
Washington State Department of Revenue



Core Tax System Replacement Study

High-Level Requirements

February 12, 2013

Revenue Solutions, Inc.



Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Contents

1	Purpose	5
2	Document Organization	6
3	Overview.....	7
4	System and Process Improvement Opportunities.....	11
4.1	Systems Environment Issues, Impacts, and Opportunities.....	12
4.2	User Experience and Training Issues, Impacts, and Opportunities	12
4.3	Business Need Issues Impacts and Opportunities	14
4.4	Taxpayer Accounting Issues, Impacts, and Opportunities	16
4.5	Business Rules Issues, Impacts, and Opportunities.....	18
4.6	Case Management Issues, Impacts, and Opportunities	18
4.7	Correspondence Management Issues, Impacts, and Opportunities	19
4.8	Workflow Management Issues, Impacts, and Opportunities	20
4.9	Functional Documentation Issues, Impacts, and Opportunities	21
4.10	Business Continuity Issues, Impacts and Opportunities	22
4.11	Information Services Issues, Impacts, and Opportunities.....	23
4.12	Data Efficiency Security and Usability Issues, Impacts, and Opportunities.....	26
4.13	Development Process and Resources Issues, Impacts, and Opportunities.....	26
4.14	Technology Issues, Impacts, and Opportunities.....	28
4.15	Reporting Issues, Impacts, and Opportunities.....	29
5	Core Tax System Replacement Scope	31
6	Conceptual Architecture.....	35
6.1	Conceptual Architecture.....	35

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

6.2 Stakeholder Access36

6.3 Business Services.....36

6.4 Core Support Services37

6.5 Data Services37

6.6 Infrastructure Services37

7 High-Level Requirements.....39

Appendix A – Requirements Traceability Matrix52

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Version Control

V #	Major Edit	Date	Saved By
1.0	Original Document	1/9/2013	Kevin Frisoli
2.0	Changes from DOR review	2/8/2013	Jody Esworthy
	Final Version	2/12/13	Chris Waite

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

1 Purpose

The purpose of the future vision is to establish the strategic direction upon which alternatives analysis and the implementation approach will be based. The High-Level Requirements Deliverable is an integral part of a clear articulation of the future vision. This document should effectively present Core Tax System issues and opportunities, articulate the scope and vision for the future Core Tax System architecture, and define functional and technical high-level requirements.

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

2 Document Organization

This document is divided into the following sections:

- Section 1: Purpose – This section describes the purpose and scope of the deliverable and its context within the study.
- Section 2: Document Organization – This section describes the content and organization of the document.
- Section 3: Overview – This section provides an overview of the findings and high-level requirement recommendations.
- Section 4: System and Process Improvement Opportunities – This section presents and prioritizes both system and process improvement opportunities.
- Section 5: Core Tax System Replacement (CTSR) Scope – This section defines the scope of the system replacement based upon improvement opportunities and industry leading practices.
- Section 6: Conceptual Architecture – This section presents a high-level summary of application functionality and technology capabilities.
- Section 7: High-Level Requirements – This section provides the recommended high-level requirements for the system replacement.
- Appendix A: Requirements Traceability Matrix – This appendix presents a link to a Requirements Traceability Matrix template, prepopulated with the high-level requirements identified in Section 7.

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

3 Overview

Over the past 15 years the Department of Revenue (DOR) has developed and implemented several applications that make up its Core Tax System. The combination of systems enables the Agency to accomplish its core mission, which is to fairly and efficiently collect revenues and administer programs to fund public services, and to advocate sound tax policy. As the needs of the Agency evolved, those applications were modified to support new requirements and legislative needs. As a result, these changes created dependencies and inefficiencies across systems. In addition, as the Agency added new modules, they turned towards a modern technology while the main components of the Core Tax System remained unchanged (i.e., COBOL). Efficiently interfacing across multiple platforms now poses technical challenges.

From the Current State Assessment the team observed a strong reliance on the business users to make existing technology work. In other words, the business users utilize Access DBs, Excel spreadsheets, system macros, and manually move documents across network locations to get documents imaged in support of their work. From a user perspective, there are too many screens, too many systems, and the taxpayer account details are spread across too many subsystems. With interdependent business rules located across multiple systems, legislative changes can be difficult to implement and downstream impacts of those changes are difficult to define.

Core Tax System of the Future

The DOR is facing a challenge shared by many revenue agencies; a legacy system that has become increasingly complex to maintain, one that is difficult to recruit and retain staff to support it, and one in which the end-user experience is cumbersome and time-consuming. Because of this, state leadership is looking to provide a system that will continue to make it easier for businesses to comply and to simplify the tax administration internally. This presents the Agency with an opportunity to modernize the technology and to improve the taxpayer and DOR user experience.

