns to the same tax period	PS-03
PS-81	Return Type Assignment	System shall support automated detection of return type (original, duplicate, amended, informational, replacement)	PS-03
PS-82	Disbursement Tracking	System shall support automated tracking of postings that require funds to be dispersed to local jurisdictions	PS-03
PS-83	Fund Commitment Tracking	System shall support automated tracking of the fund a posting commits to	PS-03
PS-84	Posting Details--Tax Type	System shall post tax type data to taxpayer's account	PS-03
PS-85	Posting Details--Form Type	System shall post form type to taxpayer's account	PS-03
PS-86	Posting Details--Tax Period	System shall post tax period data to taxpayer's account	PS-03
PS-87	Posting Details--Financial Effect	System shall post financial effect data to taxpayer's account	PS-03
PS-88	Posting Adjustment Rule Hierarchy	System shall support an easily adjustable hierarchy of business rule execution prior to return posting to allow for events such as audit adjustments	PS-03
PS-89	Posting Adjustment	System shall support automated adjustments to a taxpayer's posting based on business events such as the receipt of an amended return or clerical error	PS-03
PS-90	Financial Thresholds	System shall support threshold balancing for overpayments and underpayments that do not meet the minimums based on DOR business rules	PS-03
PS-91	Taxpayer Return Review	System shall support automated flagging of taxpayer returns for review based on business rules	PS-03
PS-92	Taxpayer Account Review	System shall support automated flagging of taxpayer accounts for review based on business rules	PS-03
PS-93	Review Item Quality Control	System shall support automated validation to ensure returns do not have an active exception item (review or suspension item) prior to creating financial postings	PS-03
PS-94	Account Transfers	System shall allow the transfer of returns, refunds, and/or payments within and between taxpayer accounts	PS-03

WL - Worklist

Defines the activities to generate and maintain work items along with their attributes in task-specific queues for DOR employees.

#	Name	Description	Task Reference ID
		"Worklist" Functional Requirements	
WL-1	Worklist Item Creation	System shall support automated creation of worklist items	TR-010-050
WL-2	Reason Code	System shall support automated assignment of a suspense reason code to a suspended item	TR-010-050
WL-3	Priority Level	System shall support automated assignment of a suspense priority level to a suspended item	TR-010-050
WL-4	Assignment by Priority Level	System shall support automated assignment of worklist items by priority based on business rules	TR-010-050
WL-5	Assignment by Capacity	System shall support automated assignment of worklist items by capacity based on business rules	TR-010-050
WL-6	Assignment by Availability	System shall support automated assignment of worklist items by available skills based on business rules	TR-010-050
WL-7	Assignment by Business Rules	System shall support automated assignment of worklist items based on business rules	TR-010-050
WL-8	Leave Tracking	System shall designate end-user availability by date (i.e., leave tracking)	TR-010-050
WL-9	Re-Assignment	System shall allow for re-assignment of worklist items based on business rules	TR-010-050
WL-10	Delegation	System shall allow for manual delegation of worklist items	TR-010-050
WL-11	Automated Worklist Item Resolution	System shall support automated resolution of open items based on business rules and additional information received	TR-010-050
WL-12	Follow-Up Worklist Items	System shall supported automated creation of worklist items for follow-up activities, including outbound phone calls	TR-010-060
WL-13	Wait Step	System shall perform a wait step after distribution of correspondence	TR-010-060
WL-14	Immediate Request for Information	System shall make immediate request for information during online registration based on business rules	TR-010-060
WL-15	Exception Codes	System shall assign an exception reason code to exception items	PS-010-230
WL-16	Suspension Routing	System shall support automated routing of suspense items to work queues based on reason codes	PS-020-040
WL-17	Suspension Alerts	System shall support automated issuance of notifications to employees when a suspense item is placed in a queue	PS-020-040
WL-18	Multiple Owners	System shall allow multiple employees to own a suspense item simultaneously	PS-020-040
WL-19	Suspense Queue Query	System shall allow users to search suspense items in queue	PS-020-040
WL-20	Suspense Queue Sort	System shall allow users to sort suspense items in queue	PS-020-040
WL-21	Return Review Time Tracking	System shall support automated time tracking for return work items spent in queues, by queue	PS-030-170
WL-22	Return Review Time	System shall allow employees to see the time a return work item has spent in queue	PS-030-170
WL-23	Multiple Work Queues	System shall support multiple queues for different types of work items (fraud, suspensions, etc.)	PS-030-170
WL-24	Work Queue Views	System shall allow for users to view and select specific information from all work queues based on business rules	PS-030-170
WL-25	Multi-factor Weighting	System shall use a multi-factor weighting system to assess prioritization of work item queue based on business rules	AM-070-060
WL-26	Work Item Notes	System shall allow for notes to be included against work items	AM-070-060
WL-27	Work Item Progression	System shall track work item progression through the system	AM-070-060
WL-28	Escalated Exceptions Worklist	System shall allocate exceptions to a worklist for escalation	PS-010-230
WL-29	Grouped Exceptions Worklist	System shall allocate exceptions to a worklist for grouping	PS-010-230
WL-30	Form Flagging	System shall allocate exception items to manual work queues based on the exception reasons	PS-010-040
WL-31	Suspense Queue Batch Assignment	System shall allow employees to assign multiple Suspense Items from a queue to themselves for processing	PS-020-0
WL-32	Suspense Queue Delete	System shall allow employees to delete Suspense Items from work queue	PS-020-(
WL-33	Time-Based Closure	System shall enforce time-based closure rules for work items based on business rules	AM-070-060

Technical Proposal

RFP 17-082 , Indiana Department of Revenue Modernization Project

Attachment F3 - Technical Proposal - Project Related Requirement Template

Instructions for this Workbook

General Requirements Instructions

The light blue shaded cells indicate information Vendors are expected to provide. The description cells should be limited to 300 words or less

Additional information can be provided beyond what is included in the worksheet descriptions or answers. The additional information must be referenced in the specific worksheet line item description.

Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.

Key Definitions

Shall: When used to describe a requirement, it denotes an important requirement that needs to be fulfilled by a future state ITS.

Should: When used to describe a requirement, it denotes a nonessential requirement that DOR desires to be fulfilled by a future state ITS.

Configuration: The ability to apply business logic through the use of native tools or screens and without the need for coding or code like development. Configuration should be accomplished by functional resources without the need for programming experience.

Customization: The modification or extension of software through coding or code like development to meet the specific needs of DOR. A customization must be fully supported by the Vendor as part of the solution.

Vendor: The primary implementer who will be responsible for their products and services as well as Vendor-Partner products and services.

Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DOR.

Third-Party: A partner of the Vendor who will provide products or services, and be managed and contracted through DOR.

Vendor Response Codes

F = Requirement is fully met through Configuration of currently available Vendor or Vendor-Partner products and services.

C = Requirement is fully met by currently available Third-Party products and services, or through current Customization.

N = Requirement will be fully met through new or unproven Vendor or Vendor-Partner products and services. The solution cannot meet the requirement now, however, the Vendor commits to having the capability to meet the appropriate implementation timeline.

P = Requirement is partially met by currently available Vendor, Vendor-Partner or Third-Party products and services.

X = Requirement not met and not included in the proposal.

Brief Project Related Requirements Worksheet Descriptions (Tabs)

Project Related Information: DOR requirements for certain project related methodologies including but not limited to, testing, training and project management. Open ended questions giving vendors the opportunity to describe approach, impact to overall project and commitment to standards.

Project Management: Requirements of the vendor to follow a structured delivery methodology that including but not limited to, status reporting, risk management, issue management, and budget and scope management.

Organizational Change Management: DOR requirements for transformational change management.

Training: DOR requirements for preparing the organization to fully leverage the new capabilities of the ITS.

Testing: DOR requirements to confirm that the solution is functioning as designed ahead of a production release. Including but not limited tom, unit testing, system testing, integration testing, conversion testing, regression testing and user acceptance.

Data Conversion: DOR requirements for the successful conversion of historical data to the new ITS.

Analytics: DOR requirements to enable agency goals including but not limited to, risk based processing, scoring, data driven decision making and management, agency dashboards, interactive reports, behavior modelling and predictive modelling.

Project Team Experience: DOR requirements pertaining to the experience and qualifications of key staff in the delivery of the ITS.

Maintenance, Support & Upgrades: DOR requirements related to software support, defect resolution, on-site support, ongoing annual and legislative changes, and upgrades.

Internal Controls: DOR requirements to establish proven internal controls including but not limited to, automated reconciliation, business process monitoring, user access and control, and segregation of duties.

Administrative: DOR requirements for the administration of the ITS.

Technical Proposal
Project Related Information

	Please Complete Blue Shaded Regions
	Description or Attachment Reference - If more than 300 words include attachment

2.3.2.1 Project Management	Enter your response below. Please indicate if attachments are included.
The DOR ITS replacement and Modernization project is the largest system-related project on the Governor's agenda and represents a significant investment for the State of Indiana. As with any complex, long term, transformational project, Indiana will require the Vendor to follow a structured delivery methodology that includes project initiation, project organization, budget and scope management, cost and schedule management, change control, quality assurance, stakeholder communication, issues management, risk management and status reporting. While Indiana does not intend to dictate a methodology, we do expect that the Vendor will specify a methodology and align to that methodology during the execution of the project. Please provide the following documents with your proposal: 1) Overview of your approach to project management methodology, how your methodology incorporates the items listed above, and how your approach impacts the cost, risk, and timelines of the solution delivery. 2) Vendor's strategy to control additional change related costs throughout implementation. 3) Samples from a project of similar size, scope and complexity of the following documents: - Project Schedule (See template in Attachment G2) - Project Management Plan - Status Report - Risk Tracking Report - Issue Tracking Report - Action Items Tracking Report - Roles and Responsibilities Matrix - Escalation Process Documents 4) A response to each requirement with details on how the Vendor will deliver the requirement. 5) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation.	Please attach document labeled "F3 - 2.3.2.1 Project Management" with your response.

2.3.2.2 Organizational Change Management	Enter your response below. Please indicate if attachments are included.
The primary cause of failure for large transformation projects can be traced to a lack of active change management. Change management includes communication and messaging, change assessment, organization or operational redesign, and organizational go-live support. Is change management delivered through the Vendor organization or do you typically leverage partners or sub-contractors? Please provide examples of how you partnered with previous clients for organizational change managment activities including, but not limited to, 1) Overview of your change management approach. 2) Draft Change Management Plan for this project that at a minimum contains: - Behaviors and Change Readiness Approach - Stakeholder Engagement Plan including detailed activities and frequency - Business Process Reengineering Approach - Transition Management Plan 3) Draft Communication Plan that at a minimum contains: - Audience Analysis - Communication Method/Channel Inventory - Message and Timing Analysis - Communication Strategy 4) Draft Stakeholder Analysis Plan that at a minimum contains: - Categorization of relevant stakeholders by their support for a change (e.g., "Supporters", "Blockers", etc.) and identifies the change's impact on each group - Capture of data on communication with key stakeholders including frequency, preferred channel, and current challenges 5) A response to each requirement with details on how the Vendor will deliver the requirement. 6) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation. Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please attach document labeled "F3 - 2.3.2.2 Organizational Change Management" with your

2.3.2.3 IV&V	Enter your response below. Please indicate if attachments are included.
The State of Indiana mandates and DOR strongly supports the need for IV&V services for projects of this size and complexity. Please provide your approach to partnering with IV&V vendors. Some examples include how you respond to findings, compliance with best practices and compliance with IV&V practices.	Please attach document labeled "F3 - 2.3.2.3 IV&V" with your response.

2.3.2.4 Training	Enter your response below. Please indicate if attachments are included.

Training refers to the broader needs around preparing the organization to fully leverage the new capabilities of the ITS. This includes performing skills assessment, identifying gaps, and developing targeted training. The actual execution of training may include presentations and demonstrations, hands on simulations, virtual training, and/or instructor led training (either Vendor delivered or "train the trainer"). Please describe your approach to confirming that the DOR organization is properly trained to leverage the capabilities of the ITS including specific tools or techniques. Please provide the following documents with your proposal: 1) Overview of Vendor's training approach for internal DOR end-users, external users of the ITS, and DOR technical staff. 2) A sample training plan covering end-user (internal and external) training requirements including the following: - Training methods for both internal DOR end-users as well as external stakeholders - Sample curriculum and length of trainings - Scope of training - Training delivery (i.e. trainer identification, logistics, training administration, and schedules) - Training materials - Assessment methodology and plan for re-training of DOR identified users who do not show the proficiency to perform their job in the new ITS solution 3) Provide a sample of the vendor's Technical Training Plan that at a minimum contains: - Training methods - List of required skills and proficiency level by technical position - Sample Technical Staff Skills Assessment - Proposed training courses by role 4) Sample training materials to be used for end-user training including Training Manuals, Job Aids, and Quick Reference Guides 5) Describe the standard methodology for knowledge transfer including objective measures to determine whether there has been sufficient knowledge transfer. 6) Provide a sample of the Vendor's Knowledge Transfer Plan that at a minimum contains: - Plan by role that shows what skills and knowledge will be transferred - Groups that need knowledge transfer and goals for each group - Strategy for knowledge check-ins to confirm progress of knowledge transfer is on track - Objective measures to determine whether there has been sufficient knowledge transfer 7) A response to each requirement with details on how the Vendor will deliver the requirement. 8) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please attach document labeled "F3 - 2.3.2.4 Training" with your response.

2.3.2.5 Testing	Enter your response below. Please indicate if attachments are included.
DOR will need to confirm that the solution is functioning as designed ahead of a production release. The expectation is that the Vendor will perform multiple rounds of testing and system confirmation throughout the project. This includes unit testing, system testing, integration testing, conversion testing, regression testing and user acceptance testing. The concept of testing would extend to training and dry runs of conversion and go-live activities. Please provide the following documents with your proposal: 1) Overview of Vendor's testing approach including any tools or techniques leveraged. 2) Overview of DOR testing responsibilities. 2) A sample detailed testing plan that at minimum includes test scripts, test cases, and milestones which will be tied to payment schedule. 3) Describe your standard methodology to developing user test scripts and test cases. 4) A response to each requirement with details on how the Vendor will deliver the requirement. 5) Any additional tasks or areas not covered as part of this RFP that the Vendor will deliver in order to increase the likelihood of a successful implementation and assist in increasing end user confidence in	Please attach document labeled "F3 - 2.3.2.5 Testing" with your response.

2.3.2.6 Data Conversion	Enter your response below. Please indicate if attachments are included.
The agency understands data conversion will be a major challenge for this project. Please describe your approach for this critically important initiative including but not limited to, a Data Conversion Plan, Data Conversion Approaches, Data Conversion Alternatives, Data Conversion Methodology and your view of best practices concerning data cleansing, the amount of historical data to be converted and data archiving. Also please describe any tools, techniques or processes you will utilize to streamline data conversion activities. Specifically, DOR is looking for a Data Conversion Plan of the steps needed to convert the data for the new system and a definition of roles and responsibilities for the conversion processes.	Please attach document labeled "F3 - 2.3.2.6 Data Conversion" with your response.

2.3.2.7 Analytics	Enter your response below. Please indicate if attachments are included.
The agency has a desire to shift toward risk based processing, scoring, data driven decision making and management, agency dashboards, interactive reports, behavior modelling, and predictive modelling. The intent is to leverage analytics across audit, collections, customer service, returns processing and all operational areas within the agency. We expect that proposed solutions would include integration to standardize federal data sources and include discovery capability for non-filers and under reporters. Please provide an overview of how your solution leverages analytics across operational areas. Include any tools or techniques that are included within your solution and how DOR will maintain these solutions post implementation. Please provide the following documents with your proposal: 1) A description of how the Vendor's ITS solution collects, correlates, manipulates, stores, and presents data. In addition, the Vendor should provide sample standard reports that would support this functionality 2) Vendor must provide a list of proposed analytical and reporting tools (e.g. Master Data Management, ETL, Visualization, etc.) used to support the proposed solution's data, reporting, and analytic capabilities. - Describe how each tool is utilized to meet DOR's reporting and analytics needs 3) Vendor must provide a list (with short descriptions) of all standard reports to be part of the proposed solutions. DOR will review these reports as part of the evaluation and determine whether the standard reports meet DOR reporting needs or whether additional reports are needed. 4) Provide samples of scorecards the proposed ITS solution uses for managerial reviews 5) A response to each requirement with details on how the Vendor will deliver the requirement. 6) Describe any differentiators of the Vendor's proposed reporting and analytics solutions as well as describe any additional features not covered as part of this RFP. 7) Describe how the vendor's proposed solution will leverage predictive analytics to drive business insight for future operations	Please attach document labeled "F3 - 2.3.2.7 Analytics" with your response.

2.3.2.8 Project Team Experience	Enter your response below. Please indicate if attachments are included.

The experience of the project team is required to appropriately identify and resolve project risks and issues, actively monitor the ongoing implementation, and confirm that DOR is able to appropriately leverage the capabilities of the COTS solution. DOR reserves the right to approve any replacement or project manager or project lead. Please provide the following documents with your proposal: 1) Names and relevant qualifications of all team members in key roles including their role (i.e. Tax Project Leader, Configuration Resource, etc), percentage of their time that will be devoted to this project plus date range each of them will be onsite at DOR during the project. The key roles should be a subset of roles identified in the Staffing Plan Template. The qualifications should highlight years of experience, number of previous similar states projects, professional certifications, and other areas the vendor deems relevant to demonstrating that the appropriate team is in place for a successful implementation. Please provide an organizational chart consistent with staffing and project plan and a rate chart for all roles and responsibilities represented in the staffing plan. 2) References from other state tax agencies for the above team members, where the proposed team members directed a project of similar size, scope and complexity. 3) A response to each requirement with details on how the Vendor will deliver the requirement.	Please attach document labeled "F3 - 2.3.2.8 Project Team Experience" with your response.

2.3.2.9 Maintenance, Support and Upgrades

Enter your response below. Please indicate if attachments are included.

DOR intends that the selected ITS will be a multi-generational solution. Ongoing maintenance, support and upgrade services are key areas of focus both internally within the agency and externally amongst stakeholders. DOR intends to specify standards related to software maintenance, resolution of defects, onsite support, ongoing annual and legislative changes, and upgrades. This RFP requires maintenance, support and upgrade proposals and costs for a 10 year period and will include caps on percentage increases allowable on a bi-annual basis (to align with Indiana's budgeting process). Please provide the following documents with your proposal: 1) An overview of the maintenance, support, upgrade models available to DOR including those proposed in your proposal. 2) A response to each requirement with details on how the Vendor will deliver the requirement. 3) Any additional information not covered as part of this RFP that the Vendor deems relevant to increase the likelihood of a successful implementation.	Please attach document labeled "F3 - 2.3.2.9 Maintenance, Support and Upgrades" with your response.

2.3.2.10 Internal Controls

Enter your response below. Please indicate if attachments are included.

DOR expects that the ITS solution will include an established and proven internal control approach that includes automated reconciliation, business process monitoring, user access and control, and segregation of duties. This will include full audit logging, review, and monitoring capabilities. DOR expects the Vendor to provide leading practices and guidance in the following areas: Control Environment, Risk Assessment, Information and Communication, Monitoring Activities, and Control Activities including at a minimum Segregation of Duties, System Access and Control, Transactional Thresholds, Anomaly Detection, and Reconciliation. Please provide the following documents with your proposal: 1) An overview of your approach to internal controls and specific examples of how that approach is implemented within your solution for each of the items list above. 2) The Vendor's proposal should describe the features of the Vendor's proposed solution that would support and enhance DOR's internal control objectives. 3) A response to each requirement with details on how the Vendor will deliver the requirement. 4) Vendor shall provide their approach to internal controls and any additional tasks or areas not covered as part of this RFP included in its proposed ITS solution. Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please attach document labeled "F3 - 2.3.2.10 Internal Controls" with your response.

2.3.2.11 Administrative Tools

Enter your response below. Please indicate if attachments are included.

Administration of the Integrated Tax System (ITS) is central to the overall effectiveness of the new system. The vendor solution should demonstrate an understanding of the administrative needs of DOR through: 1) ease of administration, 2) configurability, and 3) flexibility. DOR expects the administrative features of the ITS to empower, rather inhibit the administration of the system. The administrative tools should be easy to use and should not require outside technologists to make changes. DOR expects that the administrative tools allow for enhanced configurability. Please provide the following documents with your proposal: 1) Describe the administrative features of the ITS, specifying how the proposed solution would not only support current functionality, but also enhance administrative tools to meet DOR's needs. The administrative features of the proposed ITS should include tools that are intuitive and configurable. 2) A response to each requirement with details on how the vendor will deliver the requirement. Please see RFP Attachment P - Project Related Requirements Detail for additional information.	Please attach document labeled "F3 - 2.3.2.11 Administrative Tools" with your response.

2.3.2.12 On-Site Facilities

Enter your response below. Please indicate if attachments are included.

Please provide a list and description of on-site facilities requirements that will be needed for the Vendor, Vendor-Partner and Third-Party team members in the scope of your ITS implementation.	Please attach document labeled "F3 - 2.3.2.12 On-Site Facilities" with your response.

2.3.2.13 Other Capabilities

Enter your response below. Please indicate if attachments are included.

Please provide a list and description of innovative capabilities that we be included in the scope of your ITS implementation.	Please attach document labeled "F3 - 2.3.2.13 Other Capabilities " with your response.

2.3.2.14 Other Requirements

Enter your response below. Please indicate if attachments are included.

Please provide a list and description of requirements not listed in this RFP that will be included in the scope of your ITS implementation.	Please attach document labeled "F3 - 2.3.2.14 Other Requirements " with your response.

1. Project Management

#	Name	Description	Response Code	Description/Attachment (< 300 words)
	DOR onboarding requirements	All Vendor personnel involved in this project shall follow DOR' security onboarding requirements including a Indiana Tax Liability Clearance.		
	Communication plan	Provide type, frequency, recommended attendees, expectations, Vendor roles and responsibilities and expected DOR roles and responsibilities		
1.03	Document samples	Vendor shall provide samples from a project of similar size, scope and complexity, of the following documents: - Comparable project schedule - Project management plan - Status report - Risk tracking report - Issue tracking report - Action items tracking report - Roles and responsibilities (RACI matrix) - Escalation Process document		
1.04	Steering Committee	DOR is the owner/facilitator of the Steering Committee; the Vendor shall provide support for all meetings, request and provide a senior staff member to sit on the Steering Committee as an active and accountable member.		
1.05	Risk and issue monitoring/tracking	Vendor shall perform risk and issue management.		
1.06	Issue communication	Vendor shall report weekly on all identified risks, issues and open action items.		
1.07	Status reporting	Vendor shall submit a weekly status report detailing accomplishments, current & upcoming activities, milestones, issues and risks.		
1.08	Document repository	Vendor shall utilize DOR's document repository to store all project related documents. The current repository is SharePoint. Vendor and DOR shall agree on a document management plan to include, but not limited to, versioning, cadence and mediums of communication		
1.09	Project forms and templates	All project forms and templates used by Vendor's project manager shall be approved by DOR. DOR may require Vendor to use internal agency project forms and templates.		
1.10	Meeting facilitation	Vendor shall facilitate meetings as required, take & timely distribute meeting minutes, notes and action items.		
1.11	Project management plan	Vendor's project manager shall create and review the project management plan with DOR PM and project team.		
1.12	Project schedule	Vendor's project manager shall create, maintain and update a project schedule. The project schedule should contain a work break down structure for all project phases along with a deployment plan, communication plan, detailed implementation plan, training schedule, payment milestones and any other items deemed necessary by DOR for successful project completion and implementation.		
1.13	Implementation plan	Vendor's detailed implementation plan shall describe impact, cutover and fallback options.		
1.14	Project schedule updates	Vendor's project manager shall provide an updated project schedule on a weekly basis.		
1.15	Project management methodology	Vendor shall follow the methodology agreed upon by DOR and vendor		
1.16	Project / Phase close out summary	Vendor's project manager shall provide a closeout summary, including lessons learned, for each project phase which must be agreed to by DOR.		
1.17	IV&V	At DOR's discretion, Vendor shall engage and participate in all appropriate activities associated with IV&V.		
1.18	Project management experience	Vendor's project manager shall have at least five years experience as a senior project manager leading projects with a similar size and scope to DOR requirements as stated in this RFP.		
1.19	Project manager approval	DOR shall approve Vendor's lead project manager.		
1.20	Project manager replacement	Vendor shall not replace or substitute the project manager without prior written approval from DOR. The vendor shall replace vendor's project manager at any time during the project at the request of DOR.		
1.21	Project team	Vendor's project team shall be full-time resources dedicated to implementing the requirements of this RFP.		
1.22	Project team replacement	At the request of DOR, Vendor shall replace any member of the project team, including subcontractors, within a timeframe that does not negatively affect the project. DOR must approve in writing any replacement of the Vendor's project team.		
1.23	Reporting structure	Vendor's project manager shall report directly to DOR's Chief Modernization Officer, Project Director and Executive Sponsors		
1.24	Vendor activities	Vendor's project manager shall directly manage all vendor activities on the project.		
1.25	Vendor subcontractors	Vendor's subcontractors shall be seamlessly managed by the vendor.		
1.26	Requirements Management	Vendor shall provide a requirements management approach, utilizing a requirements management tool, to ensure visibility, collaboration and traceability. This approach should include at a minimum: - Process for Requirements Elaboration and Validation - Process for Changes and Revisions to requirements - Roles and responsibilities - Requirements Processes and Tools - Requirements traceability matrix with bi-directional traceability through user acceptance testing, including but not limited to, functional and technical specifications, system test scripts and user acceptance test scripts. Vendor shall provide the approach tools and processes to support the storage, classification, control, change log, mapping and documentation of all functional, non-functional and technical requirements. Vendor and DOR shall agree to above approach, processes and tools prior to utilization.		
1.27	Changes to project scope, schedule or budget	DOR is responsible for authorizing and approving changes to the project through the agreed upon change management process.		
1.28	Change requests	Vendor shall address change requests according to the agreed upon change management process.		
1.29	Cost Management Plan	Vendor shall work with DOR to establish an agreed upon budget reporting method and timeline that communicates actual costs and variances to baseline plan.		
1.30	Interface Design Document	Vendor shall provide an Interface Design (or Control) Document for each interface that may include, but is not limited to:- Addressed requirements- Functional Background- Business Process- Data Transfer and Transaction Details - Logical Flow (s)- Communication Methods- Job Description- Triggering Mechanism- Task Locations- File Locations- Technical and Security Details- Database impacts- Data Maintenance- Data Mapping- Message Formatting- Data Types- Interface Processing Time Requirements- Exception Handling and Risk Mitigation		
1.31	Design Specification Document	Vendor shall provide a COTS based Design Specification Document which can include, but is not limited to:- Building blocks- Block relationship diagram that represents the base tables of each block or zone of the form (vertical) and tables referenced for validation or lookups (horizontal).- Screen Design- Navigation logic- Report Design- Data Design Table- Data Sources- SQL Design- Performance Consideration- Behavioral Design that includes Function(Operation)design and Business Rule Design- Interface Design that includes Service Design and external interface design- Restart Strategy, Crash Recovery and Security- Database Design- Archiving, Installation Considerations or other COTS appropriate design elements.		
1.32	Delivery Expectation Document (DED)	Vendor shall provide a Delivery Expectation Document for every deliverable which is agreed upon prior to delivery.		
1.33	Software Development Life Cycle (SDLC)	Due to potential for enhancements and significant configurations, Vendor shall supply detail for all appropriate project tasks, including, but not limited to: Project Management Governance, Release Plan and Solution Approach, Organizational Change & Training, Requirements Management, Business Process Management, Business Rules Management, Testing/Go Live, Interface/Integration Management, Approach to Deliverables, Data Conversion, Operations and Management, Turnover, Security and Privacy, Staffing, Project Operations, Functional Requirements, and Non-Functional Requirements.		