Replacing the DOR's Core Tax System, using current technologies will:

- Ensure the Agency can continue operating in the future
- Reduce risk inherent in large systems that have evolved over years due to numerous changes implemented by multiple programmers and assure strong internal controls
- Reduce the effort to make annual changes required due to legislative changes to the tax code
- Ensure the Agency can implement major tax code changes and administer new taxes
- Allow quicker response to enhancement requests to provide new and improved services to taxpayers
- Add efficiencies for business staff; and
- Provide greater flexibility for management by technical staff

As part of the Future Visioning sessions with key DOR stakeholders, it was determined that a new Core Tax System should take the following guiding principles and areas for improvement into consideration.

External Stakeholders:

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

- Taxpayer Experience
 - Self-service & online reconciliation
 - Consolidated statement of account
 - Increase integrity of account information and provide it without delay
 - Ability to enter into an Electronic Payment Plan Agreement (EPPA) online
 - Improved front counter experience (e.g., make payment with debit card)
- Other State Agencies & Local Jurisdictions
 - Integration with state-wide “My Account”
 - Improved data management methods

DOR User Experience:

- View of Taxpayer Information
 - Consistent view of taxpayer data
 - Better information and interpretation of account view
 - Ability to drill down
- Processing Time
 - Real time vs. batch (i.e., remove wait time)
- Business Rules
 - Need efficiencies – configurable where possible
 - Better understanding of how changes impact business rules
- Improve Onboarding via Training
 - Training environment with computer based training
- Security
 - Role-based security

Taxpayer Accounting:

- All taxpayer accounting in one system
- Should not be limited by RCW 82.32 (e.g., must have ability to easily process fees)
- Improved account breakdown (e.g., spirits tax not well broken out and requires some guess work)
- Make electronic payment processing more consistent
- Provide “My Account” – statement of account
- Improved audit trail (i.e., remove the need for notes to know what happened)
- Must support individual taxpayer for potential future legislation

Revenue Accounting:

- Reduce number of reports through automation
- Improve audit trail for taxpayer accounting changes
- Remove the disconnect between Taxpayer Accounting Administration (TAA) and Revenue

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Accounting (RA)

- Keep breakdown of tax information upfront, don't combine/summarize details

Improved Use of Data:

- Data Management
 - A lot of effort to track information – what happens after it leaves the Department
 - Lack of consistency in data sharing methods
 - Need to ensure internal controls are in place for who is accessing that data
 - Need to ensure that we can meet Pub 1075 if the Legislature ever enacts individual income tax or begin utilizing Federal Tax Information
- Statistical Modeling
 - Compliance use of models (ex: integration with predictive dialer)
 - Flexibility for the business users to change criteria
 - Would be used organization wide (e.g., Audit, TAA)

Other:

- Business Continuity Plan with prioritization
- Disaster Recovery Plan to minimize impact
- Performance Measures/Metrics need to be established
- Need to reduce the number of Access Databases (DBs) and Excel Spreadsheets (e.g., Oil Spill DB)
- Business Process Changes (e.g., Revenue Agents to post assessments to warrants)
- Strong Internal Controls

Based on the Future Visioning sessions with key DOR stakeholders, it was also determined that there are several items that make Washington (WA) State unique and should be taken into consideration as part of a new Core Tax System. They are as follows:

WA State Specific Challenges or Considerations:

- System must support Revised Code of Washington (RCW) 82.32
- B&O / legislative changes
- Complex local tax structure under constant change
- Reliance solely on business tax
 - On average 500,000 taxpayers with a subpopulation who are opening and closing registrations
- Special credits
- Enforcement programs
- Out of state business establishing Nexus and offering education
- How to support Non-mainstream taxes after system replacement

Industry Best Practices Areas for Consideration:

- Consolidation of common functions

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

- Consolidation of taxpayer information
- All functions on a common data model
- Real time processing
- Robust taxpayer accounting
- Taxpayer self-service (24/7)
- Flexible architecture with open standards and browser based user interface
- Centralized business logic
- Features to support Audit, Compliance, and Revenue Accounting

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

4 System and Process Improvement Opportunities

The development of high-level business requirements depends greatly on the vision of the CTSR. To get this vision and high-level requirements, the project team conducted a Current State Assessment, Future Vision meetings, incorporated industry best practices to determine the issues and impacts, and worked with subject matter experts during the Future Vision meetings to come up with high-level requirements. This analysis resulted in the opportunities listed below and is organized as follows:

- Issue #: Number of the issue for tracking purposes
- Priority: Presents the priority of the issue
 1. Mission Critical – Must-have functionality to meet all stakeholder needs
 2. Stakeholder Specific – Needed by no more than two separate partners
 3. Business User Specific – Preferred by businesses for the user interface
- Issue: Describes the issue as discussed in the Current State Assessment or Future Vision workshops
- Business Impact: Defines the impact on the business community, partners, or DOR
- Opportunity: Presents the opportunity(ies) available to address the issue
- Requirements #: Identifies the high-level requirements related to the specific issue

The requirements fell into the following categories and this structure is used here to present the issues, impacts, and opportunities:

1. Systems Environment
2. User Experience and Training
3. Business Need
4. Taxpayer Accounting
5. Business Rules
6. Case Management
7. Correspondence
8. Workflow Management
9. Functional Documentation
10. Business Continuity
11. Information Services
12. Data Efficiency
13. Development
14. Technology
15. Reporting

4.1 Systems Environment Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
SE-1	Mission Critical	The Agency Core Tax System is made up of 12 systems/applications that are supported by dozens of applications, Access DBs and Excel spreadsheets. Many of the functions provided are redundant, and costs savings can occur by reducing the number of systems/applications, which will in turn reduce system maintenance, training and coordination.	Business users are not as efficient and effective as they would otherwise be with a centralized system using modern technology.	Examine and assess the functionality of Integrated Tax Systems (ITS) solutions currently in the marketplace. The marketplace has developed best practice systems over the past 15-20 years (including custom solutions), and the Agency can benefit from these innovations.	TECH049
SE-2	Mission Critical	System changes (e.g., legislative changes or enhancements) are time consuming and difficult to test.	There have been so many direct production fixes over the years that it's difficult to replicate those changes in a test environment to ensure that the change will work in production.	A new Core Tax System Replacement should provide a solution that allows for legislative changes to be made in one location.	GEN034, TECH008, TECH053

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.2 User Experience and Training Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
UE-1	Business User Specific	Users work across multiple systems to research and work their accounts.	Different databases and different information for the same taxpayer result in inconsistent data.	A new Core Tax System Replacement would remove or reduce the need for users to access multiple systems to	COMP005, GEN005

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
				research an account. There should be one location and system of record when it comes to taxpayer information, taxpayer accounting, case notes, and correspondence.	
UE-2	Business User Specific	The technology doesn't provide simple functionality that users are accustomed to when working with applications outside DOR. For instance, word-wrap or spell-check is not available on the TANDEM system. Users are required to use the "Function" keys to navigate screens and take action.	Business user experience can be frustrating, thus creating inefficiencies.	A new Core Tax System Replacement would provide an improved end user experience with the functionality that is available and expected with today's technology.	GEN011, TAA026
UE-3	Business User Specific	The current user experience requires users to access multiple work queues and/or tickler work-lists. Notes are stored in multiple locations within systems and across systems. There are three locations to view notes on TANDEM. Another location for notes in Electronic Case Management System (ECMS), and the E-file Help Desk.	Business user experience can be frustrating, thus creating inefficiencies. Business user may also not see all related taxpayer information which might be vital to working the account.	A new Core Tax System Replacement would provide the user with a consolidated view of the taxpayer, related case notes, and a simplified work-list or work queue.	TAA032, TAA024, TECH049, TECH059
UE-4	Business User Specific	There are times when the user is waiting on information to move from one subsystem to another overnight.	This waiting period delays the time it takes for the user to get their job done.	A new Core Tax System Replacement would minimize the wait time users currently experience when	CM016, GEN022, REG002, REG016,

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
				waiting for data to move from one sub-system to another or waiting for a screen to pull back results from a query.	REV011, TAA044
UE-5	Mission Critical	It can take 9 months to train a user on the business side to learn how to use the TANDEM subsystems, supporting systems, and Excel workbooks.	Staff retention is challenging. The time and effort spent training staff to use older technology could be used more effectively. Productivity is minimized due to the extra time required to learn how to use the system.	A new Core Tax System Replacement would decrease the amount of time it takes for a user to learn the system, provide online help for users and reduce the time to teach users because workarounds and how to manage content outside of the Core Tax system is no longer necessary.	GEN028, TECH009, TECH057, TECH058

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.3 Business Need Issues Impacts and Opportunities