2. Org Change Management

#	Name	Description	Response Code	Description/Attachment (<300 words)
2.00	Organizational Change Management	Vendor shall support and partner with DOR to establish and execute an Organizational Change Management (OCM) plan. Please see Attachment P - Project Related Requirements Detail for additional information about the OCM approach.		
2.02	Gap Analysis	Vendor shall support assessing gaps between current state and end state vision, including the degree of change necessary to reach vision		
2.03	Stakeholder Identification	Vendor shall support DOR in identifying stakeholders impacted by the implementation		
2.04	Change Readiness	Vendor shall support conducting a change readiness assessment for both internal and external stakeholders		
2.05	Resistance to Change	Vendor shall support determining group(s) resistant to change and develop action plan(s) to create acceptance		
2.06	Stakeholder Engagement Content	Vendor shall support determining content of messaging		
2.07	Stakeholder Engagement Method	Vendor shall support determining methods of engaging stakeholders		
2.08	Stakeholder Engagement Action Items	Vendor shall support assignment and ownership of action items regarding engagement effectiveness		
2.09	Baseline	Vendor shall support development of a baseline of change readiness to which progress will be measured against		
2.10	Progress and Outcomes	Vendor shall support tracking of change readiness progress across stakeholder groups and development of desired outcomes		
2.11	Strategy Alignment	Vendor shall continually assess and align stakeholder engagement and communications back to the plan		
2.12	Milestone Tracking	Vendor shall continually track assigned milestones to confirm they are being met		
2.13	Position Definition Approach	Vendor shall develop an approach that identifies the method in which necessary skills and positions are validated for the future state of the organization		
2.14	Roles and Responsibilities	Vendor shall develop and identify internal roles and responsibilities around the organization's future state		
2.15	Position Definition—Future State	Vendor shall support the definition of future state positions		
2.16	SPD Rules of Engagement	Vendor shall support development of DOR Job Activity Questions (JAQ) in adherence to the State Personnel Department's rules of engagement		
2.17	JAQ	Vendor shall support updating current DOR Job Activity Questions (JAQ)		
2.18	Skill Determination	Vendor shall identify trainable skills to be assumed by employees		
2.19	Background Assessment	Vendor shall determine the appropriate skill and experience levels required for specific roles in the new ITS		
2.20	Staffing	Vendor shall determine the number of employees necessary for given tasks		
2.21	Position Mapping	Vendor shall support the development of a position mapping of current tasks and skills to future positions.		
2.22	Position Validation	Vendor shall support the validation of the position mapping with DOR leadership and Human Resources and the State Personnel Department.		
2.23	Position Descriptions	Vendor shall support in developing and validating position descriptions with DOR Human Resources and the State Personnel Department.		
2.24	Position Definition Deliverable	Vendor shall support the development of a Position Definition deliverable that at a minimum includes: I. A finalized organization structure II. The task and skills spreadsheet III. Validated position descriptions.		

3. Training

#	Name	Description	Response Code	Description/Attachment (<300 words)
	End-User Training Plan	Vendor shall develop an End-User Training Plan to validate the approach to developing training following the industry that at a minimum includes: - Full list of all end users to be trained as agreed upon during contract finalization - Timeline for material development and review - Approach to classroom and material design including the integration of people, process and technology - Classroom and virtual delivery approach and timeline		
3.02	Training Timing	Vendor shall leverage a "just in time" approach to training end users.		
3.03	Training Environment	Vendor shall provide a dedicated training environment		
3.04	Training Environment Upgrades	Vendor shall coordinate training environment upgrades with the training team to not interfere with the training schedule.		
3.05	Training Delivery Approach	Vendor shall provide for process driven classroom training delivery.		
3.06	Training Environment Resources	Vendor shall provide necessary resources to maintain the training environment refresh schedule to support concurrent classes as defined by the training schedule.		
3.07	Professional Trainers	Vendor shall provide professional trainers rather than using a train-the-trainer approach for training activities.		
3.08	Training Data Setup	Vendor shall perform data setup activities for the training environment.		
3.09	Training Plan Support	Vendor shall drive all activities to support the various phases of the Training Plan including but not limited to: - Defining user roles - Supporting the identification of appropriate curriculum and delivery models - Validating and approving training materials related to the technical Solution - Building and maintaining the training environments - Creation of user profiles and log-in credentials in any quantity as requested by DOR to allow trainers and end users appropriate access to the training environments		
3.10	Classroom Computer Station Setup	Vendor shall coordinate and support the training lab setup with the DOR for training delivery purposes. This includes loading required training manuals, surveys, CBTs, etc. on the training lab computer stations		
3.11	Computer Based Training Software	Vendor shall provide a software tool or solution that supports creation of computer based trainings		
3.12	Computer Based Training Storage	Vendor shall provide computer based training that can be stored on the DOR network for future use		
3.13	Computer Based Training Maintenance	Vendor shall provide computer based training files that can maintained and edited by DOR after implementation		
3.14	Training Materials	Vendor shall produce training materials required to address DOR training needs		
3.15	Online Help	Vendor shall produce all help files including on-line help files targeted at System users		
3.16	Training Material Review and Approval	Vendor shall support (i.e. track material development, reviews and approval) DOR in the review and approval of all training material		
3.17	Training Pilots	Vendor shall facilitate pilot sessions of classroom training sessions with DOR UAT participants		
3.18	Training Pilot Feedback	Vendor shall incorporate feedback from the UAT Training Pilots into training to be delivered to end-users updates as mutually determined		
3.19	UAT Training Material Feedback	Vendor shall incorporate feedback from UAT participants into training materials updates as mutually determined		
3.20	Training Assessments	Vendor shall conduct training assessments for all internal DOR training sessions to validate adequate training/knowledge transfer has been performed prior to completing training sessions		
3.21	Training Assessment Results	Vendor shall track classroom assessment results at the training sessions		
3.22	Training Assessment Reporting	Vendor shall report classroom assessment results to DOR		
3.23	Training Surveys	Vendor shall conduct survey of the end-users, super users and support staff to gather feedback from participants		
3.24	Training Survey Reporting	Vendor shall report feedback provided in training surveys to DOR		
3.25	Training Delivery	Vendor shall provide complete training for all users, both technical and business, preceding each release (production code deployment)		
3.26	Training Material Production	Vendor shall provide hardcopy and electronic documentation of the functionality in each release from the business and technical standpoint		
3.27	Training Location	Vendor shall provide all training at DOR or at location(s) agreed to by DOR		
3.28	Training Material Templates	Vendor shall provide training material templates to DOR for approval		
3.29	Off-site User Training	Vendor shall provide training for off-site internal business user staff (i.e. District Offices)		
3.30	Context-sensitive Online Help	System shall provide online help that has search capabilities		
3.31	Online Help Search	System shall provide context-sensitive online help that is relevant to the screen or transaction being executed		
3.32	Online Help Training-Search	Vendor shall provide training on online help search mechanisms		
3.33	Training Material-Electronic	Vendor shall provide training materials in an electronic, editable format		
3.34	Training Material Updates	Vendor shall update the training materials as the system is maintained and enhanced during the project		
3.35	Training Material Updates-Maintenance	Vendor shall update the training materials as the system is maintained and enhanced after implementation during the maintenance period		
	Training Material Rights	Vendor shall provide the agency full rights to update the training materials as the system is maintained and enhanced after the conclusion of the project		
37	Computer Based Training-SCORM 1.2 Compliance	Vendor shall provide online training that is SCORM 1.2 compliant in order to be compatible with DOR's Learning Management System		
3.38	External Stakeholder Training	Vendor shall provide user training to the DOR's external ITS users on the use of the external facing portions of the system in a format mutually agreed upon with DOR		
3.39	External Stakeholder Training Format	Vendor shall provide external ITS training through non-classroom based methods		
3.40	Online Help-External	System shall provide context-sensitive online help and documentation for external users		
3.41	Training Material Content	Vendor shall provide system, technical, and internal and external user documentation that has each element, screen, and report fully documented		
3.42	Training Material Customization	Vendor shall provide material that has been customized to reflect the windows, screens, element names, modified and configured functionality, agency and other distinguishing characteristics, and site-specific configuration applicable to DOR		
3.43	Technical Training Plan	Vendor shall develop a Training Plan to validate the approach to developing training following industry standards that at a minimum includes: - Full list of all end users to be trained as agreed upon during contract finalization - Timeline for material development and review - Approach to classroom and material design including the integration of people, process and technology - Classroom and virtual delivery approach and timeline - Approach to Skills Assessment to be conducted on DOR technical staff		
3.44	Technical Team Skills Assessment	Vendor shall conduct a skills assessment of the DOR technical team to determine level of training needed		
3.45	Technical Training-System Modifications	Vendor shall provide training to the technical/operations team on any System changes/changes in System components functionality/architecture		
3.46	Technical Training-General	Vendor shall provide training to DOR on the development methodology, code propagation, and all aspects of creating a production application		
3.47	Technical Training-Support	Vendor shall provide technical training that covers such topics as: 1) COTS application and customization support; database installation, configuration, tuning, backup and recovery, and disaster recovery; 2) Business intelligence, archival system, and data warehouse installation (if the agency chooses to replace), configuration, tuning, and backup and recovery; 3) Operating system and security configuration, tuning, and backup and recovery; 4) Job scheduling and print operations; and 5) Disaster recovery procedures.		
3.48	Technical Training-Operations	Vendor shall provide operational training to the DOR's technical staff including: 1) Basic operation and troubleshooting; 2) Preventive maintenance; 3) Customization of set-up features; 4) Creation of internal and external user logins; 5) Setting of access privileges; 6) Scheduling of jobs; 7) Job dependencies; 8) Failure and restore procedures for each job and the system; 9) Communication procedures; 10) Procedures for stopping and starting components of the system; 11) Database administration; 12) Application maintenance; 13) System performance tuning; 14) Interface maintenance; 15) Application support; and 16) Any other training reasonably necessary to support the system.		
3.49	Technical System Documentation	The vendor must provide complete system documentation that documents the application software and its architecture as it is implemented at the DOR		
3.50	Technical Operations Documentation	The vendor must provide operations documentation that includes overviews of the application, system structure, processing, interfaces, reports, and correspondence		
3.51	Technical Documentation-Quick Reference Guides	Vendor shall provide technical quick reference guides		
3.52	Knowledge Transfer Approach	Vendor shall provide a knowledge transfer approach that shall confirm the DOR has knowledgeable internal business users (experts), system administrators, programmers, and other technical personnel sufficient to operate and maintain the system independently		
3.53	Knowledge Transfer Execution	Vendor shall execute Knowledge Transfer activities throughout the project		
3.54	Knowledge Transfer Monitoring	Vendor shall measure progress of Knowledge Transfer activities throughout the project		
3.55	Knowledge Transfer-Assessment	Vendor shall conduct assessments of Knowledge Transfer activities throughout the Project to measure progress.		

4. Testing

#	Name	Description (Testing requirements should be considered in three sections: Implementation testing (Operational testing, and Vendor Certification testing.)	Response Code	Description/Attachment (<300 words)
	Section 1: Implementation testing	**With a project of this scope and size, testing is vitally important to its implementation success. This section outlines the Vendor requirements for testing during the implementation phase.**		
4.1.01	Master Test Plan	Describe Vendor's Master Test Plan (MTP) which describes the types of testing that must be executed, how testing concepts must be applied to the project, testing prerequisites, the process approach to testing with external entities, resource and schedule constraints, and how the project can make use of automation during test processes. Plan should include testing milestones which will be tied to the payment schedule. DOR wishes to participate and collaborate throughout the testing process. The project team should have frequent and early visibility into the progress of the solution including configurations and development objects. The MTP should suggest a number based on Vendor's approach		
4.1.02	System Verification test description	Describe the System Verification Test Description (SVTD) documents the approach for System Verification Testing (SVT) as well as the approach to User Acceptance Testing (UAT). SVTD must include: 1) Introduction, 2) Scope, 3) SVT test environment, 4) Planning and preparation, 5) Formal execution, 6) Witnessed test, 7) regression test, 8) Roles and responsibilities, 9) Personnel, 10) Metrics		
4.1.03	System Verification Test Report	Describe the System Verification Test Report (SVTR) which must describe the SVT and include relevant appendices for both System Test and System Performance testing. At a minimum, this report must cover information on the following sections and appendices: Scope, Test scripts tied to system requirements, Overview of test results, Impact of test environments. Detailed test results, Test logs, Defect log, Remediation log and Other Notes, Appendix A (summary of results from system test execution,) Appendix B (Detail of remaining SVT deficiencies.)		
4.1.04	System Performance Test Description	Describe your approach to a System Performance Test Description (SPTD). SPTD documents the approach for System Performance Testing (SPT). SPT is specifically related to system speed, scalability and stability. SPTD must include: Introduction, Scope, SPT test environment, Planning and preparation, Formal execution, Witnessed test, Regression test, Roles and responsibilities, Personnel, and Metrics.		
4.1.05	System Test Report	Describe your approach to a System Test Reporting (STR). STR documents the expected and actual results of the System Test and is used in the determination of operational readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust build plans accordingly. Document must include; Scope, Overview of Test Results, Detailed System Verification Test Results, Work Product Inventory.		
4.1.06	System Test Protocol	Describe your approach to a System Test Protocol (STP). The STP is intended to validate that the system satisfied the requirements for its intended use and user needs; validate that the right problem is solved; establish responsibility and accountability for testing processes; facilitate early detection and correction of software and system anomalies; provide an early assessment of software and system performance. The description must include: Introduction, Scope, Test environment, Planning and preparation, formal executions, witnessed test, regression test, roles and responsibilities, personnel, and metrics.		
4.1.07	Security Test Plan	Describe your approach to the Security Test Report (SETR). The SETR documents the expected and actual results of security testing and is used in the determination of operation readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust plans accordingly.		
4.1.08	Accessibility Test Plan	Describe your approach to the Accessibility Test Report (ATR). The ATR documents the expected and actual results of accessibility testing and is used in the determination of operation readiness. This report includes metrics that help validate test activities to plan, identify deviations, assess the impact on other build activities, and adjust plans accordingly.		
	Section 2: Operational testing	**After the implementation is complete, the department is committed to ongoing testing at the development, integration, and regression levels. It is expected that the functionality described below will be included in the implementation. If the core system does not support these requirements, it is expected that the integrator will secure and integrate the functionality in a seamless manner.**		
4.2.01	Testing Overview	Please describe your solution for an ongoing testing solution. Provide a solution that on a given day in high demand testing would be able to support 20 unit tests, 5 integration tests, 4 systems test, and 2 regression tests in a single day. This traffic is complicated by needing to set and reset processing dates to insure that business rules for penalty and interest are working correctly. As a rule, testing capacity cannot be a bottle neck to system change implementation.		
4.2.02	Unit testing	The system shall have the ability to exercise single units of functionality in isolation in both positive and negative test modes		
4.2.03	Integration testing	The system shall have the ability to perform end to end testing of changes in relation to business processes and technical coordination of individual units or modules within the larger system		
4.2.04	system testing	The system shall have the ability to provide confirmation that functionality passing unit and integration testing will perform correctly when subjected to user perspective and scenarios covering end-to-end business process		
4.2.05	Regression testing	The system shall have the ability to verify that system modifications have not caused unintended effects and that the existing software or system components still comply with specified requirements		
4.2.06	UAT testing	The system shall have the ability to provide collaboration, open communication and knowledge sharing between testing resources and end users to provide accurate and comprehensive UAT.		
4.2.07	Accessibility testing	The system shall have the ability to perform testing to validate all IOT accessibility requirements are built into system and are maintained on a scheduled basis.		
4.2.08	Security testing	The system shall have the ability to perform testing to validate all security mechanisms built into the system and that they are maintained on a scheduled basis.		
4.2.09	Test status reporting	The system shall provide a well defined reporting process on the status of test execution, trends, and defects tracked by pre-defined metrics. Results are compiled and presented both daily and weekly showing testing progress and key accomplishments. Status reports will include a defect summary, and issues and risks regar.		
4.2.10	Mock production migration	The vendor shall migrate all code and configuration changes through the DOR system instances as follows: System Test -> PreProduction -> Production. The vendor shall provide scripts for each migration so each migration package can be migrated multiple times with the same result unless the scripts are modified.		
4.2.11	Testing environments	At a minimum the system shall provide the following test environments: unit test alone, system test environment, and UAT sterile pre prod environment. The state will accept recommendations for additional test environments. These recommendations need to mitigate version control risks balanced against the department's need to maintain the department's high demand for ongoing and thorough testing. Please provide your recommendations and rationale.		
4.2.12	Automatic generation of test scripts	The system shall have the ability to create test scripts automatically		
4.2.13	Manual generation of test scripts	The system shall have the ability to utilize test scripts manually.		
4.2.14	Test Data	The system will provide a "virtual office" space where test taxpayers and registrations are not production data. All test entities are unique and not traceable to production data		
4.2.15	Integration of production data	The system will have the ability to import production data sets onto test entities for the ability to test specific scenarios to diagnose certain production parameters while masking the personal information of the original production data.		
4.2.16	Testing volumes	Testing is an ongoing high demand process with multiple users running multiple tests for a variety of processes using various input channels, the system will provide best practices that will allow the department to effectively and efficiently maintain high volume testing. Please describe how your solution will accommodate this high use environment.		
4.2.17	System date	The system shall have the ability to change system date of test to be able to test the affect of date on output.		
4.2.18	Rollback tests	The system shall have the ability to rollback data from prior tests so that subsequent reuse of test data does not cause duplicate records		
4.2.19	Test size	The system shall be able to create a large and varied number (2000 per tax type) of test scripts so that many variables are tested.		
4.2.20	Testing environment adjustments	The system shall be able to support automated tools for the ability to reset environment.		
4.2.21	Migrations	Test environment migrations shall be documentable		
4.2.22	Migration rollback	The system shall have the ability to rollback migrations and reset the database		
4.2.23	Test system ingestion	Test environments shall have the ability to ingest files from multiple channels, i.e. MEF, imaging, Intax, bulk upload, Indiana interactive, electronic correspondence, image correspondence		
4.2.24	Data export	The system shall be able to export data to multiple channels such as image repository, financial test system, etc.		
4.2.25	Interface exchanges	The system shall be able to replicate interface exchanges without needing to touch third party data.		
4.2.26	Testing interfaces	The system shall have the ability to test the requirements of interfaces i.e. schema requirements, image requirements, etc.		
4.2.27	Interface errors	A system shall have the ability to log defects and provide error messages across interfaces		
4.2.28	Defect reporting	A system shall provide the ability to view defects reported in a dashboard with drill down ability.		
4.2.29	Defect traceability	A system shall have the ability to track defects with the ability to trace back defects to releases and requirements		
4.2.30	Testing artifacts	A system shall have the ability to retain testing artifacts for successful and unsuccessful tests		
4.2.31	Signoff	The system shall provide the signoff approval at the requirement level. All artifacts of approval shall be retained in the system.		
4.2.32	System resets	The system shall allow the ability of the tester to reset testing system		
4.2.33	Happy path testing	The system shall allow the ability to test happy path		
4.2.34	Testing negative outcomes	The system shall allow the ability to test specific negative outcomes; for example items that should be suspended, or items that should be stopped in ERF or MEF gateways, plus other interfaces.		
4.2.35	Testing database (Environment)	Standing up and preparing testing environments must take less than 1/2 day		
4.2.36	Testing database (Environment)	System must support multiple testing environments to enable simultaneous projects		
4.2.37	System Validation	The ITS system shall provide system validation which matches system functionality to user requirements.		
4.2.38	System testing	During system testing, system must be able to adjust data element identifiers to accommodate ingested data from systems whose numbers cannot be adjusted in order to avoid data duplication		
	Vendor Certification testing	**Each year the department processes over 2 million individual and 100,000 corporation tax returns electronically. It is expected that with the implementation of an ITS that bulk filing of trust taxes through the self-service portal will also go through this certification process. These electronic returns are prepared by various Vendor software products. In order to drive compliance and data quality the department certifies all products annually. The Vendor supplies a set number of returns that their software prepares based on scenarios that the department prepares. Each year the department certifies approximately 40 individual software packages and 20 corporation software packages. They often have to make corrections to their algorithms in order to make corrections to processing errors that the department identifies in the testing process. As a result this is a high volume test bed from November through mid January. It is expected that the functionality described below will be included in the implementation. If the core system does not support these requirements, it is expected that the integrator will secure and integrate the functionality in a seamless manner.**		
4.3.01	Unique system	System shall have separate environment from Test and Production.		
4.3.02	Syncing system	The Vendor certification system shall have the ability to be synced to incorporate validated changes that have been applied to other test environments.		
4.3.03	Certification vendor records	System shall be able to store vendor certification information such as vendor id, contacts, testing status, certification status etc. internally. In addition, the system should keep track of submissions for paper returns, etc.		
4.3.04	Vendor portal	System shall have a Vendor portal that will permit the Vendor to check status of submitted paperwork or tests, check important dates and check overall progress towards certification, submit encrypted test submissions, and contact testing personnel.		
4.3.05	test processing	Once test is dropped into portal, testing personnel will be able to process manually or automatically.		
4.3.06	vendor notification	System will send prepared emails to vendors as identified milestones are met.		
4.3.07	test scripts	System will prepare a designated number of test scripts which follow the "happy path" for a variety of tax types and form types. The scripts will be consistent between vendors, yet will be identifiable to each vendor so that the system can test multiple vendor's similar test cases at the same time.		
4.3.08	test scenarios	System will permit new scenarios to be developed based on changing requirements. Once requirements are established the system will generate new test script		
4.3.09	Test scenario interface	System will provide a user interface to permit the ability to change test case requirements. In addition, this capability should extend to notice generation to product contacts when test scripts change.		
4.3.10	test results	system will provide DOR testing staff with comparison results between expected results and submission results for each test.		
4.3.11	Results parameters	System will provide a user interface to set acceptable ranges of results and system still generate a positive outcome for the test.		
4.3.12	Override negative results	System will provide the opportunity for manual user override of results		
4.3.13	logging overrides	system will log all overrides and require reason notes.		
4.3.14	test results to vendors	The system will provide a "virtual office" space where test taxpayers and registrations are not production data. All test entities are unique and not traceable to production data. In essence the return data would come from production but PII would be masked with Virtual user data		
4.3.15	successful test result	For all successful tests, system will update vendor and testing personnel via system generated email		
4.3.16	system reset	System will be able to accept duplicate tests from the same vendor and segregate the data so that they will not "dup out"		
4.3.17	certification review	Once all tests and milestones have been met, system will provide all documentation, and test results for review		
4.3.18	Certification	Certification will be manually done by tester with supervisor review		

4.3.19	Notification of certification electronic returns	System will notify Vendor that certification is complete and that they can submit electronic returns.		
4.3.20	Notification of certification paper returns	System will notify Vendor that certification is complete and that they can submit paper returns.		
4.3.23	Interface to production system	System will interface with production system and permit certified products to be processed		
	Post certification testing	System will permit additional Vendor testing post certification to allow for testing of changes to their products		
	Decertification	In the event of negative post certification testing the system will allow the manual decertification with supervisor approval of a Vendor or Vendor product. System would interface to production system to block decertified products from being processed		
4.3.24	Report card	System will generate a Vendor score card based on adjustable criteria such as meeting testing milestones, number of total returns submitted in past 12 months, number of test submissions to get it right, fraud percentage, live submission rejection rate, etc.		