Issue #	Priority	Business Process Issues	Business Impact	Opportunity	Req. # *
BN-1	Mission Critical	Current system complexity prevents effective and efficient IS changes in support of legislative, process, or business changes.	Without flexibility it is challenging to comply and administer legislative changes to tax law. The result is workaround solutions that require manual interventions. Without user configurable data fields the system will require either workaround solutions or hard	Purchase or build an integrated tax solution that includes configurable features, policy & rules management, and workflow.	GEN007, GEN008, TECH015, TECH019, TECH021, TECH024, TECH059

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Business Process Issues	Business Impact	Opportunity	Req. # *
			coding the system to accommodate the change. All of which are time consuming and costly.		
BN-2	Mission Critical	Change impact analysis is difficult or nearly impossible due to the undocumented system, data and business interdependencies.	Business is not able to get the changes needed in the time required and/or does not have a high level of confidence in the changes as they are migrated to production.	As part of a Core Tax System Replacement, implement strict policy around documenting systems, data flows, and business interdependencies in order to improve timing and confidence level of system changes.	TECH022, TECH027, TECH003, TECH009
BN-3	Mission Critical	Change impact analysis is further complicated by the number of systems and system owners that use the same or similar data from varied sources.	This causes business users to access multiple systems to perform their work which in turn lowers productivity.	As part of a Core Tax System Replacement, consolidate information and processes, and limit the number of systems where possible.	COMP025 , GEN015
BN-4	Mission Critical	No documentation of assessed impact to business processes when system changes or maintenance activities are performed.	Impact becomes unknown as there is no way to anticipate the impact of changes to the system.	As part of a Core Tax System Replacement, provide documentation prior to system changes that describe the impact to the business processes as a result of the system changes or maintenance.	TECH022, TECH027

Issue #	Priority	Business Process Issues	Business Impact	Opportunity	Req. # *
BN-5	Business User Specific	Overall system performance, effectiveness, and efficiency cannot be (or is not) accurately measured.	Without an acceptable level of performance from the system the user must wait to move from action to action. This increases the time necessary to get their work done. With goal oriented workloads this hinders business users from meeting their goals.	Determine Key Performance Indicators (KPI) that are easily measureable and develop a tracking system. Include requirements to track these KPI's in any build or buy projects as part of the Core Tax System Replacement effort.	TECH012, TECH049

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.4 Taxpayer Accounting Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
TA-1	Business User Specific	Taxpayer accounting exists across multiple systems (ET, TARIS, and CRMS). It is difficult to determine the breakdown of taxes when viewing through TARIS.	This causes issues when trying to quickly understand the taxpayer history or to manually back out penalties.	A new Core Tax System Replacement would provide for improved taxpayer accounting capabilities.	REV016, REV018, REV019
TA-2	Business User Specific	Outside of a few exceptions, all "out of balance" returns are manually worked and payments, as well as credits, are applied manually.	Manual work is problematic because it is time consuming and is prone to human error.	A Core Tax System Replacement should reduce the number of manual steps needed to process a return and apply a credit or a payment.	CM012, GEN018, TAA030
TA-3	Business User Specific	There are limitations around taxpayer accounting, account reconciliation, showing the history of an account, how payments were applied, and history of	The users are unable to perform their work effectively because they are not able to easily see the history of an account causing the user to manually paint a picture	A Core Tax System Replacement would provide a detailed account history online with the ability to print that account history for	TAA049, TAA051

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
		calculated values.	of the history of the account. They are not able to answer taxpayer questions quickly.	the taxpayer that shows a simple and concise accounting of all financial activity on that account.	
TA-4	Business User Specific	To transfer a payment the user must manually create a credit on CRMS, apply it to the correct period, and reopen the period where the payment was misapplied.	Manual work is prone to human error and is time consuming. The user could be using that time and effort on other mission critical actions.	A Core Tax System Replacement should reduce the number of steps needed to perform a payment transfer.	TAA053
TA-5	Business User Specific	Creating a Trust Fund Assessment for a Responsible Officer of a business is performed outside of the system using an Excel workbook.	When actions are performed manually or outside of the system the history of that action is lost.	A Core Tax System Replacement should provide automation when determining a Trust Fund Assessment.	TAA058
TA-6	Mission Critical	If a new fee or tax does not follow RCW Chapter 82.32 then the system cannot process that fee because it is not tax.	Without flexibility it is challenging to comply and administer legislative changes to tax law. The result is workaround solutions that require manual interventions or the inability to support a new fee.	A Core Tax System Replacement should provide the ability to easily configure and implement fees.	GEN019, GEN019, REV016, TAA046
TA-7	Mission Critical	In the past, the State Auditor's Office has asked for DOR to provide traceability of data from Agency Financial Reporting System (AFRS) back to the source which was difficult to provide with the current system.	Compliance with state regulatory agencies is an essential business need for state agencies. These inefficiencies can cause findings and monetary impacts to the agency.	A Core Tax System Replacement should provide detailed traceability, always, down to the financial transaction level. There should be no need for data fixes by Information Services.	CM014