5. Data Conversion

#	Name	Description	Response Code	Description/Attachment (< 300 words)
5.01	Data Conversion - General(1)	The Vendor system shall enable the conversion of historical DOR data as described in attachment L "Conversion Data Source Detail".		
5.02	Data Conversion - General(2)	The Vendor conversion methodologies shall support the conversion of historical DOR data as described in attachment L "Conversion Data Source Detail".		
5.03	Data Conversion - General (3)	The Vendor shall provide data conversion documents including, but no limited to, Data Conversion Plan, Data Conversion Schedule, Data Conversion Task List and Data Conversion Risks List.		
5.04	Data Conversion - General (4)	The Vendor shall work with DOR resources in data conversion and in resolving data issues during the conversion.		
5.05	Data Conversion - Data Cleansing & Development (1)	The Vendor shall conduct a data validation against all identified data sources to identify the data that need to be corrected.		
5.06	Data Conversion - Data Cleansing & Development (2)	The Vendor shall provide a prioritized list of data elements to be cleansed.		
5.07	Data Conversion - Data Cleansing & Development (3)	The Vendor shall provide tools, processes and automation to support the data conversion services.		
5.08	Data Conversion - Data Cleansing & Development (4)	The Vendor shall provide technical documentation, verification, and certification documentation for each data point.		
5.09	Data Conversion - Data Cleansing & Development (5)	The Vendor shall produce a data mapping schema for the data sources being used for conversion into the new ITS systems including but not limited to UAT and Production environments.		
5.10	Data Conversion - Data Cleansing & Development (6)	The Vendor shall develop audit trail and retain history (audit trail) of all data elements that are changed through migration.		
5.11	Data Conversion - Data Cleansing & Development (7)	The Vendor shall assist DOR to ensure the data is cleansed according to municipal code, administrative rules, and policies.		
5.12	Data Conversion - Data Cleansing & Development (8)	The Vendor shall provide scripts which will correct the extracted data from the legacy data sources and place the data into a staging database, as applicable and appropriate. NOTE: This means the DOR's production data in the origin system is not changed in any manner.		
5.13	Data Conversion - Data Cleansing & Development (9)	The Vendor shall document business rules used for data conversion.		
5.14	Data Conversion - Data Cleansing & Development (10)	an automated and secure manner. The Vendor must adhere to DOR's data security policy when handling DOR's data. Encryption, data masking/data scrambling and the use of Secure FTP and/or other secure file delivery as defined in the RFP technical requirements and contract must be met by the Vendor for data in transit and if/when residing at the conversion vendor's site.		
5.15	Data Conversion - Testing (1)	The Vendor shall provide the testing process, including the test plan, test cases, test scenarios and expected results for the migration from the staging database to the new ITS		
5.16	Data Conversion - Testing (2)	The Vendor shall provide general support to the project team for any needs related to converted data.		
~~5.17~~	~~Data Conversion - Testing (3)~~	~~The Vendor shall provide general support to the project team for any needs related to converted data.~~		~~DOR - This requirement is a duplicate of 5.16.~~
5.18	Data Conversion - Testing (4)	The Vendor shall identify and develop reconciliation and comparison tools (i.e. scripts, queries, reports, etc.) that reconcile data from the legacy system to the new ITS.		
5.19	Data Conversion - Testing (5)	The Vendor shall develop automated comparison reports which compare legacy system data with corresponding data from the new ITS system.		
5.20	Data Conversion - Implementation	The Vendor shall execute the data conversion scripts to populate the final production environment.		
5.21	Data Conversion - Archive	The Vendor shall create a full data archive of all data extracted from the legacy system including any data that is not converted into the new ITS.		

6. Analytics

#	Name	Description	Response Code	Description/Attachment (< 300 words)
6.01	Internal Controls Governance	Vendor shall support identification of potential policy changes required to support the ITS analytics, reporting, and internal control.		
6.02	Data Dictionary–Vendor	Vendor shall deliver DOR's ITS data dictionary to include relevant terminology and acronyms.		
6.03	Data Quality	Vendor shall enable DOR defined data quality metrics and transformations required for data conversion into the ITS.		
6.04	Data Change Management	System shall have the capability to define how changes in data values are handled within the ITS		
6.05	Data Processing	System shall have the ability to manage the rules for updates of data within applications.		
6.06	Data Model–Conceptual	Vendor shall provide DOR conceptual data model		
6.07	Data Model–Technical	Vendor shall review DOR technical data model		
6.08	Flexible Naming	System shall allow for flexibility in data labelling and naming		
6.09	Data Monitor	Vendor shall support data monitoring for data quality based on defined metrics and DOR business rules.		
6.10	Data Cleansing Tools	Vendor shall provide tools to support data cleansing (e.g., ETL tools).		
6.11	Real-time Data Validation	System shall support real-time validation of data		
6.12	Batch Data Validation	System shall support batch validation of data		
6.13	Business Consumable	Vendor shall provide data in appropriate structures to support ability of business users to generate ad hoc reports.		
6.14	Historical Data Integration	Vendor shall support determination of the quantity of historical data (if any) to bring to the new system		
6.15	Historical Data Warehousing	System should support housing historical data in new system based on flexible and adjustable retention rules		
6.16	Report Portal	System shall provide a portal for users to receive reports		
6.17	Accessibility	System shall provide appropriate access and control related to reports and underlying data.		
6.18	Publishing	System shall confirm data is correctly formatted before delivering		
6.19	Data Deliver-Email	System shall allow for delivering data to stakeholder(s) through e-mail (Link to log-in to view data securely within the ITS)		
6.20	Extract	System shall provide data extraction tool to other formats (e.g., .csv, Excel)		
6.21	Data Delivery-SFTP	System shall provide the ability to transfer data via Secure File Transfer Protocol		
6.22	Reporting Interface–Drop Downs	System shall include a reporting user interface with drop downs		
6.23	Reporting Interface–Drag and Drop	System shall include a reporting user interface that has drag and drop capabilities		
6.24	Report Templates	System shall allow the creation of templates for standard reports		
6.25	Report Template–Modification	System shall allow for modification of standard report templates by business users		
6.26	Report Template–Storage	System shall allow for storing of standard report templates		
6.27	Sort	System shall allow employee to sort fields within report		
6.28	Filter	System shall allow employee to filter fields within report		
6.29	Order	System shall allow employee to order fields within report		
6.30	Reporting Limits	System shall support limiting results to prevent impact to system performance		
6.31	Reporting Limits–Override	System shall support the ability to override reporting limits based on user privileges.		
6.32	Reporting Database	Vendor will provide separate operational and reporting databases.		
6.33	Notifications	System shall provide notifications when report thresholds are exceeded		
6.34	Export	System shall support export of all reports to other file types (e.g., .csv, Excel, PDF)		
6.35	Visual	Vendor shall support design of graphics-driven dashboards		
6.36	Drill-downs	System shall allow employee to drill-down on fields within dashboard to view more granular data		
6.37	KPI Development	System shall support KPIs identified by business users for reporting purposes		
6.38	KPI Measurement	System shall be able to present comparison data.		
6.39	Granularity	System shall allow for dashboards to be created at multiple levels of granularity (e.g. agency, department, business unit, etc.)		
6.40	Dashboard Definition	Vendor shall support DOR in defining dashboard		
6.41	Customization	System shall support dashboard customization by users		
6.42	Active User	System shall confirm that notifications are linked to an active business owner		
6.43	3rd Party Integration	System shall support integration with 3rd party data sources (e.g. databases, other computers, HTML)		
6.44	View–Operational Report	System shall allow for view of operational report lists		
6.45	View–Mandatory Report	System shall allow for view of mandatory report lists		
6.46	Report Scheduling	System shall allow for scheduling reports to run at a specific time		
6.47	Report Distribution-Email	System shall allow for delivering data to stakeholder(s) through a link within an email to log into a secure location in the ITS to view the data		
6.48	Real Time Reporting	System shall allow for real time online report generation		
6.49	Report Distribution-Server	System shall allow for the posting of reports to a location on a server		
6.50	Business Intelligence	Vendor shall support DOR in determining business intelligence strategy and approach		
6.51	Segmentation	System shall support data segmentation		
6.52	Tracking	System shall track and report on segmented groups		
6.53	Champion-Challenger	System shall support use of Champion-Challenger strategy on segmented data groups to improve processes		
6.54	Linkages	System shall maintain link between defined customer segments and results to support champion / challenger capability and continuous process improvement		
6.55	External Data Match	System shall provide ability to leverage available IRS data for audit selection, treatment strategies, and analytics.		
6.56	Matching Detection	System shall provide matching capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.		
6.57	Scoring Detection	System shall provide scoring capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.		
6.58	Analytic Detection	System shall provide analytic capabilities to facilitate identification of non-filers, under reporters, and other non-compliant taxpayers.		
6.59	Fraud Identification	System shall provide analytical tools for fraud identification.		
6.60	Collection Treatment Strategies	System shall provide analytical tools for collection treatment strategies		
6.61	Dynamic Threshold Levels	System shall provide dynamic threshold levels for authorizations, reviews, and approvals based on evaluation of risk.		
6.62	Scoring Methodology	Vendor shall support DOR define scoring methodology, including: range, activities, and follow-up		
6.63	Advanced Visualization–Vendor	Vendor shall support implementation of advanced visualization techniques in DOR		
6.64	Advanced Visualization–Geocoding	System shall support geocoding advanced visualizations		
6.65	Advanced Visualization–Heat maps	System shall support heat maps advanced visualizations		
6.66	Third Party Data	System should have ability to import from 3rd party data sources.		
6.67	Predictive Analytics–Vendor	Vendor shall support DOR in using the ITS capabilities to meet DOR's predictive analytics objectives.		
6.68	Predictive Analytics–System	System shall support predictive analytics capabilities.		
6.69	Revenue Projections	System shall support revenue projections through statistical forecasting methods based on business rules.		
6.70	Rate Adjustments	System shall support the use of analytics to simulate rate adjustment scenarios.		
6.71	Scorecards	System shall be able to develop scorecards to measure operational effectiveness		
6.72	Scorecard Criteria	Vendor shall assist DOR on scorecard criteria		
6.73	Root Cause	Vendor shall be able to determine root cause of success/failure of procedures		

7. Project Team Experience

#	Name	Description	Response Code	Description/Attachment (<300 words)
7.01	Tax Project Leader	Vendor's Tax Project Leader shall have more than 5 years of project leadership experience and full Vendor tax system implementation experience.		
7.02	Sr. Project Manager	Vendor's Sr. Project Manager shall have either a) more than 5 years of project management experience or b) previous full Vendor tax system implementation experience.		
7.03	Tax Technology Architect	Vendor's Tax Technology Architect shall have more than 5 years of Vendor tax technology experience with the Vendor tax system and full Vendor tax system implementation experience.		
7.04	Tax Configuration Expert	Vendor's Tax Configuration Expert shall have more than 5 years of Vendor tax system configuration experience.		
7.05	Sr. Tax Test Lead	Vendors' Sr. Tax Test Lead shall have more than 5 years of Vendor tax system testing experience.		
7.06	Sr. Tax Training Lead	Vendors' Sr. Tax Training Lead shall have more than 5 years of Vendor tax system training experience.		

8. Maintenance, Support & Upgrades

#	Name	Description	Response Code	Description/Attachment (< 300 words)
8.01	Maintenance	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to enable the Vendor to: 1. Provide patches to correct system errors, faults or bugs detected by DOR, the vendor, or other system users in the community, 2. Provide patches to remediate known Cat-1 security issues, 3. Improve performance, 4. Provide updated schema input process for IRS standard formats, GLDEP file formats, and 5. Provide community based enhancements. These products and services include, but are not limited to, help desk, advisory, consulting and development services.		
8.02	Support	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to enable the Vendor to support DOR's continuous improvement strategy. These products and services may include, but are not limited to: 1. Dedicated DOR support teams and on-demand support from key Vendor resources, 2. Support for changes resulting from legislation, rate changes, tax type addition/removal, and 3. Business productivity workflow enhancements.		
8.03	Upgrades	The Vendor shall provide recurring products and services, for the implementation period and 10 years following final implementation, that are required to provide all solution related services to fully implement all upgrades (major and minor) on a schedule mutually agreed by DOR and the Vendor. Vendor commits to upgrading DOR within 12 months of upgrade availability at DOR's discretion.		

9. Internal Controls

#	Name	Description	Response Code	Description/Attachment (< 300 words)
9.01	Centralized Access Control	System shall provide a centralized screen for employees to view and edit user access		
9.02	Industry Access Standards	System shall account for the principle of least privilege when establishing users access		
9.03	Flagging	System shall support sending a selection of transactions to be reviewed by internal audit based on business rules		
9.04	Threshold Inventory	Vendor shall provide an inventory of system thresholds and limits established as business rules		
9.05	Message Broadcast	System shall provide the ability to message relevant stakeholders of system updates based on business rules		
9.06	ITS/State financial system	System shall support the reconciliation of records between the ITS and state financial system		
9.07	Accounts Receivable	System shall reconcile sub ledger accounts to the ledger accounts		
9.08	Accounting Method - Accrual	System shall allow for modified accrual basis accounting reporting		
9.09	Accounting Method - Cash	System shall allow for cash basis accounting reporting		
9.10	Fund Accounting Reconciliation	System shall support automated reconciliation of agency fund accounting, including distributions		
9.11	Segregation of Duties—Enterprise	System shall enforce segregation of duties at the enterprise level based on business rules		
9.12	Segregation of Duties—Transactional	System shall enforce segregation of duties at the transaction level based on business rules		
9.13	Role Definitions	System shall enforce definitions for roles based on business rules		
9.14	Role Definition View	Vendor shall provide a centralized view within the ITS of all information relating to a specific role, including: title, role ID, and access level		
9.15	Grouping	System shall allow for grouping of roles based on business rules		
9.16	Group Definition View	System shall provide a view of all information relating to groups including: title, group ID, and access level		
9.17	Group Identification	System shall support automated creation of a unique identification number to specified groups		
9.18	Authorization Limit	System shall enforce authorization limits against roles based on business rules		
9.19	Approval Chain	System shall enforce an approval chain for decisions and updates based on business rules		
9.20	Standardized Workflow—Tracking	System shall allow for tracking processes against the standardized workflow		
9.21	Anomaly Detection Capabilities	System shall provide automated anomaly detection software or related capabilities		
9.22	Anomaly Definition—User	System shall provide automated anomaly detection software or related capabilities		
9.23	Anomaly Definition--System	System shall detect anomalies across activity based on System		
9.24	Anomaly Definition—Transactions	System shall detect anomalies across activity based on Transactions		
9.25	Anomaly Detection—Activities	System shall detect anomalies across activity based on Activities		
9.26	Automated Anomaly Detection	System shall support automated detection of data anomalies within the system based on business rules		
9.27	Anomaly Detection—View	System shall provide a view of data anomalies for review		
9.28	Data Conflict Identification	System shall identify data conflicts within the system based on business rules		
9.29	Data Conflict Resolution—Automated	System shall allow for automated resolution of data conflicts within the system based on business rules		
9.30	Data Conflict Resolution—Manual	System shall allow for manual resolution of data conflicts within the system		
9.31	Data Conflict Resolution—Automated	System shall support automated resolution of data conflicts within the system based on business rules		
9.32	Data Conflict Reason Code	System shall support automated assignment of a reason code to a conflict		
9.33	Screen Access	System shall enforce different levels of screen accessibility based on role ID		
9.34	Data Access	System shall enforce different levels of data accessibility based on role ID		
9.35	Extended Leave	System shall capture data around extended employee leave to determine balance of workload		
9.36	Access/Control	System shall enforce access and control limitations based on business rules		
9.37	Linking--Role	System shall allow for linking of an employee to a role based on business rules		
9.38	Linking—Group	System shall allow for linking of an employee to a group based on business rules		
9.39	Security access-Editing	System shall enforce limitations on editing based on role		
9.40	Security access-View Only	System shall enforce view only access of fields based on role		
9.41	Security access-Accessing	System shall enforce limitations on accessing based on role		
9.42	Security access-Deleting	System shall enforce limitations on deleting based on role		
9.43	Update Access—Screen	System shall enforce limitations to editing screens based on role and business rules		
9.44	Update Access—Field	System shall enforce limitations to editing fields based on role and business rules		
9.45	Update Access—Correspondence	System shall enforce limitations to editing correspondence based on role and business rules		
9.46	Update Access—Report	System shall enforce limitations to editing reports based on role and business rules		
9.47	Access Thresholds	System shall enforce thresholds for employee access based on role and business rules		
9.48	Access—Tax Type	System shall enforce limitations to access data based on tax type, role, and business rules		
9.49	Access—Case Type	System shall enforce limitations to access data based on case type, role, and business rules		
9.50	Access—Customer Profile	System shall enforce limitations to access data based on customer profile, role, and business rules		
9.51	Sensitive Customer Flag	System shall allow for flagging of sensitive customers		
9.52	Sensitive Customer Access	System shall enforce limitations to view sensitive customer's (e.g., celebrities, coworkers, etc.) information based on user's role		
9.53	Sensitive Customer Access Report	System shall provide a report of attempts to access sensitive customer information		
9.54	Personal Records	System shall enforce limitations to access a user's own information		
9.55	Personal Records Report	System shall provide a report of attempts to access user's own information		
9.56	Analytics	System shall provide a forecasting tool to assist with determining thresholds		
9.57	Thresholds	System shall allow for thresholds to be established based role and business rules		
9.58	Stops	System shall allow for stops to be established based on business rules		
9.59	Alerts	System shall allow for alerts to be established based on business rules		
9.60	Threshold Hierarchy	System shall allow for setting a hierarchy of thresholds within a process based on role and business rules		
9.61	Threshold Hierarchy--Adjustment	System shall allow for real time adjustments to the hierarchy of thresholds within a process based role and business rules		
9.62	Dynamic Limits	System shall allow for limits and thresholds to be set dynamically (i.e., based on tax type) based on business rules		
9.63	Historical Data	System shall use historical data, where possible, to determine thresholds and limits		
9.64	Bidirectional Traceability	System shall trace transactions bi-directionally (i.e., sub-ledger to GL and GL to sub-ledger)		
9.65	Visibility	System shall provide a report of audits performed on transactions by internal audit		
9.66	Transaction ID	System shall support automated creation of a unique identification number to transactions		
9.67	Accounting Close-Monthly	System shall provide for monthly accounting closing		
9.68	Accounting Close-Quarterly	System shall provide for quarterly accounting closing		
9.69	Accounting Close-Yearly	System shall provide for yearly accounting closing		
9.70	Exception Reporting	System shall provide reporting on exceptions detected from reconciliation effort		
9.71	PeopleSoft Reconciliation	System shall support manual reconciliation of accounting information against PeopleSoft data		
9.72	Bank Account Reconciliation	System shall support automated reconciliation of accounting information against bank account data		
9.73	Language Integration	System should integrate DOR language by updating labels and titles across the ITS		
9.74	Security access-monitoring	System shall provide a report detailing all users and their security access		
9.75	PeopleSoft ID	System shall provide a mapping between the ITS ID and the PeopleSoft ID		
9.76	Audit Log	System shall provide a log of all transactions that includes relevant information (date, amount, transaction type, employee, change (from/to))		
9.77	Account Threshold Notification	System shall support establishing account parameters for threshold or volume transactions to managers or staff		
9.78	Random Selection for Review-Accounts	System shall support random selection of entry accounts for review		
9.79	Random Selection for Review-Transactions	System shall support random selection of transactions for review		
9.80	Transaction Mapping	Vendor shall provide a mapping of identified controls to transactions		
9.81	Backlog Monitoring	System shall provide backlog monitoring to identify points of bottlenecks within processes		
9.82	Business Activity Monitoring	System shall allow for monitoring of business activities to identify points of potential bottlenecks for continuous process improvement		

10. Administrative Requirements

#	Name	Description	Response Code	Description/Attachment (< 200 words)
	1) Tax Type			
10.1.01	Add tax type	System shall provide capability to add tax type		
10.1.02	Edit tax type	System shall provide capability to edit tax types		
10.1.03	Remove tax type	System shall provide capability to remove tax type		
10.1.04	Effective dates—tax type	System shall provide capability to determine effective dates for tax type(s)		
10.1.05	Form content management	System shall provide administrative rights for form content management (e.g., account, forms, name, details)		
10.1.06	Tax type summary	System shall provide tax type summary view (e.g. descriptions, status, history)		
10.1.07	Filter—tax type	System shall provide filtering of tax type in viewable list based on business rules		
10.1.08	Display—tax type	System shall display tax types in a viewable list		
10.1.09	Tax type procedures	System should provide guided procedures for administration of tax type		
10.1.10	Reporting frequency	System shall allow for determination of tax type reporting frequency based on business rules		
	2) Forms			
10.2.01	Create form	System shall provide capability to create form(s) (e.g., tax, correspondence)		
10.2.02	Create form—template	System shall provide pre-populated templates for forms		
10.2.03	Form content	System shall provide capability to specify form content based on user-defined parameters (e.g. user codes)		
10.2.04	Edit form	System shall provide capability to edit static content in forms		
10.2.05	Form alignment	System shall allow for manual form field alignment		
10.2.06	Carry forward	System shall provide capability to carry forward previously used forms		
10.2.07	Remove form	System shall provide capability to remove form(s)		
10.2.08	Approve form	System shall provide administrative review process to authorize form(s)		
10.2.09	Special characters	System shall provide the use of graphics, electronic signatures, or special characters on form(s)		
10.2.10	Spell Check	System shall provide spelling check capabilities equivalent to the spell check capabilities in software products such as the Microsoft Office suite		
10.2.11	Grammar Check	System shall provide grammar checking capabilities equivalent to the grammar check capabilities in software products such as the Microsoft Office suite		
10.2.12	Version control	System shall provide version control mechanism across forms		
10.2.13	Valid dates- forms	System shall allow for ability to define valid forms beginning and end dates		
10.2.14	Valid dates–content	System shall allow for ability to define valid content block beginning and end dates		
10.2.15	Revision dates	System shall record revision dates on forms		
10.2.16	Revision approval	System shall support supervisor review for form revision(s)		
10.2.17	Branded forms	System shall provide forms with DOR-specific branding		
10.2.18	Pre-population	System shall support automated population of entity information into manually personalized correspondence		
10.2.19	Map schema	System shall provide mapping of underlying schema to form data fields		
10.2.20	Language	System shall provide the ability to create forms in different language(s)		
10.2.21	Bi-lingual forms	System shall allow language of form to be selected based on user profile		
10.2.22	Generate form—electronic	System shall provide capability to generate electronic version(s) of all forms		
10.2.23	Generate form—paper	System shall provide capability to generate paper version(s) of all forms		
10.2.24	Print preview	System shall provide capability to view form in print preview		
10.2.25	Print file	System shall generate form print file		
10.2.26	Print form	System shall provide capability to print form locally		
10.2.27	Import form	System shall provide capability to scan or import forms to create editable fields		
10.2.28	Form repository	System shall provide central repository of forms		
10.2.29	View forms	System shall display all forms in viewable list based on business rules		
10.2.30	Search forms	System shall provide searching of forms in viewable list based on business rules		
10.2.31	Filter forms	System shall provide filtering of forms in viewable list based on business rules (e.g. form name, date)		
10.2.32	Embedded hyperlinks	System shall allow for embedded hyperlink(s) to external websites		
	3) Rules/Workflow			
10.3.01	Add rules	System shall provide user interface with ability to create rules		
10.3.02	Edit rules	System shall provide user interface with the ability to edit rules		
10.3.03	Remove rules	System shall provide user interface with the ability to remove rules		
10.3.04	Deploy rules	System shall provide user interface with the ability to deploy rules		
10.3.05	Define workflow	System shall provide capability to define workflow functionality for select business processes such as document processing, exception handling, customer service, auditing, collections, appeals, and criminal investigations		
10.3.06	Implement workflow	System shall provide capability to implement workflow functionality for select business processes		
10.3.07	Track rules	System shall provide capability to track changes to business rules in a viewable list		
10.3.08	Retain rules	System shall provide capability to retain business rules for multiple filing periods		
10.3.09	Apply rules	System shall provide capability to apply rules to past periods		
10.3.10	Valid dates–rules	System shall allow for determination of activation date(s) of business rules based on DOR-specified criteria		
10.3.11	Route work	System shall support workflow technology to route work to appropriate user based on business rules (e.g., sort, prioritize, balance, send)		
10.3.12	Workflow paths	System shall designate dynamic workflow paths based on analytics		
	4) Users			
10.4.01	Establish administrative access	System shall provide capability to establish administrative access for a user		
10.4.02	Multiple levels of access	System shall provide multiple levels of administrative roles with varying level of access		
10.4.03	Customize levels of access	System shall provide capability to assign user access with customizable levels of administrative access (e.g., access to tax type, but not forms)		
10.4.04	Roles-based access	System shall allow administrators to set varying level of access based on user role(s)		
10.4.05	User access level	System shall allow administrators to change user/user group access (e.g. by level, function)		
10.4.06	Notification of access	System shall support automated generation of notification of user access update based on business rules		
10.4.07	Display errors	System shall display notification errors if user does not have privilege(s) for specific action		
10.4.08	View users	System shall display all users in viewable list, based on business roles (e.g. status, level of access)		
10.4.09	Search users	System shall provide searching of users in viewable list based on business rules		
10.4.10	Filter users	System shall provide filtering of users in viewable list based on business rules (e.g. name, level of access, department)		
10.4.11	Master administrator	System shall provide capability to assign master administrator access privileges		
10.4.12	Revoke access	System shall support automated revocation of user access privileges based on business rules		
10.4.13	Revoke access—manual	System shall allow users to manually revoke user access privileges		
10.4.14	Notification of revocation	System shall support automated generation of notification of user access revocation based on business rules		
10.4.15	Access expiration	System shall support automated access expiration based on select criteria (e.g., employment, employment status, date)		
10.4.16	Temporary access	System shall allow for temporary user access based on select criteria (e.g. time, access level)		
	5) Views			
10.5.01	User view	System shall allow administrators to view screens user is viewing		
10.5.02	Customize workspace	System shall provide capability to customize work space, such as: screen resolution, font size, color scheme, navigation preferences)		
10.5.03	Customize view	System shall provide capability to customize user view		
10.5.04	Customize navigation	System shall provide capability to customize navigation paths (e.g., ability to navigate to desired screens)		
10.5.05	Multiple screens	System shall support viewing multiple screens at the same time within the system		
10.5.06	Screen portioning	System shall support screen partitioning to allow for simultaneous viewing of multiple screens		
10.5.07	View profile information	System shall provide consistent profile information on each screen (e.g., entity name, ID number)		
10.5.08	Interface	System shall provide capability to interface with external agencies to view relevant information		
	6) Reports			
10.6.01	Create report	System shall provide capability to create report(s) based on data available to DOR		
10.6.02	Select variables	System shall provide capability to select variables to be included on report		
10.6.03	Report access—view	System shall provide capability to access reports based on access level		
10.6.04	Report access—create	System shall provide capability to create reports based on access level		