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.5 Business Rules Issues, Impacts, and Opportunities

Issue #	Priority	Presentation Issues	Business Impact	Opportunity	Req. # *
BR-1	Mission Critical	Business rules are not centralized. Business rules are hard coded across various systems and create interdependencies across systems.	It can be challenging to change business rules via changes to code. It's time consuming and costly and when modifying business rules in one area it can cause problems in other areas of the system.	A new Core Tax System Replacement would provide a consolidated Business Rules Management Solution across all aspects of Tax Administration.	GEN006, GEN007, TECH017, TECH018, TECH049
BR-2	Mission Critical	Business rules are complex because there are so many exceptions in tax law that system changes can't be automated.	The complexity of the existing tax processing rules, in relation to their location across multiple systems, makes it difficult to automate certain actions, thus requiring manual interventions from the business users.	Complexity in a business rule should not limit the ability to automate. All business rules should be created, maintained, accessed, stored, and viewed in a consistent manner.	GEN006, GEN007, TECH017, TECH018, TECH049

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.6 Case Management Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
CM-1	Mission Critical	Case management occurs across multiple systems. Some case management occurs outside of the system.	There is no common platform and no consistency across the systems. There are no efficiency gains by supporting case management in several locations.	A Core Tax System Replacement could provide one case management module that can be configured to support all of the Agency's case management needs.	AUD001

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
CM-2	Business User Specific	Compliance efforts, discovery, collections and audit, are hindered due to the significant amount of manual processing required.	Manual work is prone to human error and is time consuming. The user could be using that time and effort on other mission critical actions.	The Agency could benefit significantly from automated workflow with tighter integration of the compliance functionality components; selection, case management and field audit, and tighter integration with taxpayer accounting. The Agency could also benefit by examining industry-leading compliance tools to improve automation in this area.	REG032, TAA058

** Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.*

4.7 Correspondence Management Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
CR-1	Business User Specific	Correspondence template management and issuance is not consistent throughout the Core Tax System. For instance, there are correspondence applications for Automated Compliance System (ACS) and warrants that allow users to select from dropdown lists, but other correspondence is managed	Inconsistent correspondence management leads to a disparate view of the taxpayer and additional training on where users should access and store correspondence.	A new Core Tax System Replacement would provide a consolidated Correspondence Management Solution across all aspects of Tax Administration.	COMP006, COMP008, GEN009, TAA005, TAA019, TECH029

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
		outside of the system with templates stored on shared drives. Users are required to move correspondence to network locations to be imaged. Other correspondence is created through a batch process and mailed by Department of Enterprise Services (DES).			
CR-2	Mission Critical	IDOCS is the central location for correspondence to be stored; however, not all correspondence is imaged. Some physical case folders with correspondence are imaged upon case closure so the documents can be scanned together.	Without consolidation or grouping of correspondence the burden is on business user to send documentation in after the action is performed. In the interim, other business areas are unaware of the correspondence that has been sent to the taxpayer.	All correspondence should be stored and viewed in a consistent manner.	GEN009, TECH029

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.8 Workflow Management Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
WM-1	Mission Critical	Workflow occurs in multiple systems, as well as outside of the system, as part of the business process. Whether returns, approvals, audit cases, compliance cases, or IDOCS documents, each system has their own set of	Disparate workflow decreases the effectiveness of the business user. Business user may also not see all related taxpayer information which might be vital to working the account.	A Core Tax System Replacement should consolidate workflow across all areas of the business process creating greater consistency and efficiency gains.	TAA032, TAA024, TECH049, TECH059

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
		workflow rules that need to be maintained separately.			

** Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.*

4.9 Functional Documentation Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
FD-1	Mission Critical	There is no comprehensive system-by-system set of business rules required to ensure effective support of business processes/functions.	Having business rules in one location will allow changes to the rules to be more efficient and timely for the business user.	DOR should consider solutions that would discover, manage and even centralize business rules.	GEN006, GEN007, TECH017, TECH018, TECH049
FD-2	Mission Critical	There are no pre-existing system interface or context diagrams. (These diagrams were created as a by-product of this system analysis and assessment.)	Not all developers are aware of some system interactions which may slow down design/development of system enhancements, testing, and implementation.	At the time of the replacement, the solution should be documented in a tool that can be maintained by DOR IS Staff.	TECH055
FD-3	Mission Critical	Although some data dictionaries and logical models exist for some systems, there is no comprehensive set for all systems. No conceptual or semantic models exist. No Agency Data Management Strategy exists.	Not all developers are aware of system interactions which may slow down design/development of system enhancements, testing, and implementation.	At a minimum, create and maintain an Agency Data Management Strategy, conceptual data model and logical data models. Other supporting data artifacts that would prove beneficial include: Semantic Model, Fact Model and/or Enterprise Data dictionary.	TECH033

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
FD-4	Mission Critical	IT/IS standards are applied inconsistently across activities such as: data modeling, software development, testing, etc.	Developers sometimes use their own approach to design/development of system enhancements.	Establish standards and track/monitor compliance. Create a governance mechanism that will guide the Agency through the process of standards alignment. Introduce assessment tools to ensure staff meets required (documented) skills/abilities.	TECH039, TECH041, TECH045

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.10 Business Continuity Issues, Impacts and Opportunities

Issue #	Priority	Data/Information Issue	Business Impact	Opportunity	Req. # *
BC-1	Mission Critical	The criticality of existing systems, sub-systems, and applications to the organization's mission (purpose) is not well defined and documented.	In case of a disaster, it would be difficult for DOR to continue critical work.	Include a disaster recovery or business continuity plan that defines and documents the organization's mission.	TECH016
BC-2	Mission Critical	Information security and business operational risks are not effectively used for strategic IS planning and investments.	Without risk management, business is required to react to issues instead of anticipating issues before they happen.	Develop a risk management and mitigation strategy that supports enterprise governance and strategic planning.	TECH006
BC-4	Mission Critical	Further research is required to complete and maintain an enterprise wide IS/IT risk assessment.	Without risk management, business is required to react to issues instead of anticipating issues before they happen.	Improve the risk assessment process and include in the lifecycle of new or replacement systems.	TECH006

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Data/Information Issue	Business Impact	Opportunity	Req. # *
BC-5	Mission Critical	The organization has no prior experience with the scale of this system replacement and organizational transformation.	Organization is not ready to handle the nuances of a large system replacement as this one will be and may be caught off guard.	Consider including training or specific transformation processes to increase strategic skill sets related to this large-scale system replacements.	GEN028, TECH009, TECH054, TECH055, TECH057, TECH058
BC-6	Mission Critical	System effectiveness and efficiency needs are not traced to the organization's business vision, mission, and goals.	Organization is left with a solution that does not maximize effectiveness and efficiencies.	Create a clear Enterprise Architecture program that can operate from, track and achieve agency vision, missions, and goals according to agency standards, principles, policies in order to maximize performance.	GEN021, TECH023
BC-7	Mission Critical	Established business vision oriented principles (or a governance structure) are not used when making IS change decisions.	IS changes occur at a lower level to meet the low level requirement necessary without incorporating the overall DOR vision.	A Core Tax System Replacement project should take into consideration the vision oriented principles when making IS change decisions.	TECH004

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.11 Information Services Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
IS-1	Mission Critical	Business areas are aware of the technical limitations and are overcoming or creating workarounds to compensate for these limitations.	Using worksheets and DBs outside of the system allows data from the system to be duplicated and manipulated. This can lessen the integrity of the data. These	Adopt, build or procure a Core Tax System Replacement that is configurable for new or legislated functionality.	TECH005, TECH027

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
			methods are often times manual work and are not an efficient way to do business. IS may not always be aware of these workarounds, which may put the business user at risk.	Create a process for enhancement planning, development, and release management. Remove the need for business users to develop their own solutions outside of the system.	
IS-2	Mission Critical	Data processing and business analytics are accomplished outside IS provided solutions.	Because legacy system changes are difficult to make, business creates worksheets to accomplish the desired result. This is time consuming and does not reside in the system where it should be.	Integrate necessary Business Intelligence into the Core Tax System Replacement solution. The new solution must also integrate with the existing DOR Data Warehouse. Create and manage an enterprise "debt" list.	GEN021, TECH023
IS-3	Mission Critical	Access databases are utilized to ensure data integrity of information used to execute routine business activities. Business area specific Access DBs are maintained as the primary repository of a significant amount of data used to track work progress and to provide decision analytics.	Using worksheets and DBs outside of the system allows data from the system to be duplicated and manipulated. This can lessen the integrity of the data. These methods are often times manual work and are not an efficient way to do business.	Create higher levels of data availability, security, and accessibility as part of the Core Tax System Replacement efforts.	GEN021, TECH007, TECH050
IS-4	Mission Critical	Excel spreadsheets are used to calculate taxes, verify credit and to facilitate other key business functions. Data in these spreadsheets are entered primarily manually; but, may also	Because the logic is outside of the system, business creates worksheets to calculate logic to be able to complete their work. This can be manual and can reduce user productivity.	Include business driven requirements for features currently delivered by Excel spreadsheets in the new design or procurement documents for the Core Tax	GEN006, GEN007, TECH017, TECH018, TECH049