10.6.06	System reports	System shall support the manual generation of DOR-created reports (e.g., annual, department)		
10.6.06	Formats to send/save	System shall support multiple formats for reports (e.g., HTML, PDF, document, spreadsheet)		
10.6.07	Generate form—electronic	System shall provide capability to generate electronic version(s) of reports		
10.6.08	Generate form—paper	System shall provide capability to generate paper version(s) of reports		
10.6.09	Print preview	System shall provide capability to view report in print preview		
10.6.10	Print file	System shall generate report print file		
10.6.11	Print report	System shall provide capability to print report locally		
10.6.12	Form depository	System shall archive all reports in a central repository based on business rules		
10.6.13	View report	System shall display all reports in viewable list based on business rules		
10.6.14	Search report	System shall provide capability to search reports based on business rules		
10.6.15	Filter report	System shall provide filtering of reports in viewable list based on business rules (e.g. report name, date)		
10.6.16	Backup report	System shall provide capability to backup reports based on business rules		
	7) Rates/Dates			
10.7.01	Effective rates	System shall provide capability to select effective dates for rate(s) (e.g., interest, penalty, distribution)		
10.7.02	Effective rates—document	System shall provide capability to document effective dates for rates		
10.7.03	Vary rates	System shall allow rates to be varied during select time period		
10.7.04	Calculate rates	System shall calculate rates based on different components of entity (e.g., tax type, liability type, amount owed)		
10.7.05	Rate parameters	System shall provide capability to set parameters for rate amounts based on business rules		

Mandatory Requirements
RFP 17 - 082, Attachment H - Mandatory Requirements Template
Instructions:

Tab Name	Instructions
Mandatory Requirements Template	Please fill in the cells shaded blue. All items require a Yes/No a the evidence and references supporting the response with no r reference additional documentation to support your explanati

Mandatory Requirements

RFP 17 - 082, Attachment H - Mandatory Requirements Template

Mandatory Requirements	Yes/No	Explanation including evidence description and refe...es
Respondent must have been the primary implementation vendor for a complete implementation of the proposed, proven Commercial Off the Shelf based ITS solution for at least 1 U.S. state, that implementation for that state must have been completed in the last 7 years, and that state must be currently utilizing the implemented solution. The complete implementation must have included the implementation of the core tax processes (returns processing, account maintenance, revenue accounting, collections, process payments, and process disbursements) for all DOR tax types (individual, corporate and special as referenced in the RFP) together in at least 1 U.S. state (all tax types and core tax processes in the SAME U.S. state). Do you meet this mandatory requirement?		

Attachment L: Technology Solutions Description

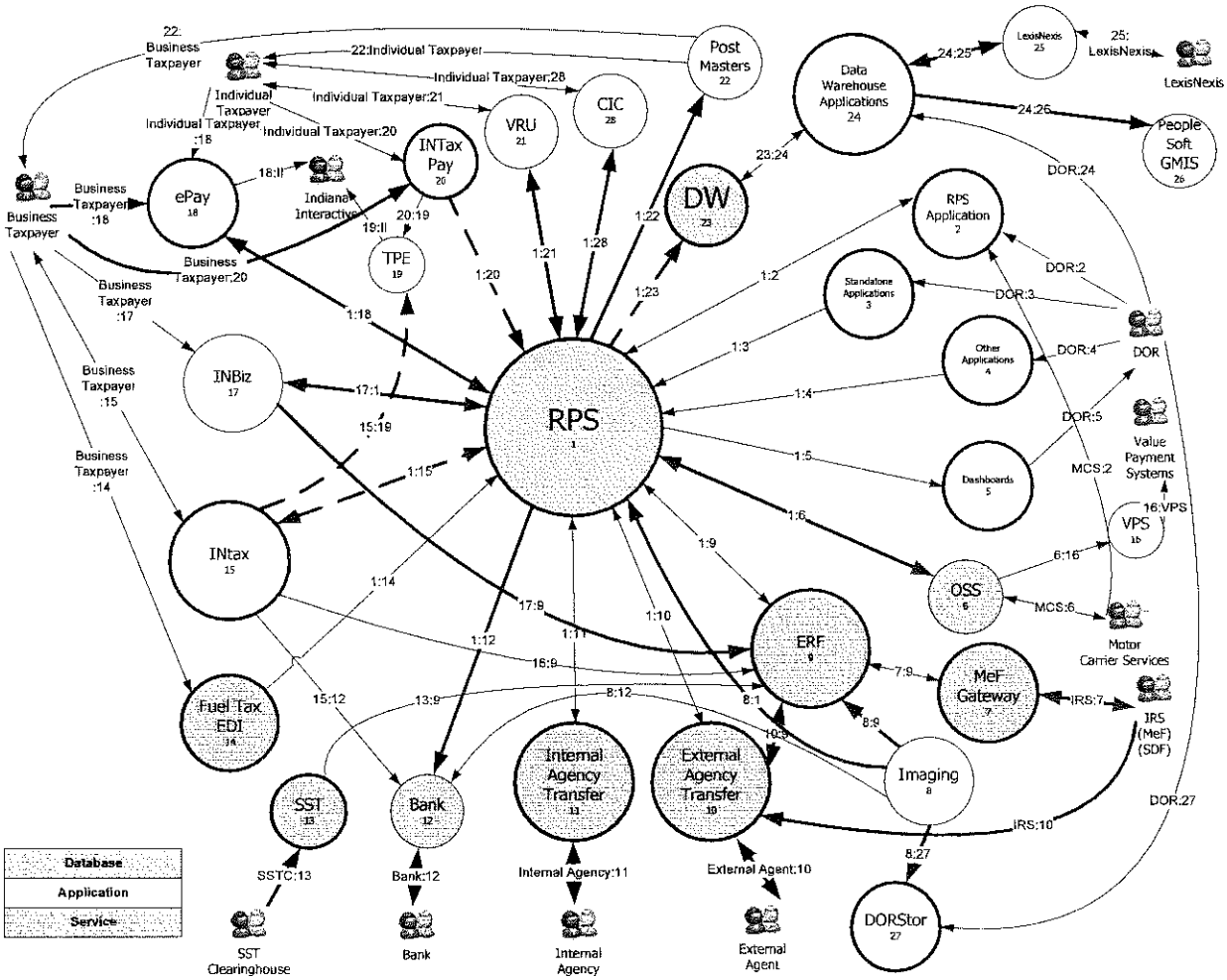
Technology Solutions

DOR is a large and complex organization that employs numerous business processes for tax administration, supported by a variety of applications and technology products. Over the last two decades, the technology landscape at DOR has evolved to support additional tax types, implement legislative changes, automate manual business processes, and provide enhanced reporting capabilities. This has resulted in numerous dependencies between subsystems. Additionally, the core systems now present a mix of technologies and in many cases separate business rules and workflows.

The technology solutions landscape is managed by the Information Technology Division (ITD) within DOR. This IT division is staffed by more than 75 internal and contract staff members. The core applications at DOR can be classified into the following eight broad functions; Data Capture, Decision Support, Imaging, Returns Filing, Returns and Payment Processing, Customer Service, Audit and Compliance.

Attachment L: Technology Solutions Description

DOR Systems Environment (Context View)



Notes:

Bubbles with thick borders are in scope for the ITS Modernization project.

Lines with thick gauge are external interfaces that must be addressed by the ITS project. Dashed lines denote interfaces that might not apply depending on whether vendor wants to replace a particular component or not. Arrows denote directionality.

All following sections refer to elements depicted in this diagram.

Attachment L: Technology Solutions Description

Entity Descriptions

Diagram ID	Name	Description	Type	Examples
DOR	Employees/Associates of Indiana Department of Revenue	See Attachment M for a description of the various DOR locations, facilities, and business functions performed at each. See Attachment N for a description of the DOR Business Functions.	Internal	See list of business functions in Attachment N.
VPS	Value Payment Systems	Vendor engaged by the Indiana Department of Administration to perform processing of Credit/Debit card transactions for Indiana state agencies.	External	
MCS	Motor Carrier Services Division	A division of DOR responsible for maintaining registrations for Commercial Carriers via the IRP program and collecting Motor Fuel taxes via the IFTA program.	Internal	Unified Carrier Registration (UCR) International Registration Program (IRP) International Fuel Tax Administration (IFTA) Oversized/Overweight Permitting
IRS	Internal Revenue Service	The Federal agency responsible to collect revenue.	External	Modernized eFile (MeF) program to receive electronic returns Secure File Delivery (SDF) program to receive data concerning federal taxpayers who could have liability within our state. This is the source of Federal Tax Information (FTI).
External Agent		A non-state agency or vendor who provides data or services to the DOR or who receives data from the DOR	External	County Clerk County Sheriff Third Party Collector

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	Examples
Internal Agency		A state agency who provides to the DOR or receives data from the DOR	External (to DOR)	Department of Workforce Development (DWD) Bureau of Motor Vehicles (BMV) Indiana Economic Development Corporation (IEDC)
Bank		Any of the financial institutions with whom the Treasurer of State (ToS) has opened an account to receive funds from the DOR	External	We do not name these institutions.
SST/Clearinghouse	Streamlined Sales Tax Clearinghouse	A service of the Streamlined Sales Tax Advisory Board to facilitate the collection of Retail Sales Tax from out of state purchases.	External	
Business Taxpayer		A person who remits taxes on behalf of a business. This may be a Sole Proprietor, a Partner, a Member, an Agent, a Corporate Officer, or a Responsible Officer.	External	Corporate Income tax liabilities arise from the profits or losses of the business. Business/Excise taxes that arise from a transaction because it is taxable to the business Trust taxes that are collect from customers or employees because they have experienced a taxable event and remitted to the DOR on their behalf (e.g. Retail Sales Tax, Income Withholding Tax).
Individual Taxpayer		A person who remits taxes on behalf of himself. In this context, we are describing a payer of Individual Income Taxes. An individual may also be	External	Estimated Income tax payments Annual Income tax filing and remittance

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	Examples
		the Sole Proprietor of a business but those transactions are being described under Business Taxpayer.		
Indiana Interactive		A vendor for the state of Indiana engaged by the Indiana Office of Technology (IOT) to manage the state's presence of the Internet. Their services include web content management, web application development and management, and payment processing.	External	
LexisNexis		A DOR vendor who provide Identity Verification services.	External	

Attachment L: Technology Solutions Description

Applications Descriptions

Diagram ID	Name	Description	Type	In Project Scope	Examples
1	RPS Database	This is the Hub of our entire operation and represents our Taxpayer System of Record. The database runs on an Oracle Exadata Database Appliance under Oracle RDBMS version 12g. Most business rules are embedded in PL/SQL scripts and packages. We expect the bulk of converted data to come from either RPS or the Data Warehouse.	Database	Yes	Revenue Processing System
2	RPS Application	These are the Oracle Forms 12g and Reports 12g programs that allow non-technical users to interface with the RPS database.	Application	Yes	RPS Forms/Correspondence
					RPS Reporting
3	Standalone Applications	These are special applications that support minor tax types or special workflows.	Application	Yes	Fiduciary. We expect this system to become obsolete with the ITS implementation.
4	Other Applications	There are other user and query applications that directly access the database.	Application	Yes	Case Management
					Customer Interaction Center
					Revenue Premier
5	Dashboards	These are operational dashboards that pull data directly from RPS	Application	Yes	Returns Processing Dashboard
6	One Stop Shop	This is a set of online applications supporting our motor carrier operations.	Application	No	International Fuel Tax Administration
					International Registration Plan
					Unified Carrier Registration
					Oversized/Overweight

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
7	MeF Gateway	This is the interface to the IRS Modernized eFile system. We essentially outsource electronic filing to commercial software vendors who must meet certain security requirements and certify with us that they can submit returns that will post in our Taxpayer System of Record. We believe this will be replaced by a similar component in the COTS ITS.	Service	Yes	MeF Gateway
8	Imaging & Remittance Processing	These are systems where we convert paper filings and payments into electronic filings and payments.	Application	Yes	FRED (COR MeF Reformatter). We expect this system to become obsolete with the ITS implementation.
				No	ECAPTURE
				No	eFlow
				No	ExportTrac
				No	Fairfax
				No	InfoPOLL
				No	SoftTrac
				No	TMS
				No	vCapture
9	Electronic Returns Filing	This is a hub that serves as a single point of entry for all electronic tax filings. We believe this will be replaced by a similar component in the COTS ITS.	Service	Yes	ERF
				Yes	Echo
				Yes	Electronic Payment Processor
10	External Agency Transfer	This is a Secure File Transfer site where we can exchange data with external agencies such as county clerks, sheriffs, and receivables administrators. Also interface with IRS Secure Data Facility. We believe this will be replaced by a similar component in the COTS ITS. However, we do not believe	Service	No	STFTP
					Bulk Upload

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
		we should ask our trading partners to implement a different interface specification as a consequence of this project.			
11	Internal Agency Transfer	This is a Secure File Transfer site where we can exchange data with other state agencies such as DWD, BMW, and PLA. We believe this will be replaced by a similar component in the COTS ITS. However, we do not believe we should ask our trading partners to implement a different interface specification as a consequence of this project.	Service	No	SFTP
12	Bank	These are our main banking partners.	Service	No	SFTP
13	Streamlined Sales Tax	This is our interface to the Streamlined Sales Tax Clearing House for facile collection of retail sales tax from out of state retailers and large in-state retailers. We believe this will be replaced by a similar component in the COTS ITS.	Service	Yes	Streamlined Sales Tax
14	Fuel Tax EDI	This is our electronic interface to collect fuel taxes from terminal operators. We believe this will be replaced by a similar component in the COTS ITS.	Service	Yes	EDI
15	INTax	This is our online interface allowing trusted agents and businesses who pay excise taxes to file and pay electronically using a web interface. We believe this will be replaced by a similar component in the COTS ITS.	Application	Yes	INTax

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
16	Value Payment Systems	This is the State's preferred Credit Card Processor	Service	No	VPS
17	INBiz	This is a web site on which we partner with the Secretary of State to provide a single point of contact for business entities to register and maintain their presence in the state. DOR uses this to allow business to file an electronic BT-1 to establish trust tax accounts and register for excise taxes. There is currently a project underway to allow the business user to maintain and update his information on file. A future vision is to expose return filing functionality for business and trust taxes here so the business user only has a single system he can use to manage all obligations to all state agencies regulating his business.	Application	No	INBiz
18	ePay	This is an electronic payment web site operated by Indiana Interactive allowing taxpayers to pay taxes online. We believe this will be replaced by a similar component in the COTS ITS.	Application	Yes	ePay
19	The Payment Engine	This is the Indiana Interactive Credit Card Processer.	Service	Yes	TPE
20	INTaxPay	This is an electronic payment web site operated by DOR allowing taxpayers to pay taxes online. We believe this will be replaced by a similar component in the COTS ITS.	Application	Yes Yes	INTaxPay DORPay

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
21	Voice Response	This is a system allowing taxpayers to get information about their accounts using their telephones. Taxpayers can also make payments here. For payments, the system transfers the call to Official Payments.	Application	Yes	IVR
22	PostMasters	This is the State Printing Vendor. Most Forms and Letters to be mailed to taxpayers and trusted agents as sent here.	Service	No	PostMasters
23	Data Warehouse	This is a highly normalized view of all taxpayer accounts over time. We expect the bulk of converted data to come from either RPS or the Data Warehouse.	Database	Yes	Data Warehouse
				Yes	Portfolio Warehouse
				Yes	RSI Workpaper Toolkit
				Yes	ETL
24	Analytics Applications	These are operational dashboards that pull data from the data warehouse. This is also where our Revenue Accounting Mapper and People Soft interface reside. Our Fraud application also resides here.	Application	Yes	OBIEE Dashboards
				Yes	PeopleSoft Hub
25	LexisNexis Interface	Interface to vendor supplying identity verification services. We anticipate that this interface could be utilized for other things (e.g. Trusted Agent Credit Scoring)	Service	No	LexisNexis Interface
26	PeopleSoft GMIS	SOI ERP/General Ledger System. We would like to eliminate the Revenue Accounting Mapper mentioned in #24-Analytics Applications and use a more standard, general-purpose interface.	Application	No	PeopleSoft
27	DORStor	Secure Document Repository. Primarily used for Tax Return Image storage. We only want to require users to access a single such repository within the ITS.	Application	Yes	Imaging

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
28	Customer Interaction Center (CIC)	Telephony/Web Chat system used to manage synchronous communication with Taxpayers	Application	No	CTI IVR

Attachment L: Technology Solutions Description

Data Flow Descriptions

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
1:2	RPS Database	RPS Application	Bidirectional	RPS Forms/Correspondence	User Requests	Screens
						Correspondence
				RPS Reports	Report Criteria	Reports
1:3	Standalone Applications	RPS Database	One Way	Fiduciary	Low Volume Entry for Billings	N/A
1:4	Other Applications	RPS Database	Bidirectional	Case Management	Tax Account Data for Audit	Updates to Account (e.g. Billing)
				Customer Interaction Center	Screen Pop Request	Screen Pop Data
				Revenue Premier	Low Volume Entry for Billings	N/A
1:5	RPS Database	Dashboards	One Way	Returns Processing Dashboard	Query Request	Returns Post/Suspend Status by DLN
1:6	OSS	RPS Database	Bidirectional	OSS	Low Volume Entry for Billings	Taxpayer Status
1:9	ERF	RPS Database	Bidirectional	Imaging	Filed Returns (XML)	N/A
				MeF	Filed Returns (XML)	ACKs, Rejects
				External Agency Transfer	Filed Returns (XML)	ACKs, Rejects
				External Agency Transfer	Electronic Tax Payments (XML)	ACKs, Rejects
1:10	External Agency	RPS Database	Bidirectional	IRS Secure Data System	IRS MDF Files	N/A
				County Clerks	Warrant Recording Request	Warrant Record Number
				Sheriffs	Warrant Placement/Recall	N/A
				A/R Managers	Warrant Placement/Recall	N/A
1:11	Internal Agency	RPS Database	Bidirectional	DWD	Employer Employee Census & Withholding	N/A

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
				BMV	Title Lien Clearance Requests	Taxpayer Status
				PLA	License Renewal Requests	Taxpayer Status
				ATC	License Renewal Requests	Taxpayer Status
1:12	RPS Database	Bank	Bidirectional	Bank EFT	NACHA Payment File	N/A
				RPS Refunds	NACHA Payment File	ACK, Reject
1:14	Fuel Tax EDI	RPS Database	One Way	Fuel Tax EDI	EDI Fuel Tax Return File	ACK, Reject
1:15	INTax	RPS Database	Bidirectional	INTax Return Filing	Electronic Filed Returns	N/A
				INTax Payment Receipt	Electronic Tax Payments	N/A
				RPS Account Refresh	Updated Taxpayer Account Data	N/A
1:18	ePay	RPS Database	Bidirectional	ePay Taxpayer Information	Taxpayer Info Request	Taxpayer Entity Information
				ePay Tax Payment	Electronic Tax Payment (Flat)	ACK, Reject
1:20	INTaxPay	RPS Database	One Way	INTaxPay Payment	Electronic Tax Payment	ACK, Reject
1:21	RPS Database	VRU	Bidirectional	VRU Taxpayer Information	Taxpayer Info Request	Taxpayer Entity Information
				VRU Account Status	Taxpayer Account Status Request	Taxpayer Account Status Information
				VRU Payment	Electronic Tax Payment (Flat)	ACK, Reject
1:22	RPS Database	PostMasters	One Way	Form-driven Correspondence	Data File	N/A
				Correspondence Letter	PDF	N/A
1:23	RPS Database	DW	One Way	Extract/Transform/Load	Taxpayer Data	ACK, Reject
1:28	RPS Database	CIC	Bidirectional	Taxpayer Information	Taxpayer Info Request	Taxpayer Entity Information for screen pop

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Sourc
				VRU Account Status	Taxpayer Account Status Request	Taxpayer Account Status Information for screen pop
DOR:2	DOR Users	RPS Application	Bidirectional	User Interaction	User Input	System Response
DOR:3	DOR Users	Standalone Applications	Bidirectional	User Interaction	User Input	System Response
DOR:4	DOR Users	Other Applications	Bidirectional	User Interaction	User Input	System Response
DOR:5	DOR Users	Dashboards	Bidirectional	User Interaction	User Input	System Response
DOR:27	DOR Users	DORStor	One Way	User Interaction	User Input	System Response
MCS:2	MCS Users	RPS Application	Bidirectional	User Interaction	User Input	System Response
MCS:6	MCS Users	One Stop Shop	Bidirectional	User Interaction	User Input	System Response
6:16	One Stop Shop	Value Payment Systems	Bidirectional	Payment Clearing	Payment Data	ACK, Reject
IRS:7	IRS Modernized eFile	DOR MeF Gateway	Bidirectional	Poll MeF System	Request Transmission File	Transmission File
				Unpack Transmission File	Transmission File	Receipt
IRS:10	IRS Secure Data Transfer System	External Agency	One Way	GL Data Exchange Program	Request Transmission File	Transmission File
7:9	DOR MeF Gateway	ERF	Bidirectional	Return Submission	Return File	Submission ID
				Return ACK/Reject	ACK/Reject Message	ACK, Reject
8:1	Imaging	RPS Database	One Way		Electronic Tax Returns (Flat)	N/A
8:9	Imaging	ERF	One Way		Electronic Tax Returns (XML)	N/A
8:12	Imaging	Bank	One Way	Remittance Processing	Image Cash Letter	N/A
8:27	Imaging	DORStor	One Way	Return Images & Metadata	TIFF Image Files XML Metadata Files	N/A

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
10:9	External Agency	ERF	Bidirectional	Payroll Filing	Electronic Tax Returns (XML)	ACK, Reject
External Agent:10	External Agent	External Agency	Bidirectional	Payroll Filing	Electronic Tax Returns (XML)	ACK, Reject
				County Clerks	Warrant Recording Number	N/A
				County Sheriffs	Warrant Status	N/A
				A/R Manager	Warrant Status	N/A
Internal Agency:11	Internal Agent	Internal Agency	Bidirectional	DWD	Employer Employee Census & Withholding	N/A
				BMV	Title Lien Clearance Requests	Taxpayer Status
				PLA	License Renewal Requests	Taxpayer Status
				ATC	License Renewal Requests	Taxpayer Status
Bank:12	Bank User	Bank	Bidirectional	Remittance Processing	Image Cash Letter	ACK, Reject
				INTax	NACHA Deposit File	ACK, Reject
				RPS Database	NACHA Payment File	ACK, Reject
13:9	SST	ERF	Bidirectional	Return Submission	Return File	Submission ID
				Return ACK/Reject	ACK/Reject Message	ACK, Reject
SSTC:13	SST Clearinghouse	SST	Bidirectional	SST Transmission	Request Transmission File	Transmission File
				Unpack Transmission File	Transmission File	Receipt
Business Taxpayer:14	Business Taxpayer	Fuel Tax EDI	Bidirectional	EDI Transmission	EDI Fuel Tax Return File	Receipt
15:12	INTax	Bank	One Way	Bank Transmission	NACHA Debit File	N/A
15:19	INTax	TPE	One Way	Payment Processor Transmission	Electronic Tax Payment (Web Service)	ACK, Reject

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Sourc
Business Taxpayer:15	Business Taxpayer	INTax	Bidirectional	Account Inquiry	Taxpayer Info Request	Taxpayer Account Status Information
				Return Filing	Return Data	ACK, Reject
				Payment	Tax Payment Data	ACK, Reject
16:VPS	VPS	Value Payment Systems	Bidirectional	Payment	Tax Payment Data	ACK, Reject
17:1	INBiz	RPS	Bidirectional	Taxpayer Standing Taxpayer Account	Taxpayer Standing Taxpayer Account	Taxpayer Standing Information Taxpayer Account Information
17:9	INBiz	ERF	Bidirectional	Tax Account Registration	Registration Data	ACK, Reject
Business Taxpayer:17	Business Taxpayer	INBiz	Bidirectional	Tax Account Registration	Registration Data	ACK, Reject
18:II	ePay	Indiana Interactive	Bidirectional	Payment	Tax Payment Data	N/A
Business Taxpayer:18	Business Taxpayer	ePay	Bidirectional	Tax Account Information	Tax Account Information Request	Taxpayer Account Status Information
				Payment	Payment Data	ACK, Reject
Business Taxpayer:20	Business Taxpayer	INTaxPay	Bidirectional	Payment	Payment Data	ACK, Reject
Individual Taxpayer:18	Individual Taxpayer	ePay	Bidirectional	Tax Account Information	Tax Account Information Request	Taxpayer Account Status Information
				Payment	Payment Data	ACK, Reject
20:19	INTaxPay	TPE	Bidirectional	Payment Processor Transmission	Electronic Tax Payment (Web Service)	ACK, Reject
Individual Taxpayer:20	Individual Taxpayer	INTaxPay	Bidirectional	Payment	Payment Data	ACK, Reject
Individual Taxpayer:21	Individual Taxpayer	VRU	Bidirectional	Taxpayer Account Status	Tax Account Information Request	Taxpayer Account Status Information
				Payment	Payment Data	ACK, Reject
Individual Taxpayer:28	Individual Taxpayer	CIC	Bidirectional	Conversation	Conversation	Conversation

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
22:Individual Taxpayer	PostMasters	Individual Taxpayer	One Way	Correspondence Letter	Regular Postal Item	N/A
					Certified Postal Item	Response Card
					Post Office Return	NCOA Tag
22:Business Taxpayer	PostMasters	Business Taxpayer	One Way	Correspondence Letter	Regular Postal Item	N/A
					Certified Postal Item	Response Card
					Post Office Return	NCOA Tag
23:24	Data Warehouse Applications	Data Warehouse	Bidirectional	Analysis	Data Request	Requested Data
24:25	Data Warehouse Applications	LexisNexis Interface	Bidirectional	Identify Verification Request	Data Request	Requested Data
25:LexisNexis	LexisNexis Interface	LexisNexis	Bidirectional	Identify Verification Request	Data Request	Requested Data
DOR:24	DOR Users	Data Warehouse Applications	Bidirectional	Analysis	Data Request	Requested Data
24:26	Data Warehouse Revenue Accounting Mapper	PeopleSoft GMIS	One Way	Revenue Accounting Entry Records	File of Records	N/A

Attachment L: Technology Solutions Description

Technical Solutions Detail

Diagram ID	System Name	Function	Type	Vendor	DOR Owner	In Service	Interfaces	End Users	Front-End	Back-End
4	Case Management	Audit	COTS	RSI	ITD	-	-	-	ASP.Net	SQL Server 2012
8	COR MeF Reformatter (FRED)	Imaging	Internal App	-	RPO	2015	2	10	C# 2010	N/A
4	Customer Interaction Center (CIC)	Customer Service	COTS	Interactive Intelligence	Tax Admin & Collections	2011	7	Over 100	CIC V 4.0 SU 6	SQL Server 2012
23	Data Warehouse	Decision Support	Internal App	-	ITD	-	12	-	ASP.Net	Oracle
8	Ecapture	Imaging	COTS	TransCentra	RPO	-	2	100	ASP.Net	SQL Server 2012
9	ECHO	Returns Filing	Internal App	-	RPO	2015	6	N/A	.Net	SQL Server 2012
8	EFLOW	Imaging	COTS	TransCentra	RPO	-	2	60	ASP.Net	SQL Server 2012
9	Electronic Payment Processor (EPP)	Returns Filing	Internal App	-	ITD	-	-	5	ASP.Net	Oracle
9	Electronic Returns Filing (ERF)	Returns Filing	Internal App	-	RPO	2009	7	N/A	C# .Net 2008	Oracle
18	Epay	Electronic Data Capture	COTS	Indiana Interactive	ITD	2005	-	N/A	-	-
8	ExportTrac	Imaging	COTS	IBML	RPO	-	2	10	C#	SQL Server
8	Fairfax	Imaging	COTS	Fairfax Imaging	RPO	2015	7	10	ASP.Net	SQL Server
3	Fiduciary	Returns and Payment Processing	Stand Alone	-	RPO	-	-	4	VB.Net 2010	SQL Server 2012
8	INFOPoll	Imaging	COTS	Agissar	RPO	-	2	80	ASP.Net	SQL Server
15	INTax	Electronic Data Capture	Internal App	-	ITD	2005	8	25	ASP.Net, C#	Oracle

Attachment L: Technology Solutions Description

Diagram ID	System Name	Function	Type	Vendor	DOR Owner	In Service	Interfaces	End Users	Front-End	Back-End
20	INTaxPay	Electronic Data Capture	Internal App	-	ITD	2006	5	25	ASP.Net, C#	Oracle
25	LexisNexis Interface	Returns Filing	Internal App	-	ITD	2014	3	N/A	ASP.Net, C#	Oracle, PL/SQL
7	MeF Gateway	Electronic Data Capture	Internal App	-	ITD	2010	3	N/A	Windows	Oracle
24	OBIEE Dashboards	Decision Support	Internal App	-	Finance	2009	2	Over 100	BI Publisher	Oracle
6	One Stop Shop (OSS)	Electronic Data Capture	Internal App	-	MCS	-	2	14	Java J2EE	Oracle
25	PeopleSoft Hub	Audit	Internal App	-	Finance	2014	3	10	Java	Oracle
23	Portfolio Warehouse	Decision Support	COTS	RSI	ITD	2014	3	-	-	Oracle
	Revenue Premier Special Tax (RPE)	Returns and Payment Processing	COTS	RSI	ITD	2014	5	40	ASP .Net, C#	SQL Server
1	Revenue Processing System (RPS)	Returns and Payment Processing	Internal App	-	ITD	1990s	16	500	Oracle Forms & Oracle Reports	Oracle, COBOL, PL/SQL
2	RPS Reporting	Decision Support	Internal App	-	ITD	-	1	Over 100	-	Oracle
24	RSI Workpaper Toolkit	Audit	COTS	RSI	ITD	2014	-	20	ASP.Net	Oracle
8	SoftTrac	Imaging	COTS	IBML	RPO	-	2	10	C#	SQL Server
13	Streamlined Sales Tax (SST)	Electronic Data Capture	Internal App	-	ITD	2004	2	-	Windows	Oracle
8	Transaction Management System (TMS)	Imaging	COTS	TransCentra	RPO	-	8	40	ASP.Net, C#	SQL Server
8	Vcapture	Imaging	COTS	Lionbridge	RPO	-	2	5	ASP.net	SQL Server

Attachment L: Technology Solutions Description

Diagram ID	System Name	Function	Type	Vendor	DOR Owner	In Service	Interfaces	End Users	Front-End	Back-End
26	Web Center Content (DORStor)	Imaging	COTS	Oracle	RPO	2016	1	700	HTML	Oracle App/Database

Attachment L: Technology Solutions Description

.nterface Details

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
:2	ITS Database	ITS Application	Assumed to be contained within the ITS COTS Solution.			
:3	Standalone Applications (Assume these become obsolete with ITS)	ITS Application	Assumed to be contained within the ITS COTS Solution.			
:4	Other Applications (Assume these become obsolete with ITS)	ITS Application	Assumed to be contained within the ITS COTS Solution.			
:5	ITS Database	ITS Dashboards	Assumed to be contained within the ITS COTS Solution.			
:6	OSS	ITS Database	Web Service	Taxpayer Status	Supply WSDL	
:9	ERF (Assume Vendor replaces this component)	ITS Database	Assumed to be contained within the ITS COTS Solution.			
:10	External Agency	RPS Database	Assumed to be contained within the ITS COTS Solution.			
:11	Internal Agency	RPS Database	Assumed to be contained within the ITS COTS Solution.			

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
:12	RPS Database	Bank	One Way	Bank EFT	NACHA Payment File Standard NACHA file with specific values for destination institution.	N/A
			One Way	RPS Refunds	NACHA Deposit File Standard NACHA file with specific values for destination institution.	N/A
:14	Fuel Tax EDI	RPS Database	Assumed to be contained within the ITS COTS Solution.			
:15	INTax (Assume Vendor replaces this component)	RPS Database	Assumed to be contained within the ITS COTS Solution.			
:15	INTax (Assume Vendor wishes to use this component)	RPS Database	Bidirectional	INTax Return Filing	Supply File Formats	
				INTax Payment Receipt	Supply File Formats	
				RPS Account Refresh	Supply File Formats	
:18	ePay	ITS Database	Bidirectional	ePay Taxpayer Information	Supply File Formats	
				ePay Tax Payment	Supply File Formats	
:20	INTaxPay	ITS Database	Assumed to be contained			

Attachment L: Technology Solutions Description

ram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
	(Assume Vendor replaces this component)		within the ITS COTS Solution.			
:20	INTaxPay (Assume Vendor wishes to use this component)	ITS Database	Bidirectional	INTaxPay Payment	Supply File Formats	
:21	ITS Database	VRU	Bidirectional	VRU Taxpayer Information	Supply File Formats	
				VRU Account Status	Supply File Formats	
				VRU Payment	Supply File Formats	
:22	ITS Database	PostMasters	One Way	Form-driven Correspondence	Supply File Formats	
				Correspondence Letter	Supply File Formats & PDF	
:23	ITS Database (Assume Vendor replaces this component)	DW	Assumed to be contained within the ITS COTS Solution.			
:23	ITS Database (Assume Vendor wishes to use this component)	DW	Assumed to be contained within the ITS COTS Solution.	Extract/Transform/Load using Oracle Data Warehouse Builder	Taxpayer Data	
:28	RPS Database	CIC	Bidirectional	Taxpayer Information	Supply WSDL	Taxpayer Entity Information for screen pop
				Account Status	Supply WSDL	Taxpayer Account Status Information for screen pop
)OR:2	DOR Users	ITS Application	Assumed to be contained within the			

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
			ITS COTS Solution.			
)OR:3	DOR Users	Standalone Applications (Assume these become obsolete with ITS)	Assumed to be contained within the ITS COTS Solution.			
)OR:4	DOR Users	Other Applications (Assume these become obsolete with ITS)	Assumed to be contained within the ITS COTS Solution.			
)OR:5	DOR Users	Dashboards (Assume these become obsolete with ITS)	Assumed to be contained within the ITS COTS Solution.			
)OR:27	DOR Users (Assume Vendor replaces this component)	DORStor	Assumed to be contained within the ITS COTS Solution.	User Interaction	User Input	System Response
)OR:27	DOR Users (Assume Vendor wishes to use this component)	DORStor	One Way	User Interaction	User Input	System Response
ICS:2	MCS Users	ITS Application	Assumed to be contained within the ITS COTS Solution.			
ICS:6	**MCS Users**	**One Stop Shop**	**Out of Scope**			
:16	**One Stop Shop**	**Value Payment Systems**	**Out of Scope**			
RS:7	IRS Modernized eFile	DOR MeF Gateway (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.			

Attachment L: Technology Solutions Description

ram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
RS:10	IRS Secure Data Transfer System	External Agency (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.			
:9	DOR MeF Gateway (Assume Vendor replaces this component)	ERF (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.	IT-40, IT-40PNR, IT-40RNR IT-20S, IT-65	Supply XSDs for ReturnState	
:1	Imaging	ITS Database	One Way	IT-40ES, IT-40X, ES-40 IT-20, IT-20S, NP-20, IT-65	Supply File Format	
:9	Imaging	ERF	One Way	IT-40, IT-40PNR, IT-40RNR IT-20S, IT-65	Supply XSDs for ReturnState	
	Imaging	**Bank**	**Out of Scope**			
:27	Imaging	DORStor (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.			
:27	Imaging	DORStor (Assume Vendor wishes to use this component)	One Way	Return Images & Metadata	Supply XSD + multi-page TIFF	
0:9	External Agency	ERF	Assumed to be contained within the ITS COTS Solution.	Payroll Filing	Supply XSD	
xternal gent:10	External Agent	External Agency	Assumed to be contained within the ITS COTS Solution.	Payroll Filing	Supply XSD	We need to itemize all Agent transactions that come through this interface

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
				County Clerks	Warrant Recording Number Supply File Format	
				County Sheriffs	Warrant Status Supply File Format	
				A/R Manager	Warrant Status Supply File Format	
nternal Agency:11	Internal Agent	Internal Agency	Assumed to be contained within the ITS COTS Solution.	DWD	Employer Employee Census & Withholding Supply File Format	We need to itemize all Agent transactions that come through this interface
				BMV	Title Lien Clearance Requests Supply File Format	Taxpayer Status
				PLA	License Renewal Requests Supply File Format	Taxpayer Status
				ATC	License Renewal Requests Supply File Format	Taxpayer Status
Bank:12	Bank User	Bank	Assumed to be contained within the ITS COTS Solution.	INTax	NACHA Deposit File	ACK, Reject
Bank:12	Bank User	Bank	Assumed to be contained	RPS Database	NACHA Payment File	ACK, Reject

Attachment L: Technology Solutions Description

ram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
			within the ITS COTS Solution.			
3:9	SST	ERF	Assumed to be contained within the ITS COTS Solution.			
STC:13	SST Clearinghouse	SST	Assumed to be contained within the ITS COTS Solution.			
usiness axpayer:14	Business Taxpayer	Fuel Tax EDI	Assumed to be contained within the ITS COTS Solution.			
	INTax (Assume Vendor replaces this component)	Bank	Assumed to be contained within the ITS COTS Solution.			
5:12	**INTax** (Assume Vendor wishes to use this component)	**Bank**	**Out of Scope**			
5:19	INTax (Assume Vendor replaces this component)	TPE*	One Way	This will be a Hosted Checkout Solution		
5:19	INTax (Assume Vendor replaces this component)	VPS*	One Way	This will be a Web Service	Supply WSDL	
5:19	**INTax** (Assume Vendor wishes to use this component)	**TPE***	**Out of Scope**			
usiness axpayer:15	Business Taxpayer	INTax (Assume Vendor replaces this component)	Assumed to be contained within the	Account Inquiry	Taxpayer Info Request	Taxpayer Account Status Information

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
			ITS COTS Solution.			
			Assumed to be contained within the ITS COTS Solution.	Return Filing	Return Data	ACK, Reject
			Assumed to be contained within the ITS COTS Solution.	Payment	Tax Payment Data	ACK, Reject
Business Taxpayer:15	**Business Taxpayer**	**INTax** (Assume Vendor wishes to use this component)	**Out of Scope**	Account Inquiry	Taxpayer Info Request	Taxpayer Account Status Information
			Out of Scope	Return Filing	Return Data	ACK, Reject
			Out of Scope	Payment	Tax Payment Data	ACK, Reject
6:VPS	**VPS**	**Value Payment Systems**	**Out of Scope**			
7:1	INBiz	RPS	Web Service	Taxpayer Standing Taxpayer Account	Supply WSDLs	
7:9	INBiz	ERF	Bidirectional	Tax Account Registration	Supply XSD	
Business Taxpayer:17	**Business Taxpayer**	**INBiz**	**Out of Scope**			
8:II	**ePay**	**Indiana Interactive**	**Out of Scope**			
Business Taxpayer:18	**Business Taxpayer**	**ePay**	**Out of Scope**			
Business Taxpayer:20	**Business Taxpayer**	**INTaxPay** (Assume Vendor wishes to use this component)	**Out of Scope**			
Business Taxpayer:20	Business Taxpayer	INTaxPay (Assume Vendor replaces this component)	Assumed to be contained within the			

Attachment L: Technology Solutions Description

ram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
			ITS COTS Solution.			
ndividual axpayer:18	**Individual Taxpayer**	**ePay**	**Out of Scope**			
0:19	**INTaxPay** (Assume Vendor wishes to use this component)	**TPE***	**Out of Scope**			
0:19	INTaxPay (Assume Vendor replaces this component)	TPE*	Bidirectional	This will be a Hosted Checkout Solution		
0:19	INTaxPay (Assume Vendor replaces this component)	VPS*	Bidirectional	This will be a Web Service	Supply WSDL	
ndividual axpayer:20	**Individual Taxpayer**	**INTaxPay** (Assume Vendor wishes to use this component)	**Out of Scope**			
ndividual ayer:20	Individual Taxpayer	INTaxPay (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.	Payment	Payment Data	ACK, Reject
ndividual axpayer:21	Individual Taxpayer	VRU	**Out of Scope**			
ndividual axpayer:28	**Individual Taxpayer**	**CIC**	**Out of Scope**			
2:Individual axpayer	PostMasters	Individual Taxpayer	One Way	Regular Postal Item	Supply File Format	
				Certified Postal Item	Supply File Format	
				Post Office Return	Supply File Format	
2:Business axpayer	PostMasters	Business Taxpayer	One Way	Regular Postal Item	Supply File Format	
				Certified Postal Item	Supply File Format	
				Post Office Return	Supply File Format	

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction	Source to Target	Target to Source
:3:24	**Data Warehouse Applications**	**Data Warehouse** (Assume Vendor wishes to use this component)	**Out of Scope**			
:3:24	Data Warehouse Applications	Data Warehouse (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.			Do we need to itemize the Analyses we want?
:4:25	Data Warehouse Applications	LexisNexis Interface	Assumed to be contained within the ITS COTS Solution.	Identify Verification Request	Data Request	Requested Data
:5:LexisNexis	LexisNexis Interface	LexisNexis	Assumed to be contained within the ITS COTS Solution.	Identify Verification Request	Data Request	Requested Data
)OR:24	**DOR Users**	**Data Warehouse Applications** (Assume Vendor wishes to use this component)	**Out of Scope**			
)OR:24	DOR Users	Data Warehouse Applications (Assume Vendor replaces this component)	Assumed to be contained within the ITS COTS Solution.	Analysis	Data Request	Requested Data
:4:26	Data Warehouse Revenue Accounting Mapper	PeopleSoft GMIS	Assumed to be contained within the ITS COTS Solution.			

Attachment L: Technology Solutions Description

Conversion Data Source Detail

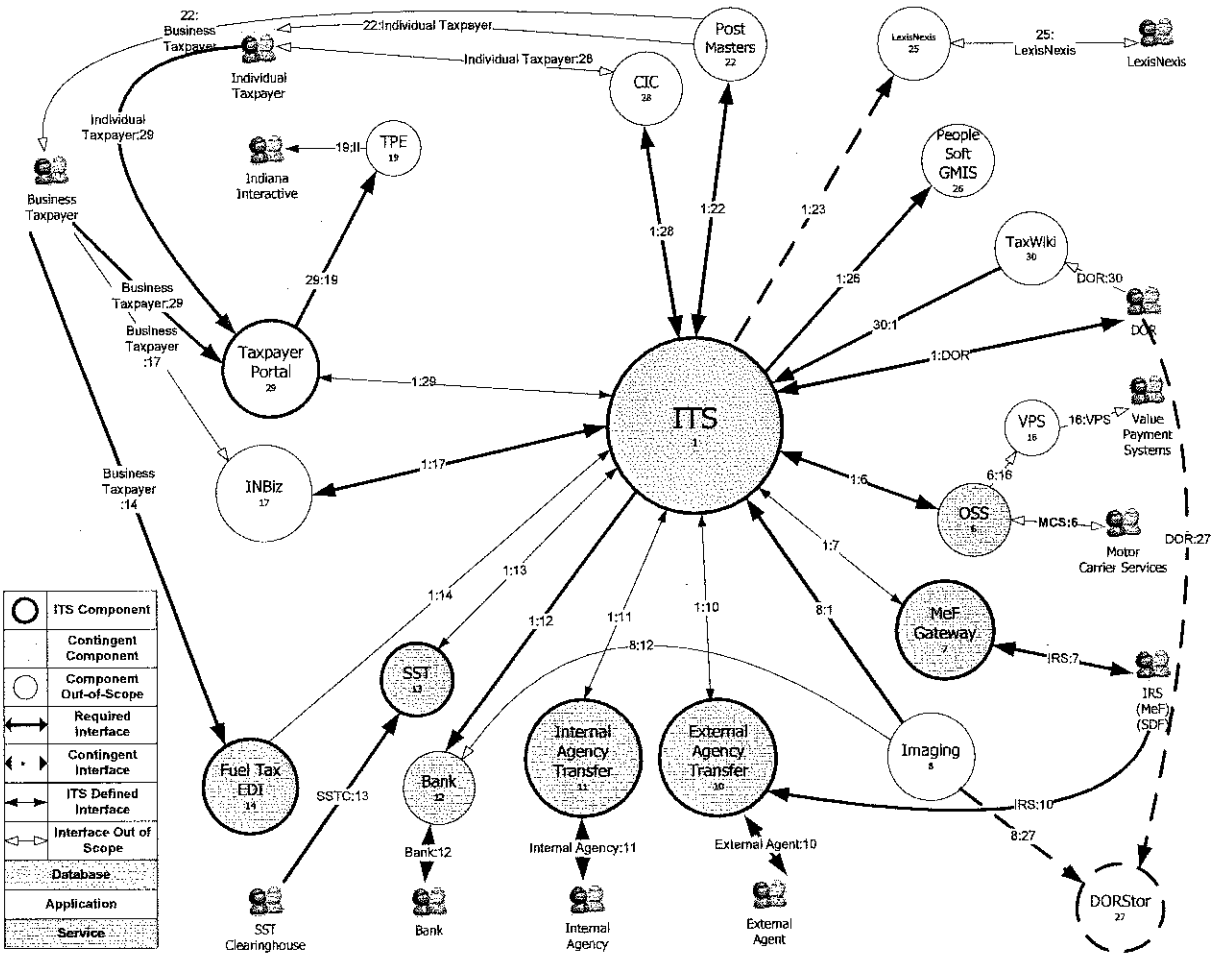
Diagram ID	Name	Description	Type	In Project Scope	Examples
1	RPS Database	Contains data for all taxpayers at some level of detail ranging from just taxpayer entity & account data to tax period data and correspondence history. Data ranges from late 20th century to present.	Oracle Database	Yes	All Individual Income Taxes All Corporate Income Taxes All Withholding Taxes except Employer-supplied Wage Statements All Trust Taxes (RST, CIT, FAB, TF, FPS) Fuel Tax
3	Fiduciary System	Contains Entity, Account, Tax Period, and Payments (past three years).	SQL Server Database	Yes	Estate & Trust Taxes (IT-41)
9	Electronic Returns Filing (ERF)	Contains original filing of electronic income tax returns. Individual from 2009 – present. Corporate pass through from 2014 – present.	Oracle Database	Yes	Individual (IT-40, IT-40PNR, IT-40RNR, IT-40EX (through 2015)). Corporate (IT-65, IT-20S) from 2014 – present)
9	Electronic Returns Filing (Echo)	Contains original filing of electronic Cigarette tax returns from 2014 – present.	SQL Server Database	Yes	CigTax Filings 2014 - present
23	Data Warehouse (Data Warehouse)	Contains taxpayer historical data that has been cleansed to some degree beyond that available in RPS. Contains data from external data sources	Oracle Database	Yes	Mirrors the type and scope of data in RPS.
23	Data Warehouse (Portfolio Warehouse)	Contains taxpayer historical data that has been cleansed to some degree beyond that available in RPS. Also includes data for Audit Case Management system and the Audit Work Papers application.	Oracle Database	Yes	RPS data since 2004 Other sourced data since 2009

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Examples
		Contains data from external data sources			
27	DORStor	Contains images of paper tax returns processed through the Imaging system. Contains images of Powers of Attorney processed through Imaging System.	Oracle Database	Yes	Multipage TIFF Images PDF Files Metadata tying each of the above to a Taxpayer and a Document or Payment locator number.

Attachment L: Technology Solutions Description

DOR ITS Systems Environment (Context View)



Entity Descriptions

This diagram uses the same Entity Descriptions as does the current state diagram.