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
		be exported from various IS systems.		System Replacement efforts.	
IS-5	Mission Critical	A variety of undocumented macros have been created to support business users by recording the steps and screens used to complete routine work, ensure run accuracy, perform work functions, and other tasks.	Because of multiple steps to complete routine transactions, macros are being used. Steps or screens may be skipped that requires a user to verify information prior to moving onto the next step. Macros skip those steps.	Gather all currently used macros and determine the purpose and function of each macro. Develop associated requirement as needed to include in future development or procurement efforts.	GEN006, GEN007, TECH017, TECH018, TECH049
IS-6	Mission Critical	Business rules, analytical logic, and reporting procedures used in the Excel spreadsheets and Access databases are not documented.	Business users are at risk when legacy system changes occur that impact the data in those Excel spreadsheets and Access DBs	Capture all business requirements associated with Microsoft application so that the appropriate requirements are developed for the Core Tax System Replacement efforts.	GEN006, TECH017, TECH018, TECH049
IS-7	Mission Critical	IS system owners are not aware of the wide variety of information services and business support workarounds currently in place.	Business users are not aware of how those workarounds are affected when legacy changes occur.	Work with business areas to determine, document and track the rules and requirements associated with current business processes.	GEN006, GEN007, TECH017, TECH018, TECH049
IS-6	Mission Critical	Security is not implemented in a consistent manner across systems, and independent or rogue systems (e.g., Access DBs) do not have robust security measures in place.	DOR is at risk when the data in those Excel spreadsheets and Access DBs is manipulated, exported, and emailed across the agency.	Bring disparate databases into the Core Tax solution and apply role based security in order to secure data.	CM001

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

4.12 Data Efficiency Security and Usability Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. #
DE-1	Mission Critical	Data sharing methods are outdated and may present an information security risk: Limited data security standards are applied to data exchange at rest or in transit. Limited data integrity and quality standards have been implemented throughout the data lifecycle. Data movement in the department goes beyond the scope of data security standards (i.e., reports, CSV, Excel, Access, etc.).	DOR is vulnerable to loss of data integrity as data moves outside of the system. Business users may not have the most current information as data continues to change in the system, but not in their Excel or Access DB outside of the system.	Develop a Data Management strategy that sets enterprise goals including but not limited to data ownership, quality, standards, warehousing, Business Intelligence, create secure methods of data access, viewing, and logging.	TECH045
DE-2	Mission Critical	Web development standards (style sheets, templates, etc.) have been initiated but have not been implemented across all applications.	The user experience is not consistent.	A Core Tax System Replacement project should establish web development standards across all applications	GEN016, TECH049

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.13 Development Process and Resources Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
DP-1	Mission Critical	Inconsistent development practices performed using multiple tool sets across various platforms.	Inconsistent tools and platforms makes business changes more difficult and time consuming to implement.	Leverage the STAR Technical Steering Committee to identify and systematically adopt development standards.	TECH054, TECH060

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
DP-2	Mission Critical	Undocumented development process/methods vary from system to system.	This slows down the process for implementing changes.	Create training programs for developers that focus on DOR development standards. Provide recognition for improvement in the development process and methodology.	TECH054
DP-3	Mission Critical	Major system/application upgrades or modernization efforts rarely occur due to the amount of effort and number of resources required to maintain the existing systems.	Business users are left to implement their own workarounds using the tools available.	A Core Tax System Replacement should be designed to allow for planned/scheduled major system/application enhancements to occur with minimal impact to ongoing operations.	TECH049
DP-4	Mission Critical	System updates are limited to tactical fixes, legislative requirements, or simple enhancements.	Business users are left to implement their own workarounds using the tools available.	To create system performance improvements begin to build new functionality into enterprise services starting with the data layer and moving to the business rules level in an effort to gain performance efficiencies.	TECH049
DP-5	Mission Critical	Resource pool is not optimized. The Agency does not have the appropriate number of trained/skilled IS staff to accommodate the number of enhancements requested. In addition, resources do not exist for	Without a resource pool, IS is not able to implement changes in the system timely. Business users are left to implement their own workarounds using the tools available.	Include staffing, training and team development as part of the Core Tax System Replacement effort to support further and future development, replacement system maintenance, and	TECH054