Attachment L: Technology Solutions Description

Applications Descriptions

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
1	Integrated Tax System (ITS)	This is the product that DOR is purchasing. It is a highly configurable, highly customizable, commercial off-the-shelf (COTS) product offering of a vendor with qualified experience in the state tax and revenue marketplace.	Integrated multi-tier, multi-channel Tax and Revenue application.	Yes	Account Management Collections Customer Service Manage Case Process Disbursements Process Payments Process Submissions Revenue Accounting Taxpayer Registration
6	One Stop Shop	This is a set of online applications supporting our motor carrier operations.	Application	No	Account Management Collections Customer Service Manage Case Process Disbursements Process Payments Process Submissions Revenue Accounting Taxpayer Registration International Fuel Tax Administration International Registration Plan

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
					Unified Carrier Registration
					Oversized/Overweight
7	MeF Gateway	This is the interface to the IRS Modernized eFile system. We believe this is a standard component in the COTS ITS.	Service	Yes	Process Submissions
					Process Disbursements
					Taxpayer Registration
8	Imaging & Remittance Processing	These are systems where we convert paper filings and payments into electronic filings and payments.	Application		Process Submissions
					Process Disbursements
					Process Payments
					Taxpayer Registration
				Yes	FRED (COR MeF Reformatter). We expect this system to become obsolete with the ITS implementation.
				No	ECAPTURE
				No	eFlow
				No	ExportTrac
				No	Fairfax
				No	InfoPOLL
				No	SoftTrac
				No	TMS
				No	vCapture
10	External Agency Transfer	This is a Secure File Transfer site where we can exchange data with external agencies such as county clerks, sheriffs, and receivables administrators. Also interfaces with IRS Secure Data Facility.	Service	Yes	Account Management
					Collections
					Manage Case
					Process Disbursements
					Process Payments
					Process Submissions

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
		We believe this is a component in the COTS ITS. However, we do not believe we should ask our trading partners to implement a different interface specification as a consequence of this project. Therefore, all existing interfaces are AS-IS.			STFTP
11	Internal Agency Transfer	This is a Secure File Transfer site where we can exchange data with other state agencies such as DWD, BMW, and PLA. We believe this is a component in the COTS ITS. However, we do not believe we should ask our trading partners to implement a different interface specification as a consequence of this project. Therefore, all existing interfaces are AS-IS.	Service	Yes	Account Management Collections Manage Case Process Disbursements Process Payments Process Submissions Bulk Upload
12	Bank	These are our main banking partners.	Service	No, except when the ITS creates and sends its own deposit file.	Process Payments Process Disbursements SFTP
13	Streamlined Sales Tax	This is our interface to the Streamlined Sales Tax Clearing House for facile collection of retail sales tax from out of state retailers and large in-state retailers. We believe this is a component in the COTS ITS.	Service	Yes	Process Submissions Process Payments Taxpayer Registration Streamlined Sales Tax

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
14	Fuel Tax EDI	This is our electronic interface to collect fuel taxes from terminal operators. We believe this is a component in the COTS ITS.	Service	Yes	Process Submissions Process Payments EDI
17	INBiz	This is a web site on which we partner with the Secretary of State to provide a single point of contact for business entities to register and maintain their presence in the state. We are unable to ask our partner to implement a different interface specification as a consequence of this project. Therefore, all existing interfaces are AS-IS. DOR uses this system to allow a business to file an electronic BT-1 to establish trust tax accounts and register for excise taxes. There is currently a project underway to allow the business user to maintain and update his information on file. * A future vision is to expose return filing functionality for business and trust taxes here so the business user only has a single system he can use to manage all obligations to all state agencies regulating his business.	Application	No	Taxpayer Registration The State's One Stop Shop for businesses to conduct their business with all state agencies who have some jurisdiction over them. These transactions include: • Registration (SOS) • Tax Registration (DOR) • Tax Registration (DWD) • Licensing (PLA) Business Registration/Biennial Business Entity Report BT-1/BC-100 Filing Trust/Excise Tax Filing* SUTA Filing Professional Licensing

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
19	The Payment Engine	This is the Indiana Interactive Credit Card Processer. If this component is used, this will be a hosted checkout application and the vendor may have to adjust his software to perform in that manner.	Service	Yes	Payment Processing TPE
22	PostMasters	This is the State Printing Vendor. Most Forms and Letters to be mailed to taxpayers and trusted agents as sent here.	Service	No	Account Management Collections Customer Service Manage Case Process Disbursements Process Submissions Taxpayer Registration PostMasters
23	Data Warehouse	This is a highly normalized view of all taxpayer accounts over time. We expect the bulk of converted data to come from either RPS or the Data Warehouse. . We believe this will be replaced by a similar component in the COTS ITS. However the vendor may make the case to preserve this component and interface to it. All interfaces in this case are AS-IS.	Database	 Yes Yes Yes Yes	Analytics Data Warehouse Portfolio Warehouse RSI Workpaper Toolkit ETL
24	Analytics Applications	These are operational dashboards that pull data from the data warehouse. This is also where our Revenue Accounting Mapper and People Soft interface reside. Our Fraud application also resides here. .	Application	 Yes Yes 	Analytics OBIEE Dashboards PeopleSoft Hub

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
		We believe this will be replaced by a similar component in the COTS ITS. However the vendor may make the case to preserve this component and interface to it. All interfaces in this case are AS-IS.			
25	LexisNexis Interface	Interface to vendor supplying identity verification services. We anticipate that this interface could be utilized for other things (e.g. Trusted Agent Credit Scoring)	Service		Account Management Process Submissions Taxpayer Registration
				No	LexisNexis Interface
26	PeopleSoft GMIS	SOI ERP/General Ledger System. We would like to eliminate the Revenue Accounting Mapper mentioned in #24-Analytics Applications and use a more standard, general-purpose interface.	Application		Revenue Accounting
				No	PeopleSoft
27	DORStor	Secure Document Repository. Primarily used for Tax Return Image storage. We only want to require users to access a single such repository within the ITS.	Application		Image Repository Content Management
				Yes	Imaging
28	Customer Interaction Center (CIC)	Telephony/Web Chat system used to manage synchronous communication with Taxpayers	Application	No	Account Management Collections Customer Service Intake Channel for: • Walk-in • Telephone • Chat • Email • Text • IVR

Attachment L: Technology Solutions Description

Diagram ID	Name	Description	Type	In Project Scope	Function(s)
					System of Record for these interactions. Will share interaction identifier with ITS to federated data can be combined for interaction reporting.
29	Taxpayer Portal	This is anticipated to be a component of the ITS. It would provide an online application presence for any Indiana taxpayer (Individual/Business) or their proxy (Accountant/Other Service Provider).	Application	Yes	Account Management Collections Customer Service Manage Case Process Payments Process Submissions Input/Output Channel for Web Interactions with taxpayer.
30	TaxWiki	A MediaWiki-based knowledgebase of Indiana Tax information for use by DOR Associates as a resource for Q&A or tax processing issues.	Application	No	DOR Tax Admin Knowledgebase

Attachment L: Technology Solutions Description

Interface Details

DOR must maintain a data trading relationship with many partners. DOR will not require any trading partner to change their interface with us as a consequence of implementing the ITS. The ITS vendor will have to account for every exchange using this inventory. DOR is not prescribing how the ITS updates itself from a provided file or fulfills the needs for any outgoing file.

We are not describing interfaces between assumed ITS components.

Attachment L: Technology Solutions Description

Diagram ID	Source	Target	Type	Specific Transaction		Interface Format	Function Supported
DOR	ITS Application	DOR Users	Web User Interface	User Authorization System Configuration Business Process Functions Business Analytical Functions Financial Functions			Account Management Collections Customer Service Manage Case Process Disbursements Process Payments Process Submissions Revenue Accounting Taxpayer Registration
6	OSS	ITS Application	Web Service	Taxpayer Status		MCSLink Services.wsdl	Taxpayer Registration
12	ITS Application	Bank	File	Bank Deposit	NACHA ACH Debit Standard NACHA file with specific values for destination institution.		Process Payments
			File	Tax Refunds	NACHA ACH Credit File Standard NACHA file with specific values for destination institution.		Process Disbursements
17	INBiz	ITS Application	Web Service	Taxpayer Standing Taxpayer Account		INBizService.wsdl	Taxpayer Registration

Attachment L: Technology Solutions Description

			File	Tax Account Registration		INBizService.wsdl	Taxpayer Registration
			File	Tax Period Filings	Proposed		Process Submissions
			File	Payments		ACH Credit file	Process Payments
18	ePay This system will be superseded by DORPay which is internal to DOR by EOY 2017. DORPay functionality will be assumed by Taxpayer Portal.	ITS Application	Web Service	ePay Taxpayer Information	Currently an RPC		Process Payments
			File	ePay Tax Payment		Std_Pmt_Layout	Process Payments
21	ITS Database	VRU	Web Service	VRU Taxpayer Information	Currently an RPC	Proposed Web Service	Account Management
				VRU Account Status	Currently an RPC	Proposed Web Service	Account Management
			File	VRU Payment		Std_Pmt_Layout	Process Payments
2.	ITS Application	PostMasters	File	Form-driven Correspondence			Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration
				Correspondence Letter (PostScript Files)			Account Management
							Collections
							Customer Service
							Manage Case

							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration
	Post Masters	ITS Application	File	Mailing Confirmation			Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration
23	ITS Application	LexisNexis Interface	File Web Service	Identify Verification Request	Data Request		Process Submission
			Web Service	Identity Verification Response	Data Fulfillment		Process Submission
			Web Service	Credit Scoring		Proposed : Obtain a FICO-like score against file attributes describing a Business Entity that wishes to open Trust Tax Accounts	Taxpayer Registration

Attachment L: Technology Solutions Description

2	ITS Application	GMIS	File	Financial Accounting Transactions	Database Link	PeopleSoft Intake Field Definitions	Revenue Accounting
	ITS Application	GMIS		Direct Deposit Totals	Database Link	PeopleSoft Intake Field Definitions	Revenue Accounting
	ITS Application	GMIS		Refund Transactions (Paper)	Database Link	PeopleSoft Intake Field Definitions	Revenue Accounting
	GMIS	ITS Application		External Agent Transactions			Collections
							Process Payments
	GMIS	ITS Application		Replacement Transactions			Process Disbursements
	ITS Application	GMIS		External Agent Payments			Collections
							Process Payments
	ITS Application	GMIS		Rejected VPS Payments			Process Payments
28	ITS Application	CIC	Web Service	Taxpayer Information	Currently a RPC		Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration
				Account Status	Currently a RPC	Taxpayer Account Status Information for screen pop	Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements

Attachment L: Technology Solutions Description

							Process Payments
							Process Submissions
							Taxpayer Registration
				Taxpayer Payment	Currently a RPC		Process Payment
				Outbound Predictive Dialer	Desired		Collections
OR:27	DOR Users (Assume Vendor replaces this component)	DORStor	Web User Interface	User Interaction	User Input	System Response	Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration
			Web Service	User Interaction	ITS-supplied Input	Proposed: The system would formulate a hyperlink based on data available from that being displayed to access the appropriate document in DORStor	Account Management
							Collections
							Customer Service
							Manage Case
							Process Disbursements
							Process Payments
							Process Submissions
							Taxpayer Registration

Attachment L: Technology Solutions Description

sl. 7	IRS Modernized eFile	ITS MeF Gateway	IRS-defined XML File with State-defined area within	Electronic Returns Downloads& Filings (IT-40, IT-40PNR, IT-40RNR, IT-40X, ES-40, IT-40ES, SC-40, IT-20, IT-20S, IT-65)		Individual: MeF-INIndividual 2016V3.4 Business: MeF-Business 2016V2.1	Process Submissions
				Linked Federal Return	IRS-defined Schema		
				Acknowledgements & Rejections back to IRS to forward to Electronic Tax Submitters	Standard MeF Schema		
:S:10	IRS Secure Data Transfer System	External Agency	IRS-defined File	GLDEP files via the IRS Secure Data Facility	IRS-defined File Formats IMF, ITRF, BMF, BTRF, IMFR, CP2000, EOAD, Military Combat Zone, PITFR, STATE_LEAD RPT_X		Account Management Collections Manage Case Process Payments Process Submissions Taxpayer Registration
	External Agency	IRS Secure Data Transfer Facility	IRS-defined File	GLDEP files via the IRS Secure Data Facility	IRS-defined File Formats IMF, ITRF, BMF, BTRF, IMFR, CP2000, EOAD, PITFR, STATE_LEAD RPT_X		Account Management Collections Manage Case Process Payments Process Submissions Taxpayer Registration

Attachment L: Technology Solutions Description

	IRS EFTPS	External Agency	DOR-defined File	Candidate Federal Taxpayer Debts		Common Offset Candidates	Process Disbursements
	External Agency	IRS EFTPS	DOR-defined File	Available State Taxpayer Refunds		Common Offset Matches	Process Disbursements
	IRS EFTPS	External Agency	DOR-defined File	Requested State Taxpayer Refunds		Common Offset Matches	Process Disbursements
	IRS EFTPS	External Agency	DOR-defined File	Acknowledged State Taxpayer Refunds		Common Offset Notifications	Process Disbursements
	External Agency	IRS EFTPS	FMS/TOPS-defined File	Candidate State Taxpayer Debts			Collections
							Process Payments
	IRS EFTPS	External Agency	FMS/TOPS-defined File	Unavailable Federal Taxpayer Refunds			Collections
							Process Payments
	IRS EFTPS	External Agency	FMS/TOPS-defined File	Available Federal Taxpayer Refunds			Collections
							Process Payments

Attachment L: Technology Solutions Description

1	Imaging	ITS Application	XML File	IT-40, IT-40PNR, IT-40RNR, IT-40X, ES-40, IT-40ES, SC-40, IT-20, IT-20S, IT-65, ST-103, WH-1, WH-3		Individual:IDOR-Individual2016V3.4 Business: IDORINBusiness2016V1.0	Process Payments Process Submissions Taxpayer Registration
		ITS Application	Flat File	ES-40, IT-40ES, IT-20, Payments		Std_Pmt_Layout 2015_ES40_req_layout	Process Payments Process Submissions Taxpayer Registration
27	Imaging	DORStor (Assumes Vendor replaces this component)	XML File with Multipage TIFF Images				Account Management Collections Manage Case Process Payments Process Submissions
			One Way	Return Images & Metadata			Taxpayer Registration
xternal gent:10	External Agency	External Agent	File	Social Security Administration		Proposed: Verification of SSA Account holder	Account Management Process Submissions Taxpayer Registration
				County Clerks (92)	Warrant Recording Number	Clerk Warrant File	Collections
	External Agent	External Agency	File	County Clerks (92)	Warrant Recording Number	Clerk Return File	Collections
	External Agency	External Agent	File	County Sheriffs (92)	Warrant Status	Agent Warrant File	Collections

Attachment L: Technology Solutions Description

	External Agent	External Agency	File	County Sheriffs (92)	Warrant Status	Agent Return File	Collections
				County Sheriffs (92)	Payments	Std_Pmt_ Layout	Collections
							Process Payments
	External Agency	External Agent	File	Third Party Collections Agency	Warrant Status	Agent Warrant File	Collections
	External Agent	External Agency	File	Third Party Collections Agency	Warrant Status	Agent Return File	Collections
	External Agent	External Agency	File	Third Party Collections Agency	Flat Payment File	Std_Pmt_ Layout	Collections
							Process Payments
	External Agent	External Agency	File	Informatix	Bank Account Number	Request	Collections
	External Agency	External Agent	File	Informatix	Bank Account Number	Response	Collections
			Web Service	Address Validation Service		Spectrum	Taxpayer Registration
				National Change of Address Database	NCOA Format	VeriMoveFile	Account Management
							Collection
							Taxpayer Registration
	External Agent	External Agency	XML File	Payroll Filing	DOR XML[1]	IDORWTH2 016V1.0	Process Submission

Attachment L: Technology Solutions Description

			Flat File		SSA EFW2[2] IRS 1220[3]	SSA format IRS Format	1 DOR will be supporting the FTA eFile Standards XML format for these layouts. [2] SSA is introducing an XML version of this format. [3] IRS is introducing an XML version of this format. DOR will want to support both.
	External Agent	External Agency	XML File	Court Pleadings	PACER-defined XSD	PACER	Collections
	External Agent	External Agency	File	Payments	Flat Payment File	Std_Pmt_ Layout	Process Payments
	External Agent	External Agency	File	Indiana Association of Counties – Property Tax Debt Offsets	Property Tax Arrears Debtors	Common Offset Candidates	Manage Disbursements
	External Agency	External Agent	File	Indiana Association of Counties – Property Tax Debt Offsets	Taxpayer Refunds for offsetting Property Tax Arrears Debts	Common Offset Matches	Manage Disbursements
	External Agent	External Agency	File	Indiana Association of Counties – Property Tax Debt Offsets	Tax Refund Intercept Requests to offset Property Tax Arrears Debts	Common Offset Notifications	Manage Disbursements
	External Agency	External Agent	File	Indiana Association of Counties – Property Tax Debt Offsets	Taxpayer Refunds Intercepts to offset Property Tax Arrears Debts	ACH Credit?	Manage Disbursements
ternal gency:11	Internal Agent	Internal Agency	File	DWD	Employer Employee Census & Withholding	DWD Wage Extract File	Account Management Process Submission
	Internal Agent	Internal Agency	File	DWD – Unemployment Insurance Overpayment Offsets	UI over payment Debtors	Common Offset Candidates	Manage Disbursements

Attachment L: Technology Solutions Description

	Internal Agency	Internal Agent	File	DWD – Unemployment Insurance Overpayment Offsets	Taxpayer Refunds for offsetting UI over payment Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	DWD – Unemployment Insurance Overpayment Offsets	Tax Refund Intercept Requests to offset UI over payment Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	DWD – Unemployment Insurance Overpayment Offsets	Taxpayer Refunds Intercepts to offset UI over payment Debts	Common Offset Notifications	Manage Disbursements
	Internal Agency	Internal Agent	File	BMV	Delinquent Taxpayers for Lien Request	DOR BMV Interfaces	Collections Process Payments
	Internal Agent	Internal Agency	File	BMV	Lien-able Assets	DOR BMV Interfaces	Collections Process Payments
	Internal Agency	Internal Agent	File	BMV	Lien Requests	DOR BMV Interfaces	Collections Process Payments
	Internal Agency	Internal Agent	File	BMV	Motor Vehicle Rental Excise Tax Receipts	MVR Extract for BMV File Layout v2	Process Payments
	Internal Agent	Internal Agency	File	BMV	Address Changes	(Proposed)	Account Maintenance Collections
	Internal Agent	Internal Agency	File	JTAC	Individual Income Tax Filers	JTAC Jury Pool	*Repopulate County Jury Pools*
	Internal Agent	Internal Agency	File	JTAC – Recovery of Court Fees	Unpaid Court Fee Debtors	Common Offset Candidates	Manage Disbursements

Attachment L: Technology Solutions Description

	Internal Agency	Internal Agent	File	JTAC – Recovery of Court Fees	Taxpayer Refunds for offsetting Unpaid Court Fee Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	JTAC – Recovery of Court Fees	Tax Refund Intercept Requests to offset Unpaid Court Fee Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	JTAC – Recovery of Court Fees	Taxpayer Refunds Intercepts to offset Unpaid Court Fee Debts	Common Offset Notifications	Manage Disbursements
	Internal Agent	Internal Agency	File	DCR	Child Support Arrears Debtors	Common Offset Candidates	Manage Disbursements
	Internal Agency	Internal Agent	File	DCR	Taxpayer Refunds for offsetting Child Support Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	DCR	Tax Refund Intercept Requests to offset Child Support Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	DCR	Taxpayer Refunds Intercepts to offset Child Support Debts	Common Offset Notifications	Manage Disbursements
	Internal Agent	Internal Agency	File	FSSA – Child Care Development Fund	Child Care Arrears Debtors	Common Offset Candidates	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Child Care Development Fund	Taxpayer Refunds for offsetting Child Care Debts	Common Offset Matches	Manage Disbursements

Attachment L: Technology Solutions Description

	Internal Agent	Internal Agency	File	FSSA – Child Care Development Fund	Tax Refund Intercept Requests to offset Child Care Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Child Care Development Fund	Taxpayer Refunds Intercepts to offset Child Care Debts	Common Offset Notifications	Manage Disbursements
	Internal Agent	Internal Agency	File	FSSA – Tax Assistance for Needy Families	TANF payment Debtors	Common Offset Candidates	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Tax Assistance for Needy Families	Taxpayer Refunds for offsetting TANF payment Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	FSSA – Tax Assistance for Needy Families	Tax Refund Intercept Requests to offset TANF payment Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Tax Assistance for Needy Families	Taxpayer Refunds Intercepts to offset TANF payment Debts	Common Offset Notifications	Manage Disbursements
	Internal Agent	Internal Agency	File	FSSA – Supplemental Nutrition Assistance Program	SNAP payment Debtors	Common Offset Candidates	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Supplemental Nutrition Assistance Program	Taxpayer Refunds for offsetting SNAP payment Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	FSSA – Supplemental Nutrition Assistance Program	Tax Refund Intercept Requests to offset SNAP payment Debts	Common Offset Matches	Manage Disbursements

Attachment L: Technology Solutions Description

	Internal Agency	Internal Agent	File	FSSA – Supplemental Nutrition Assistance Program	Taxpayer Refunds Intercepts to offset SNAP payment Debts	Common Offset Notifications	Manage Disbursements
	Internal Agency	Internal Agent	File	FSSA – Federal Programs Verifications	Taxpayer Refunds Amounts to be reported to FSSA coordinating Federal agencies		*FSSA Compliance*
	Internal Agent	Internal Agency	File	INDOT – Infrastructure Damage Repair Recovery	Infrastructure Damage Repair Debtors	Common Offset Candidates	Manage Disbursements
	Internal Agency	Internal Agent	File	INDOT – Infrastructure Damage Repair Recovery	Taxpayer Refunds for offsetting Infrastructure Damage Repair Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	INDOT – Infrastructure Damage Repair Recovery	Tax Refund Intercept Requests to offset Infrastructure Damage Repair Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	INDOT – Infrastructure Damage Repair Recovery	Taxpayer Refunds Intercepts to offset Infrastructure Damage Repair Debts	Common Offset Notifications	Manage Disbursements
	Internal Agent	Internal Agency	File	State Universities – Unpaid Fees (PU, IU, ISU, VU, IVT, IUPUI)	Unpaid fee Debtors		Manage Disbursements
	Internal Agency	Internal Agent	File	State Universities – Unpaid Fees (PU, IU, ISU, VU, IVT, IUPUI)	Taxpayer Refunds for offsetting Unpaid fee Debts	Common Offset Candidates	Manage Disbursements

Attachment L: Technology Solutions Description

	Internal Agent	Internal Agency	File	State Universities – Unpaid Fees (PU, IU, ISU, VU, IVT, IUPUI)	Tax Refund Intercept Requests to offset Unpaid fee Debts	Common Offset Matches	Manage Disbursements
	Internal Agency	Internal Agent	File	State Universities – Unpaid Fees (PU, IU, ISU, VU, IVT, IUPUI)	Taxpayer Refunds Intercepts to offset Unpaid fee Debts	Common Offset Matches	Manage Disbursements
	Internal Agent	Internal Agency	File	State Universities – Concessionaire Tax Compliance (PU, IU, ISU, VU, IVT, IUPUI)	Candidate Requests to sell on behalf or on premises that could be protested to prompt Taxpayer Debtor to settle liability	Standard Protest Candidates	Collections
	Internal Agency	Internal Agent	File	State Universities (PU, IU, ISU, VU, IVT, IUPUI)	Concession Protest Requests	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	State Universities (PU, IU, ISU, VU, IVT, IUPUI)	Concession Protest Releases	Standard License Actions	Collections
	Internal Agent	Internal Agency	File	Auditor of State – Candidate Disbursement Offsets	Payments that could be used to offset tax debt		Collections Process Payments
	Internal Agency	Internal Agent	File	Auditor of State – Candidate Disbursement Offsets	Requests for offsets from payments		Collections Process Payments

Attachment L: Technology Solutions Description

	Internal Agent	Internal Agency	File	Professional Licensing Agency (PLA) – New License Applications and Renewal Requests	Candidate License Requests that could be protested to prompt Taxpayer Debtor to settle liability	Standard Protest Candidates	Collections
	Internal Agency	Internal Agent	File	PLA	License Protest Requests	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	PLA	License Protest Releases	Standard License Actions	Collections
	Internal Agent	Internal Agency	File	Alcohol Tobacco Commission (ATC) – New License Applications and Renewal Requests	Candidate License Requests that could be protested to prompt Taxpayer Debtor to settle liability	Standard Protest Candidates	Collections
	Internal Agency	Internal Agent	File	ATC	License Protest Requests	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	ATC	License Protest Releases	Standard License Actions	Collections
	Internal Agent	Internal Agency	File	Health Professions Agency (HPA) – New License Applications and Renewal Requests	Candidate License Requests that could be protested to prompt Taxpayer Debtor to settle liability	Standard Protest Candidates	Collections
	Internal Agency	Internal Agent	File	HPA	License Protest Requests	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	HPA	License Protest Releases	Standard License Actions	Collections

Attachment L: Technology Solutions Description

	Internal Agent	Internal Agency	File	Hoosier Lottery – New Retailer License Applications	Candidate License Requests that could be require retailer to register to collect taxes common to his business.	Standard Protest Candidates	Collections
	Internal Agency	Internal Agent	File	Hoosier Lottery	License Protest Requests	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	Hoosier Lottery	License Protest Releases	Standard License Actions	Collections
	Internal Agency	Internal Agent	File	Hoosier Lottery	Delinquent Taxpayer Winnings Offset Request	Lottery Offset Request	Collections
	Internal Agent	Internal Agency	File	Indiana Economic Development Corporation – Credits with Limits	File of Eligible Amounts for EDGE, EDGE-R, HBI, and HBI-L Contract Deduction Credits		Process Submissions
	Internal Agent	Internal Agency	File	Indiana Housing and Community Development Authority	File of Eligible Amounts for NAP Contract Deduction Credits		Process Submissions
	Internal Agent	Internal Agency	File	Ascensus	College Choice 529 contributions from Taxpayers	Indiana 529 Contributions File	Process Submissions
	Internal Agent	Internal Agency	File	College Choice	College Choice 529 contributions from Taxpayers	Indiana 529 Contributions File	Process Submissions

Attachment L: Technology Solutions Description

	Internal Agency	Internal Agent	File	Indiana Education Savings Authority	Collect Choice 529 Credits taken by Taxpayers		Process Submissions
	Internal Agent	Internal Agency	File	ISDH – Death Certificates	Notice of Taxpayers who have died during the past period	Dept of Health SSA Deceased File	Account Maintenance Collections
			Web Service	Secretary of State	Business Entity Status (from INBiz)	Proposed SOS would have to build Web Service that would be consumed by ITS	Taxpayer Registration
			File/Web Service	GIS	Geo Code for Location	Proposed	Collections Analytics
ank:12	Bank User	Bank	File	ITS Application	NACHA Payment File with specific data for financial institution	ACK, Reject	Process Payments Process Disbursements
STC:13	SST Clearinghouse	SST	SST-defined Web Service	Registrations Electronic Filings			
usiness axpayer: 4	Business Taxpayer	Fuel Tax EDI	EDI system-defined File	Registrations Electronic Filings	http://www.in.gov/dor/files/ftediguide.pdf		
usiness axpayer: 9	Business Taxpayer	Taxpayer Portal	Web User Interface	Registrations Account Changes Electronic Filings			
3:24	Data Warehouse Applications	Data Warehouse (Assume Vendor replaces this component)	Web User Interface				

Attachment L: Technology Solutions Description

OR:24	DOR Users	Data Warehouse Applications (Assume Vendor replaces this component)	Web User Interface	Analysis	Data Request	Requested Data	
):19	Taxpayer Portal (Assume Vendor replaces this component)	TPS	Hosted Checkout				
):1	TaxWiki	ITS Application	Web User Interface	Context-sensitive help from DOR Tax Knowledgebase	Open new Tab of Web User Interface		

Attachment M: Technology Infrastructure Description

Technology Infrastructure

DOR has significant infrastructure to support the above solutions and additional support, monitoring and productivity tools. The infrastructure landscape is managed by the Indiana Office of Technology (IOT) which reports independently to the Office of Management and Budget.

The following is a summary of the major DOR technology infrastructure services and components managed by IOT:

- DOR Help desk serves 700 DOR employees.
- Field Services supports more than 1000 devices, including laptops, personal computers (PCs), office printers, specialized printers, scanners, faxes, and other hardware. All laptops and PCs are DELL or HP and use Windows 7 Professional operating system. DOR will likely migrate to Windows 10 during the next workstation refresh cycle in 2018.
- There are 181 servers in the production environment (44 physical and 137 virtualized) and 122 (28 physical and 94 virtualized) servers on non-production environments. Most servers are Microsoft Windows Server (250) or Linux (44), except for 9 running AIX. Server virtualization is done with VMWare.
- IOT has a storage capacity of approximately 2 Petabytes.
- There are 246 databases in the production environment with sizes that range between <1 GB and 6.8TB. There are 197 Microsoft SQL Server and 49 Oracle12g databases. The very large databases are all run on Oracle 12g.
- IOT has 2 datacenters. The primary data center is located in the Indiana Government Center (IGC) and runs all PROD instances of agency applications. The secondary data center is located at Indiana University in Bloomington. It is the disaster recovery site and runs all non-PROD instances of agency applications until there is a need to recover the primary data center. Critical applications will be recovered in the first 24 hours of a disaster.
- There are approximately 35,000 employees / contractors, 50,000 network end-points, 800 remote WAN locations, and 3,500 network devices (predominately Cisco) on the State network.
- Almost all WAN and LAN equipment is owned, patched and refreshed by IOT
- Internet access is provided by local Internet Service Providers (ISPs) or global communication providers.

IOT is currently using Microsoft System Center Configuration Manager (SCCM) 2007 and Microsoft System Center Operations Manager (SCOM) 2012 for server monitoring, patches, and image installation in workstations. For database management and monitoring, IOT uses Red Gate solutions for SQL Server and GRID for Oracle. All employee authentications are managed through Microsoft's Active Directory, including those from Virtual Private Networks (VPNs).

IOT hosts DOR's Integrated Tax System in its Protected Zone (PZ). The PZ is a secure area of the network with high utilization of firewalls to maintain separation of agencies, system instances (e.g. PROD, Pre-PROD, Test), and system tiers (e.g. Presentation, Application, Data). Each agency instance tier is on its own isolated network segment and visibility to or from another instance tier must be explicitly granted in the firewalls at the endpoint IPA, protocol, and port levels. Multiple applications belonging to the agency and multiple non-PROD instances may be running on the same network segment. Basic PZ rules are:

1. No other instance is allowed access to the PROD instance.
2. The PROD instance is not allowed to access non-PROD instances

3. All applications are expected to conform to a 3 tier architecture consisting of Presentation, Application, and Data tiers.
4. The Presentation tier can only access the Application tier
5. The Application tier can only access the Data Tier and respond to the Presentation tier

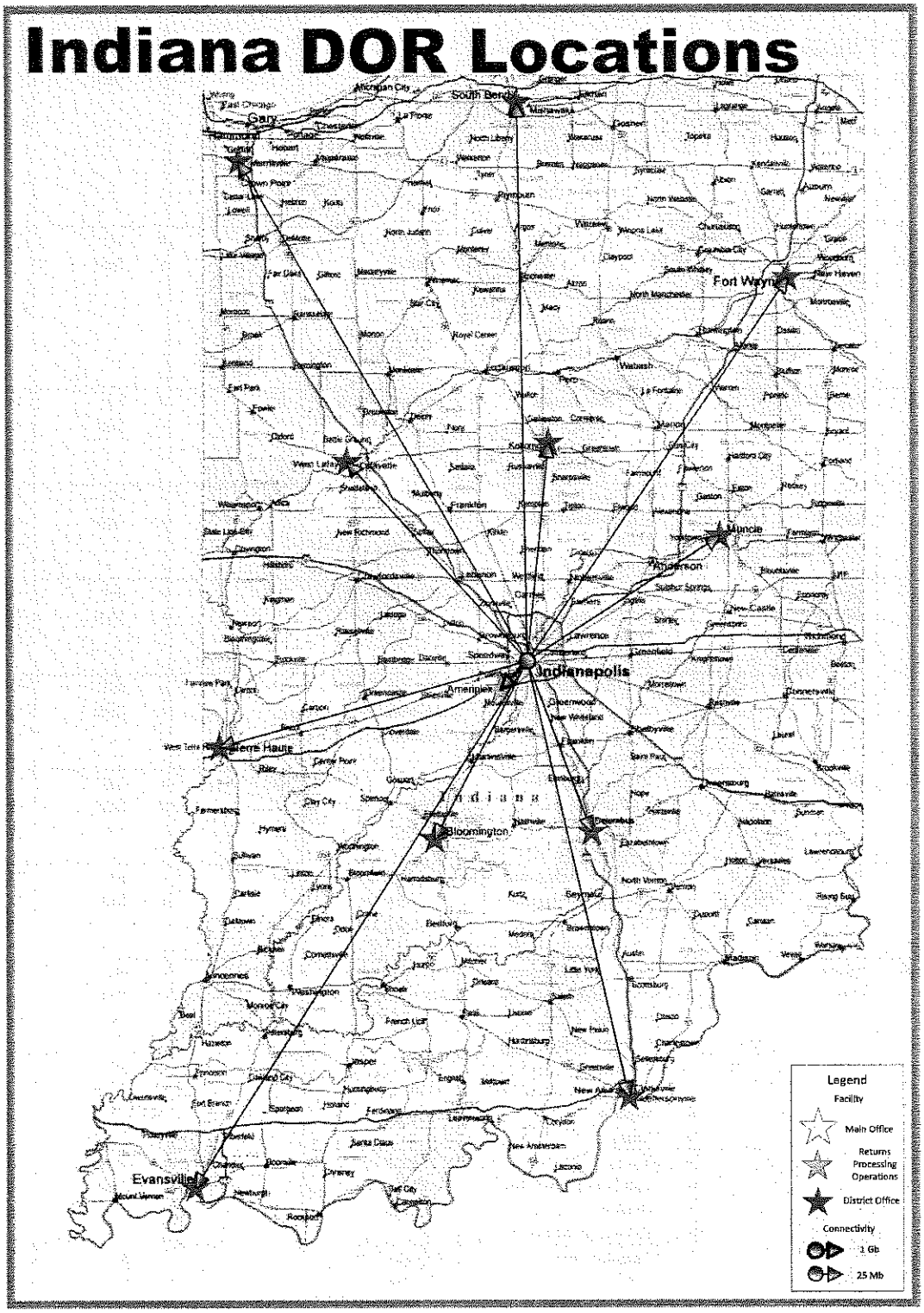
IOT implements the DOR security requirements for CAT-1 and CAT-2 STIGs for the operating systems and database systems. (See Section 5.2).

The IOT PZ implements virtual servers with up to four single core vCPUs and 16GB RAM. These can be clustered and load balanced. IOT can provide disk storage for file systems in multi-TB quantities. The virtual servers may operate Windows Server 2012 or Red Hat Enterprise Linux 6.8. Databases may run on Windows SQL Server 2014 or Oracle 12g. There is an Oracle Exadata database appliance running Oracle 12g in the PZ and that is DOR's preferred database platform. DOR can purchase physical servers to operate in the PZ but that is not our desired option for a long term enterprise systems as physical hardware must be replaced every 3 years.

IOT does not grant system administrator rights for any machine in the PZ to non-IOT employees or contractors. The ITS Vendor is a DOR contractor and so will have to work with IOT resources for all server and database work.

Attachment M: Technology Infrastructure Description

Indiana DOR Locations



Attachment M: Technology Infrastructure Description

Infrastructure By Location

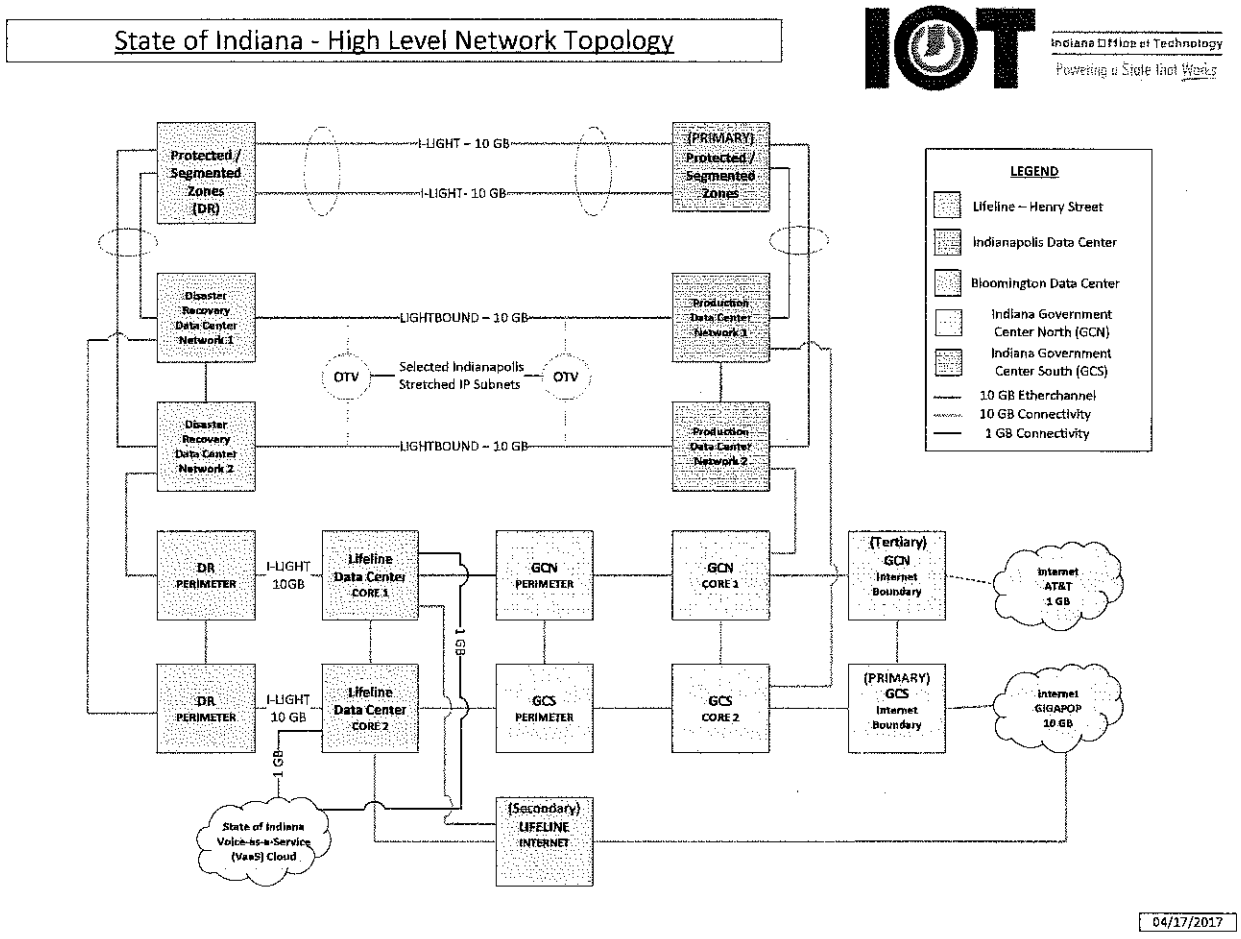
Location	Purpose	Staff	Business Functions	Connectivity	Servers	Workstations	Printers
IGCN, Indianapolis	DOR Main Office	600	• Commissioner's Office Staff Functions (HR, IT, Legal, HR, Finance) • Taxpayer Assistance • Call Center • Walk-in • Enforcement (Audit, Collections)	1Gbps to Desktop	n/a	• HP • Dell	• Ricoh Multifunction Devices • HP LaserJet
Ameriplex, Indianapolis	Returns Processing Operations	100	• Returns Processing (Mail Opening, Imaging, Remittance Processing) • Taxpayer Administration • Special Tax Administration	100Mbps to Desktop	n/a	• HP • Dell	• Ricoh Multifunction Devices • HP LaserJet
Merrillville	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
South Bend	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Fort Wayne	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Lafayette	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Kokomo	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Muncie	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Terre Haute	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Columbus	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Bloomington	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
Clarksville	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device

Attachment M: Technology Infrastructure Description

Evansville	District Office	~6	• Taxpayer Assistance • Call Center Overflow • Walk-in • Enforcement (Audit)	20Mbps WAN 100Mbps to Desktop	n/a	• HP • Dell	Ricoh Multifunction Device
IGCN	Data Center			10Gb Core 1Gb Runs to Floors	• HP • Dell • VMWare		
Bloomington	Data Center				• HP • Dell • VMWare		

Network Diagram Including Bandwidth

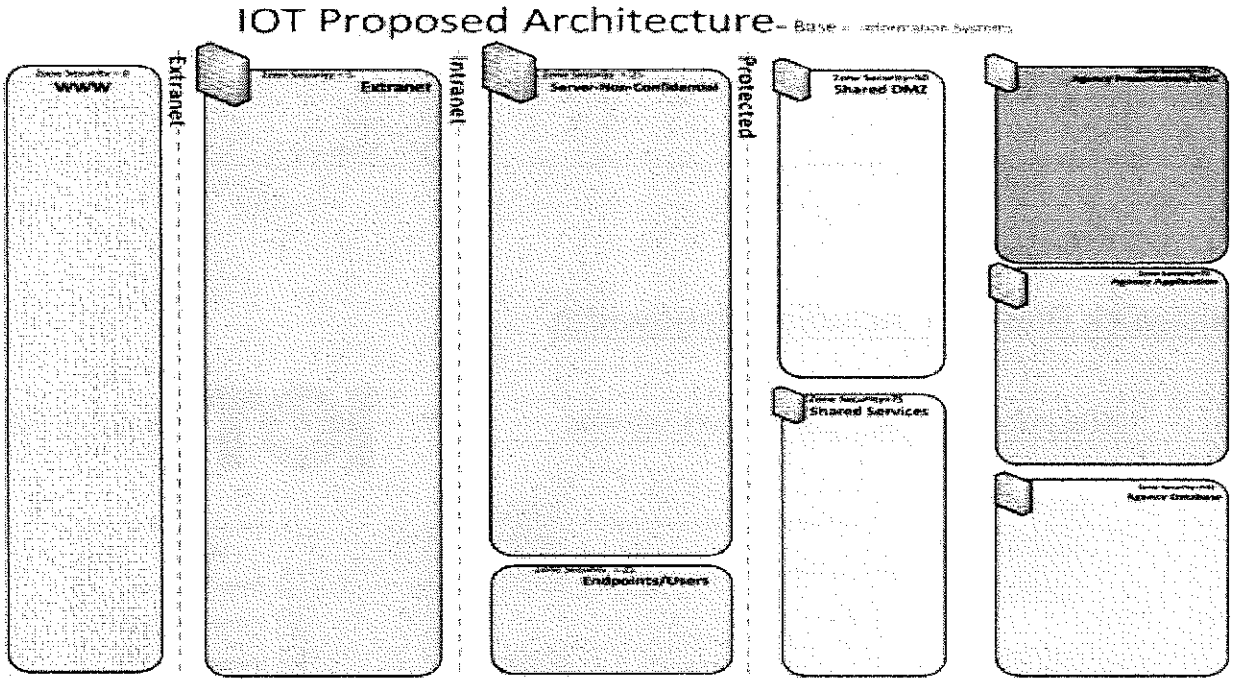
State of Indiana - High Level Network Topology



Attachment M: Technology Infrastructure Description

IOT Protected Zone

The following diagram is the concept for the IOT Protected Zone (PZ).



Agency applications are deployed across subnets represented in the far right column with each tier on a separate subnet. Users and web services are generally served in the subnet depicted at the bottom of the center column and will be granted access to the application tier through explicit firewall rules. Any public-facing interface would reside in the subnet depicted in the far left column and have access only to the services in the endpoints/users services zone again granted access through explicit firewall rules.

Where applicable, IOT uses NSX for firewall segmentation. In addition, NSX role based access to NSX(Firewalled) segments may be used where the solution matches the design. This model results in all servers being located in the same network segment while allowing for isolation (Firewall) between each and every virtual machine even within an application/group. Vendors will need to provide port requirements for communication between servers in an application with the perspective that each server making up an application or system will be firewalled from its mates entirely.

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Question No.	RFP Section and Sub-Section or Appendix and Tab Name	Page	Topic	Specific Question/Inquiry	State Respo
1	RFP Section 2.3.1: Business Information	23	Certificate of Authority	The RFP states that the proposal must be "accompanied by a certificate of authority." What is an acceptable certificate of authority or specific form of documentation required?	
2	RFP Section 2.3.1.10: Evidence of Financial Responsibility	27	Evidence of Financial Responsibility	Subsection 2.3.1.10 Evidence of Financial Responsibility states, "See Section 1.26 for details", but Section 1.26 addresses Conflict of Interest, not financial responsibility. Please clarify.	
3	Attachment F3 - Project Related Requirements Template	30	Form Alignment clarification	Attachment F3 - 10. Administrative, 10.2.05, Form alignment requirement states, "System shall allow for manual form field alignment." Can the DOR please elaborate on how you anticipate manual alignment of the fields on forms? Is this something that would be done during configuration of the forms? For instance, is this a requirement to be able to align (arrange) the form fields in different organizational groups across different tabs and sections?	IT is DOR's vision that forms would be rendered within ITS. Whe and a data element. Manual alignment would maintain both the real estate and rendering and would maintain a "dictionary" of d data from various channels. Yes, this is something that would be
4	Attachment F1 - Technical and Service Level Requirement Template	28	300 Maximum Words	Attachment F1, F2, and F3 instructions state, "The description cells should be limited to 300 words or less." Can the DOR please confirm that the "< 300" corresponds only to the response to the individual requirement in the EXCEL spreadsheet, and not to any additional attachment being referenced for the response?	The Respondent can answer each requirement with up to 300 w While there is no limit set for the additional referenced attachme possible.
5	Attachment F2 - Process Driven Functional Requirements Template	Correspondence	Correspondence--Generation--Personalize	Attachment F2, CO-33 requirement states, "System shall provide action item notifications for manually personalized correspondence templates." Can the DOR please clarify what type of action item notifications are meant for these types of notices? Does "manually personalized" mean "free form text"?	Some forms will require free form text to be inserted before beir that an employee does not send correspondence that has not b into place. Yes, manually personalized means free form text.
6	Attachment F2 - Process Driven Functional Requirements Template	Correspondence	Image Record	Attachment F2, CO-95 requirement states, "System shall support automated image recording of system-generated correspondence." Can the DOR please clarify what is an "image recording" as compared to the "image" referenced in requirement CO-96 - Image Access, which states, "System shall provide access to images of system-generated correspondence from within correspondence history"?	Image recording and image are the same thing and interchange would need access to the same correspondence as was originall
7	Attachment F2 - Process Driven Functional Requirements Template	Correspondence	Flag Correspondence	Attachment F2, CO-108 requirement states, "System shall provide for flagging of correspondence to be removed from discovery". Can the DOR please clarify what is meant by "correspondence to be removed from discovery"?	There is correspondence that may be inside of the system tied t reasons and not discoverable by the taxpayer. We want to flag t accidentally and erroneously released without additional scrutiny
8	Attachment F2 - Process Driven Functional Requirements Template	Account Maintenance Tab	Manage Account Postings--Process--	Attachment F2, AM-88 requirement states, "System shall provide a process to adjust agent collections date based on business rules." Can the DOR please clarify what is meant by an "agent collections date"?	This is the date in which a Third Party Collection agent collects invoice payment collected on.
9	Attachment F2 - Process Driven Functional Requirements Template	Account Maintenance Tab	Dynamic Views - Analyst	Attachment F2, AM-220 requirement states, "System shall support dynamic views of entity data for fraud analysts based on entity demographics." Can the DOR please explain the difference or similarity of the "dynamic views of entity data" in this requirement as compared to the views described in AM-219 Customized Views - Analyst and AM-221 Entity Data View?	The customized fraud views related to requirement AM220 are depending on the type of potential fraud that is identified. The v to meet their specific needs and the types of potential fraud iden nature of the views based on the demographic information relat words, DOR expects that the views (and related data displayed) identified under the fraud condition. AM222 is simply an examp (at a minimum) be included in the fraud screen. These data ele
10	Attachment F2 - Process Driven Functional Requirements Template	Process Submissions Tab	Update Return Workers	Attachment F2, PS-66 requirement states, "System shall support automated update of employees who determined a return could not be processed. " Can the DOR please clarify if this requirement is for a report based on the audit trail of a system and situations of a user manually moving or determining that a return's issues cannot be resolved upon review?	It would be on a report based on the audit trail. The department employees are not processing returns and the type of issues the supervisor to provide remedial training or reassignment based o
11	Attachment F2 - Process Driven Functional Requirements Template	Account Maintenance Tab	External Rate	Attachment F2, AM-120 requirement states, "System shall support calculation of interest based on external rates." Should the vendor assume that this requirement refers to the use of rates that are determined by an external source/agency and which can be imported or updated on a regular basis if changed?	IC 6-8.1-10-1 establishes a taxpayer's liability for interest as wel overpayments of tax. The rate is based on the "...average inve state's previous fiscal year..." The rate takes effect on January November 1. The requirement is written to capture the basis for year and does not vary more frequently than that. However, rate should not be limited to once per year (today's current process).

12	Attachment F1 - Technical and Service Level Requirement Template	2. System Security Tab	System Security - Go Live Requirements (4)	Requirement 2.32 refers to "DOR's Security Acceptance Test Plan." Can DOR provide a copy of their Security Acceptance Test Plan or a description of what will be included?	DOR will review the Vendor's self assessment of their ability to i appropriate STIGs applied. DOR will insist that the system impl implemented in the development environment. The vendor will finding in order to begin the customization and configuration pro when the system is first implemented. DOR will generally insist findings can be resolved in one of three ways; the vendor can in a compensating control (which must be approved by DOR), or t (POAM) agreement for each finding that will lead to its eliminati The Security Test Plan is the compilation of all POAMs and the make certain they don't reappear. Acceptance will require 100% with no remaining CAT-1 and DOR unapproved CAT-2 findings
13	Attachment F1 - Technical and Service Level Requirement Template	2. System Security Tab	System Security - SEIM	Attachment F1, requirement 2.37 states "the vendor shall implement a security information and event monitoring (SIEM) solution." Does IOT have an enterprise SIEM tool and monitoring provider that the vendor will be hooking into and sending the security information and events to a central syslog? Or is the requirement to implement a dedicated SIEM solution specific to the proposed ITS?	IOT has an SIEM system. There is now a requirement in Attach
14	Attachment F1 - Technical and Service Level Requirement Template	3. Implementation Security Tab	Implementation Security - Certification of Development Area(s)	Attachment F1, requirement 3.13 states "the vendor shall submit to approval of compliance of development area(s) by DOR Security team" Can DOR describe what compliance criteria of development area(s) needs to be meet?	We are concerned that any off-site development or configuratio or contractors will have access to our systems and data be cont on the security controls specified in NIST 800-53 (Rev 4). Refe implement controls that pertain to remote development/support. inclusive. Our on-premises facility does meet these requirements and therefor
15	Attachment F1 – Technical and Service Level Requirement Template	Hardware Specifications Tab	Hardware Specifications	The Attachment F1 instructions for Hardware Specifications ask for "a full list of hardware and software required" to be included but the worksheet columns on the Hardware Specifications tab are specific to hardware. Can vendors add another worksheet specific to software or is the preference to have both hardware and software in the same worksheet?	Please include both hardware and software in the same worksheet.
16	Attachment F1 - Technical and Service Level Requirement Template	Hardware Specifications Tab	Hardware Specifications	Should the rows in the Hardware Specifications tab of Attachment F1 identify the specifications for all physical servers required to support all the virtual machines that will be requested for the solution or is the intention to list all the virtual machines that will be requested of IOT?	Please list the requirements for the servers (virtual or physical) levels. IOT is responsible for the physical servers that host the Remember that DOR does not prefer to implement a large numl Procurement is long, costs are high, and service periods are sh
17	Attachment F1 – Technical and Service Level Requirement Template	Qualifying Security Requirement Tab	Qualifying Security Requirement - Vendor Self Assessment	Requirement Q.02 describes the self assessment against STIGs relevant to the vendor's system, and requirement 2.01 describes states that "Indiana DOR will provide the specific STIG checklists" How should vendors submit the lists of technologies and description of architecture to the Indiana DOR in order for the DOR to return the appropriate STIG checklists to be used in the self assessment?	After submitting your intent to respond documents, please subm all contact between the vendors and the state. IDOA will forwar the STIG packages to you.
18	Attachment F1 - Technical and Service Level Requirement Template		General Questions - 10.03	Attachment F1, requirement 10.03 asks for vendors to "please describe all compatible ESBs that can interface with your system." Does DOR have an existing ESB in place that can be utilized by the proposed solution, or a preferred ESB?	DOR's security requirements for the ESB are more rigorous tha requirements on the other the state agencies that use the IOT E technology since we will have to manage its secure implementa
19	Attachment F2 - Process Driven Functional Requirements Template	Revenue Accounting Tab	Parent-Child Relationship-Update - RA-16	Requirement RA-16 Parent-Child Relationship--Update states, "System shall enforce parent-child relationship rules for updating chart of accounts details." Can the DOR please provide an example to better understand the context of what is desired for this requirement?	Parent Roll up of "Corporate Tax", may have Identified Accoun Tax, and Financial Institution Tax. "Gaming Tax", may have Admissions, Riverboat Wagering, Charity Gaming Tax.
20	RFP Section 1.2: Definitions and Abbreviations	21 of 39	Activity Dates	Request that vendors be allowed to submit written questions to the RFP until July 24. In vendor conference it was indicated we could not ask questions on the RFP past July 17.	We are sorry for the confusion caused by the July 17 date. The referenced in the RFP main document.

21	Attachment F3 - Project Related Requirements Template	Tab 5. Data Conversion	Attachment L – Conversion Data Source Detail document	Requirement 5.02 Data Conversion - General (2) states: "The Vendor conversion methodologies shall support the conversion of historical DOR data as described in attachment L "Conversion Data Source Detail". Attachment L – Conversion Data Source Detail document section outlines the years of data (Data ranges from late 20th century to present / past three years / individual from 2009 – present / Corporate pass through from 2014 – present / etc.). Does the DOR expect that all tax periods (open and closed) be converted or all open periods and associated open cases plus zero balanced through Statute of Limitations? Additional details associated with the quantification of required converted data would be appreciated.	We are asking the vendor to recommend the types and duration issues are identified in your question so form your recommendat
22	Attachment F3 - Project Related Requirements Template	Tab 5. Data Conversion Tab	Data convers	Requirement 5.07, Data Conversion - Data Cleansing & Development (3) states: "The Vendor shall provide tools, processes and automation to support the data conversion services." Could the DOR please clarify if the vendor is to support data conversion services from the data archive (legacy data repository) into the staging ITP tables? Will the DOR support the data conversion from legacy into the data archive?	We are asking the vendor to recommend who will access, clean vendor to lead the preparation of legacy data. However, we vi that the vendor needs to partner in every aspect including utilizi
23	Attachment F3 - Project Related Requirements Template	Tab 5. Data Conversion Tab	Duplicate requirement ?	Requirements 5.16 and 5.17 Data Conversion - Testing (2) & (3) have identical wording: "The Vendor shall provide general support to the project team for any needs related to converted data." Can the DOR please clarify the difference, if any, between the two, or is one of them a duplicate requirement?	These are duplicate requirements. One of the requirements will
24	Attachment F3 - Project Related Requirements Template	Tab 5. Data Conversion Tab	Extraction of data	Requirement 5.21, Data Conversion - Archive, states, "The Vendor shall create a full data archive of all data extracted from the legacy system including any data that is not converted into the new ITS." Is the DOR responsible for extraction of data from the legacy databases into the data archive?	DOR intends to initially preserve all legacy data in its native for data required for their system implementation. This requiremen
25	Attachment F3 - Project Related Requirements Template	Tab 4. Testing	Mock Production Migration	The requirement is missing from the DOR's template. Will this requirement be part of a later amendment?	We have added it to the spreadsheet and it will be available in t
26	Attachment F3 - Project Related Requirements Template	Tab 4. Testing	Automatic Generation of Test Scripts	Please clarify what is meant by "create test scripts" automatically". Does this mean that the scripts are "captured automatically" during keystroke recordings, or created through some other method?	We want testing scripts that we can execute so testing is automa easily capture and automatically or robotically execute standard test or upgrades.
27	Attachment F3 - Project Related Requirements Template	Tab 8. Maint, Su	Maintenance	As a part of the products and services provided by the vendor during the 10 year post-implementation period, please clarify the requirement for "community based enhancements" (e.g., source, frequency, etc.)	As part of the Ongoing Services Fees for Maintenance and or S investing in the product on behalf of the community. Communit of the combined system maintenance fees collected from and th customers of the ITS.
28	Attachment F3 - Project Related Requirements Template	Tab 4. Testing	Accessibility Test Plan	In order to respond to the DOR's ATR requirements, please provide information regarding DOR's accessibility requirements and/or standards.	Please refer to section 26. Information Technology Enterprise A
30	RFP Section 1.22; Minority & Women's Business Enterprises RFP Subcontractor Commitment	18-19	MBE/WBE	For scoring purposes, can the diversity supplier spend be changed to be applicable to only the implementation period and not also include the ten year maintenance timeline?	No
31	RFP Section 2.4.1; Attachment F1 – Technical and Service Level Requirements Template	4	General Architecture	Please provide the list of Enterprise licenses owned by the agency/Indiana Office of Technology (IOT) that can be leveraged in the new solution.	IOT requires most licenses be purchased directly by the executiv IOT. DOR owns an enterprise license for BitVise SSH server. DOR uses an instance of Oracle's Web Center Content (WCC) for license for WCC and charges DOR under a utilization model. DOR owns SQL Server and Oracle 12g licenses. All licenses are c would not be available to the IT5 unless and until the systems th DOR has a license for the Pitney Bowes EngageOne product. Th impressions that can be generated annually. This volume is insu

32	RFP Section 2.7: Mandatory Requirements Template		Mandatory Requirements	Questions 1, 3, and 4 require the respondent to have implemented Individual, corporate, and special tax types all in 1 state. This would severely limit the number of compliant respondents. Would the state consider expanding the definition to include "individual and/or corporate" in order to open up the competition to more vendors? Would the state consider any implementations of individual income tax for other countries? Would the State consider a check point addition to the RFP timeline submitted by July 21 where vendors submit answers to the mandatory requirements template? The State can then make a decision on qualified vendors for further consideration and notify them within one week after submission (July 28).	The Mandatory Requirements have been updated and will be re issued on July 20. A respondent must meet every aspect of the further consideration. DOR's Mandatory Requirements are bein ITS implementation can only be achieved by partnering with an implement a proven ITS solution that the Respondent has recen
33	RFP Section 3.2: Evaluation Criteria			Section 3.2 of the RFP (Evaluation Criteria) states that any proposal not meeting the Mandatory Requirements in Attachment H will be disqualified during Step 1 of the State's evaluation process. If a Respondent meets substantially all of the Mandatory Requirements, but not technically all of such Mandatory Requirements, will the Respondent be disqualified at Step 1?	The Mandatory Requirements have been updated and will be re issued on July 20. A respondent must meet every aspect of the further consideration. DOR's Mandatory Requirements are bein ITS implementation can only be achieved by partnering with an implement a proven ITS solution that the Respondent has recen
34	RFP Section 1.7: Question/Inquiry Process			We received attachments F through P on July 7th and have not had sufficient time to thoroughly analyze the requirements to generate questions. Will the State consider a later date to ask questions on those documents?	As shown on page 21 of the main RFP documents, there is anot
35	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Training Time	• What is the DOR's definition of "just in time" approach to training end users? • What learning approaches has the DOR used in the past with this audience? Have they been successful? Why or why not? • What would the DOR consider doing differently?	Please review Attachment P of the RFP for further details. DOF for end users should not commence until near implementation. done; some training of designated staff may occur through the t DOR employs a variety of approaches to training users, includin video tutorials, and peer training. All methods have been succe vision for training using embedded trainers within the job areas
36	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Training Environment	• Can you explain what it means for the vendor to provide a dedicated training environment? Does this mean facilities, additional instances of software deployments?	Please review Attachment P for details surrounding this requirer version of the application that is fully functional witho ori "mock production" or "pre-prod." DOR requires this i ne and must be able to initiate data refreshes and udpates. ,'s o facilities to accomplish training.
37	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Training Environment Resources	• How much individual seat time does the DOR think will be required to teach the new business and technology training?	Please review Attachment P for details about this requirement. part of the RFP response, and the plan should include an estima expected for users to become proficient in use of the application
38	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Professional Trainers	• Will the DOR provide any internal resources that will be devoted to this process? (e.g., trainers, instructional designers)	Please review Attachment P for details surrounding this requirer to assist the vendor in many training tasks. The vendor is expec user training with professional trainers.
39	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Computer-Based Training Software	Does the DOR anticipate that software simulations will need to be built?	Please review Attachment P for further details about this require application to operate outside production for training purposes.

40	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		computer-Based Training Storage	Are there any system limitations that need to be considered?	Please review Attachment P for further details about this require delivered in files we can store and deploy in our PeopleSoft Lea requirement that these files are in a SCORM-compliant format f concern to DOR.
41	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Training Assessment Results	How does the DOR currently track assessment results?	DOR uses a Learning Management System (LMS) to deploy and skill assessments.
42	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		External Stakeholder Training Format	- Does any of this training need to be mobile? (e.g., tablet, phone, etc.) - Does the end user need to be able to complete training offline or will they be driven to online access (LMS)?	Please review Attachment P for further details concerning this re presented to external stakeholders must be available through wl deployed. We do not expect offline availability to training.
43	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Training Material Customizatio n	- How many different configurations are there within a given role? Are there different configurations that need to be accommodated and if so, how many?	Please review Attachment P for further details about this require materials used to be customized to the deployment for Indiana I implemented solution.
44	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Technical Team Skills Assessment	- How many technical users will there be that have to be assessed?	DOR expects the implementer/vendor to present a comprehensi RFP. The number of technical users to be assessed is not imm vendor to employ best practices for skills assessments and to pr Template requires the Respondent to estimate the DOR roles a
45	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		Technical Training-System Modification s	- How many releases does the DOR anticipate will happen in a given year? What is the frequency of the releases? (e.g., weekly, monthly, ad hoc)	This requirement refers to the vendor's solution and its interface number of releases is unknown to DOR.
46	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		OCM - Change Management Plan	Does the DOR have an example of a change initiative that was considered a change fail? If yes, are there any lessons that you've learned from change failures?	The RFP Amendment will provide clarification surrounding OCM facilitate Organizational Change Management. However, DOR guidance, and implementation of specified tasks supporting the management. As with any large transformation effort that signifi operations, processes and workflows, implementation of the ITS making change and transition management, communications, a success. We do not have specific DOR examples, however Att intends to follow with the support and collaboration of the Respo

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47	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		OCM - Communication Plan	- How have changes been communicated in the past?	The RFP Amendment will provide clarification surrounding OCM facilitate Organizational Change Management. However, DOR guidance, and implementation of specified tasks supporting the management. In the past, DOR has utilized the Project Manag communicate change (PR, Training). Also, refer question 48 re:
48	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		OCM - Resistance to Change	What are some of the expected challenges to this change initiative?	As with all major transformation of process and technology, sign objectives. DOR has identified OCM as a top priority and has a Amendment will provide clarification surrounding OCM roles an Respondent) will facilitate Organizational Change Management. support, input, guidance, and implementation of specified tasks organizational change management.
49	RFP Section 2.4.3: Technical Proposal - Project Related Requirements Template		OCM - Position Definition Approach	What types of positions do you anticipate will need to be validated? How many user roles do you think will be impacted? Do you anticipate a significant reorganization happening as a result of this implementation?	We would expect the respondent to bring to DOR best practice i structure based upon the solution. We have identified the initial Template.
50	RFP Section 2.5: Cost Proposal Template	1	Cost Template Formulas	Is the vendor free to make changes to the formulas in the spreadsheet so that columns and rows total properly?	Yes! Since adding rows is required, calculations were meant to
51	RFP Section 1.22: Minority & Women's Business Enterprises RFP Subcontractor Commitment	18	Calculation of Total Bid Amount for MBE, WBE and IVBE share	Please confirm that 10 years of post project support is to be used as part of the calculation of Total Bid Amount for MBE, WBE and IVBE share percentage.	Yes! This is confirmed.

Cost Proposal

RFP 17-082 Attachment D – Cost Proposal Template

Instructions for this Workbook

General Cost Proposal Instructions
This Cost Proposal should include Fixed-Bid Costs to implement all requirements committed to be met in Attachments F1, F2, F3 and H.
Prices must be ALL INCLUSIVE, including any and all delivery costs, destination fees and inflation. Prices must include the full ten (10) years of Support, Maintenance and Upgrade support
This Cost Proposal must include all non-infrastructure and non-hardware product and service costs required to fully implement and operate the solution represented in the proposal during implementation and 10 years after full implementation.
Each Cost Summary line item should be described fully in the corresponding worksheet for the appropriate cost category (i.e. Solution Product And Services). The descriptions should include a description of all limitations for products and services including licensing. For instance, if the price for a product license is for up to 600 concurrent users, that must be specified in the description for that line item. The lack of described limitations will be a product or service without limits.
Additional information can be provided beyond what is included in the Cost Proposal worksheet descriptions. The additional information must be referenced in the specific worksheet line item description. For instance, if a support agreement is included in the Cost Proposal Worksheet "Support Products And Services" and there is a document that provides all the details for the support agreement, the line item in the worksheet should clearly reference the attachment.
All costs in the Cost Proposal should be consistent with the strategy and approach described in Attachment G1 - Implementation Proposal - Approach Definition Template and all other submittal information for each implementation Approach.
The "TOTAL BID AMOUNT" cell (bright red shading) in the Costing Summary worksheet must include all costs for the implementation and 10 year post-implementation period and will be used to evaluate the total costs for your proposed services.
DOR reserves the right to contact proposers on price and scope clarification at any time throughout the selection process and negotiation process.
Do NOT use "To Be Determined" or similar annotations in the Cost Proposal worksheets. Assumptions should be stated in the Cost Proposal Assumptions worksheet or in worksheet for the specific cost sections.
All worksheets in the Cost Proposal should be thoroughly and accurately completed.
Rows can be added or removed to support your level of detail, however, major categories (i.e. Solution Products And Services) cannot be changed and the overall format of the worksheets must be maintained.
Cost Proposal Formatting Information
The light blue shaded cells indicate information Vendors are expected to provide (i.e. Cost Summary Worksheet, Cell D5).
All red text shown in light blue shaded cells represent SAMPLES and/or EXAMPLES (i.e. Cost Summary Worksheet, Cell D5) The provided red text SAMPLES and EXAMPLES should be replaced or removed in the submitted Cost Proposal.
Major column and row headings in each worksheet have comments, when needed, defining the required information.
The description cells in the Cost Proposal worksheets should be limited to 300 words.
Dollar amounts should always be rounded to the nearest whole dollar.
Rows of appropriate data can and should be added. Columns should not be added without prior approval from IDOA.
Vendor, Vendor-Partner and Third Party Instructions
Where costs for products or services are referred to as Vendor, Vendor-Partner or Third-Party:
Vendor products or services are defined as:
Costs for Vendor owned products or services that are solely the responsibility of the Vendor, are fully integrated in their solution, are committed in the Vendor proposal and will be contracted through the Vendor.
Vendor-Partner products or services are defined as:
Costs for Vendor-partner products or services that are the primary responsibility of the Vendor, are fully integrated in their solution, are committed in the Vendor proposal and will be contracted through the Vendor. All partners providing resources, including Women, Minority and Veteran Owned business partners, must be considered Vendor-Partners.
Third-Party products and services are defined as:
Costs for third party products or services that are not the responsibility of the Vendor, may be fully integrated in their solution, are included in the Vendor proposal as estimates only and will be contracted through the third party.
All products and services in this Cost Proposal must be clearly defined as Vendor (V), Vendor-Partner (VP) or Third-Party (TP).
All Vendor-Partners and Third-Parties must be thoroughly defined in this Cost Proposal and must be included in the Business Proposal.
DOR strongly prefers to have very few, if any, Third-Party products or services!
Brief Cost Proposal Worksheet Descriptions
Cost Summary – A phase-by-phase, year-by-year summary of all costs required to fully implement the proposed FTS solution and fully maintain and support it for 10 years after full implementation. The implementation phases must be consistent with those described throughout your proposal including Attachments G1, G2 and G3.
Cost Proposal Assumptions – A full description of any assumptions that are not specific to a Cost Proposal section.
Payment Schedule – A month-by-month schedule of payment triggers and payment amounts based on the proposed project plan in Attachment G2. NOTE: One of the first implementation related payment triggers must be the sign-off on the base installation of the proposed solution meeting all security requirements. The final implementation related payment trigger must be the final sign-off of complete implementation and must financially represent 10% of the one-time implementation costs.
Solution Products And Services – A full description of each cost item in the Solution Products and Services section of the Cost Summary worksheet including any assumptions.
Implementation Services – A full description of each cost item in the Implementation Services section of the Cost Summary worksheet including any assumptions.
Other OT Products And Services - A full description of each cost item in the Other OT Products And Services section of the Cost Summary worksheet including any assumptions.
Maintenance Products And Services - A full description of each cost item in the Maintenance Products And Services section of the Cost Summary worksheet including any assumptions.
Support Products And Services - A full description of each cost item in the Support Products And Services section of the Cost Summary worksheet including any assumptions.
Upgrade Products And Services - A full description of each cost item in the Upgrade Products And Services section of the Cost Summary worksheet including any assumptions.
Other Rec Products And Services – A full description of each cost item in the Other Recurring Products And Services section of the Cost Summary worksheet including any assumptions.

ONE-TIME IMPLEMENTATION PRODUCTS AND SERVICES	Vendor Vendor-Partner Third-Party	Cost Summary ID	TOTAL	Phase 1	Phase	Phase	Phase 4	Phase 5
Timeline (Beginning - Ending Months)				1 - 10	11 - 22	23 - 30	32 - 40	N/A
1. Solution Products And Services								
Enterprise P3 Solution Licenses	V	CS - 1	0					
Rules Engine Licenses	VT	CS - 2	0					
BI Warehouse	T	CS - 3	0					
Analytic Engine	V	CS - 4	0					
Trusted Information Source	V	CS - 5	0					
Example Product or Service E	V	CS - 6	0					
Example Product or Service F	V	CS - 7	0					
Example Product or Service G	V	CS - 8	0					
Example Product or Service H	VT	CS - 9	0					
Example Product or Service IC	H	CS - 10	0					
Example Product or Service IL	H	CS - 11	0					
Example Product or Service IC	TP	CS - 12	0					
SUBTOTAL		CS - 13	0	0	0	0	0	0
2. Implementation Services								
Project Management	V	CS - 17	0					
Change Management	V	CS - 18	0					
System Configuration	VT	CS - 19	0					
System Customizations	VT	CS - 20	0					
Data Conversion	VT	CS - 21	0					
Data Interface	V	CS - 22	0					
Web Services Interface	V	CS - 23	0					
Training Services	V	CS - 24	0					
Custom / Courses	TP	CS - 25	0					
Solution Installation and Tuning	V	CS - 26	0					
SUBTOTAL		CS - 27	0	0	0	0	0	0
3. Other One-Time Products and Services								
Example Product 1	V	CS - 28	0					
Example Product 2	V	CS - 29	0					
Example Service 1	V	CS - 30	0					
Example Product 2	V	CS - 31	0					
SUBTOTAL		CS - 32	0	0	0	0	0	0
ONE-TIME IMPLEMENTATION PRODUCTS AND SERVICES TOTALS								
		CS - 33	0	0	0	0	0	0

RECURRING PRODUCTS AND SERVICES	Vendor Vendor-Partner Third-Party	Cost Summary ID	TOTAL	Phase 1	Phase	Phase	Phase 4	Phase 5	Post-Project Year 1	Post-Project Year 2	Post-Project Year 3	Post-Project Year 4	Post-Project Year 5	Post-Project Year 6	Post-Project Year 7	Post-Project Year 8	Post-Project Year 9	Post-Project Year 10
Timeline (Beginning - Ending Months)				1 - 10	11 - 22	23 - 30	31 - 40	N/A										
4. Maintenance Products And Services																		
(Example) Data Maintenance 5-8 Mo	V	CS - 34	0															
(Example) Web Host, Extended Maintenance	TP	CS - 35	0															
SUBTOTAL		CS - 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Support Products And Services																		
(Example) Online Solutions Support - Level 1	V	CS - 37	0															
(Example) Online Solutions Support - Level 2+	VT	CS - 38	0															
SUBTOTAL		CS - 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Upgrade Products And Services																		
(Example) Software Upgrade Product or Service Level 1	V	CS - 40	0															
(Example) Software Upgrade Product or Service Level 2	V	CS - 41	0															
SUBTOTAL		CS - 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Other Recurring Products And Services																		
(Example) Other Recurring Product or Service 1	TP	CS - 43	0															
(Example) Other Recurring Product or Service 2	VT	CS - 44	0															
SUBTOTAL		CS - 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RECURRING PRODUCTS AND SERVICES TOTALS																		
		CS - 46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ONE-TIME AND RECURRING TOTALS																		
		CS - 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL BID AMOUNT [redacted]

Assumption Description	ID
	CAD - 1
	CAD - 2
	CAD - 3
	CAD - 4
	CAD - 5
	CAD - 6
	CAD - 7
	CAD - 8
	CAD - 9
	CAD - 10

ID	Payment Trigger	Description	Phase #	Project Plan Task # or ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
P_1	Payment Trigger: 10% ...																											
P_2	Payment Trigger: 10% ...																											
P_3	Payment Trigger: 10% ...																											
P_4	Payment Trigger: 10% ...																											
P_5	Payment Trigger: 10% ...																											
P_6	Payment Trigger: 10% ...																											
P_7	Payment Trigger: 10% ...																											
P_8	Payment Trigger: 10% ...																											
P_9	Payment Trigger: 10% ...																											
P_10	Payment Trigger: 10% ...																											
P_11	Payment Trigger: 10% ...																											
P_12	Payment Trigger: 10% ...																											
P_13	Payment Trigger: 10% ...																											
P_14	Payment Trigger: 10% ...																											
P_15	Payment Trigger: 10% ...																											
P_16	Payment Trigger: 10% ...																											
P_17	Payment Trigger: 10% ...																											
P_18	Payment Trigger: 10% ...																											
P_19	Payment Trigger: 10% ...																											
P_20	Payment Trigger: 10% ...																											

Cost Summary ID	Cost Summary Item Name	Descriptions	ID
			SPAS - 1
			SPAS - 2
			SPAS - 3
			SPAS - 4
			SPAS - 5
			SPAS - 6
			SPAS - 7
			SPAS - 8
			SPAS - 9
			SPAS - 10
			SPAS - 11
			SPAS - 12
			SPAS - 13
			SPAS - 14
			SPAS - 15
			SPAS - 16
			SPAS - 17
			SPAS - 18
			SPAS - 19
			SPAS - 20

Cost Summary ID	Cost Summary Item	Descriptions	ID
			IPS - 1
			IPS - 2
			IPS - 3
			IPS - 4
			IPS - 5
			IPS - 6
			IPS - 7
			IPS - 8
			IPS - 9
			IPS - 10

Cost Summary ID	Cost Summary Item	Descriptions	ID
			OOPS - 1
			OOPS - 2
			OOPS - 3
			OOPS - 4
			OOPS - 5
			OOPS - 6
			OOPS - 7
			OOPS - 8
			OOPS - 9
			OOPS - 10

Cost Summary ID	Cost Summary Item	Descriptions	ID
			MPS - 1
			MPS - 2
			MPS - 3
			MPS - 4
			MPS - 5
			MPS - 6
			MPS - 7
			MPS - 8
			MPS - 9
			MPS - 10
			MPS - 11
			MPS - 12
			MPS - 13
			MPS - 14
			MPS - 15
			MPS - 16
			MPS - 17
			MPS - 18
			MPS - 19
			MPS - 20

Cost Summary ID	Cost Summary Item	Descriptions	ID
			SPS - 1
			SPS - 2
			SPS - 3
			SPS - 4
			SPS - 5
			SPS - 6
			SPS - 7
			SPS - 8
			SPS - 9
			SPS - 10
			SPS - 11
			SPS - 12
			SPS - 13
			SPS - 14
			SPS - 15
			SPS - 16
			SPS - 17
			SPS - 18
			SPS - 19
			SPS - 20

Cost Summary ID	Cost Summary Item	Descriptions	ID
			UPS - 1
			UPS - 2
			UPS - 3
			UPS - 4
			UPS - 5
			UPS - 6
			UPS - 7
			UPS - 8
			UPS - 9
			UPS - 10
			UPS - 11
			UPS - 12
			UPS - 13
			UPS - 14
			UPS - 15
			UPS - 16
			UPS - 17
			UPS - 18
			UPS - 19
			UPS - 20

Cost Summary ID	Cost Summary Item	Descriptions	ID
			ORPS - 1
			ORPS - 2
			ORPS - 3
			ORPS - 4
			ORPS - 5
			ORPS - 6
			ORPS - 7
			ORPS - 8
			ORPS - 9
			ORPS - 10