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
		large scale modernizations, development efforts or replacement projects.		expansion of new technologies.	
DP-6	Mission Critical	IT/IS professionals willing and able to develop and manage DOR Legacy system are limited and decreasing. New IT/IS professionals are not acquiring legacy system skills in the current DOR technical environment.	Business users are less likely to see requested enhancements or defect fixes implemented.	Intentionally reduce the dependency on Legacy systems over a planned timeframe.	TECH032
DP-7	Mission Critical	Development tools and environment are not robust and in some cases do not maximize efficiencies given the current available technologies.	Business is left with limitations around system changes due to older technology.	Consider moving to platforms with more accessible development, management and testing suites. Create development, test and production environments wherever possible.	GEN021, TECH007, TECH050

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.14 Technology Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
TC-1	Mission Critical	Non-standard scanning equipment. Multiple types of scanners that utilize a variety of scanning, OCR, and content management technology.	Created inefficiencies for training, administrative maintenance, and processing.	Select an Agency standard imaging platform suitable for all DOR functions/programs (e.g., BLS, Registration, Tax, etc.)	TECH049
TC-2	Mission Critical	Multiple .Net versions (1.0, 1.1, 2.0, 3.5, and 4.0) are supported.	Requirements support for multiple versions of .NET, and	Migrate all applications to a current version. If	TECH049

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
			may create inconsistencies in business user experienced when upgraded.	applications cannot move to the newer version, twilight the application and build or buy replacement solutions.	
TC-3	Mission Critical	Large variety of coding languages used (counted 12 languages).	Can create inefficiencies on the development side.	Restrict new development to a set of standard supported language. Create requirements around those languages for future development or procurement projects.	TECH049
TC-4	Mission Critical	Due to different platforms being used, there are two development environments, source control tools, development tools, testing efforts, separation of duties, release management efforts, and versioning.	Can create inefficiencies on the development side.	Leverage the STAR Technical Steering Committee to adopt and implement development standards for source code, version control and development environment.	TECH049, TECH050, TECH007
TC-5	Mission Critical	Multiple versions of Microsoft Office applications (e.g., Excel, Access, etc.) are used to support business needs.	Creates maintenance inefficiencies.	Replace the dependency on complex Excel and Access application with a Core Tax System Replacement. As functionality becomes available, decommission older versions.	TECH036, TECH049

* Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.

4.15 Reporting Issues, Impacts, and Opportunities

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
----------------	-----------------	-------------------------	------------------------	----------------------	-----------------

Core Tax System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Issue #	Priority	Technical Issues	Business Impact	Opportunities	Req. # *
R-1	Mission Critical	Reporting is inconsistent in the creation, storage, delivery, and format across systems.	Unreliable information and the inability for business users to select data to query.	An enterprise wide business intelligence solution should be implemented to provide consistency throughout the organization.	GEN021, TECH023
R-2	Mission Critical	Reports can be system generated or user generated by users typing into Excel workbooks.	Manual work is prone to human error and is time consuming. The user could be using that time and effort on other mission critical actions.	An enterprise wide business intelligence solution should be implemented to provide consistency throughout the organization.	GEN021, TECH023
R-3	Mission Critical	Agency reports management has evolved over many years and an assessment of what's required vs. what's not required needs to be performed.	Reports being created that are not needed or reports that do not offer all of the information required making decisions or reporting correctly.	A Core Tax System Replacement would start with an assessment of all reports to determine what's needed.	COMP017, COMP021, REG005, REV009, TECH043

** Requirement # - This is not an exhaustive list of related requirements but will demonstrate that there is at least one requirement that traces to the Issue listed.*

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

5 Core Tax System Replacement Scope

As part of the Current State Assessment, the project team met with the Systems Transformation and Refresh (STAR) Steering Committee to clarify the scope of the new Core Tax System. The Steering Committee conveyed the following scope of systems and tax types. The lists below provide the Steering Committee's direction.

Systems within Scope:

1. Business Registration Management System (BRMS): This system manages business registrations. When a business establishes itself, a registration application is filed. The business registration information is captured in BRMS and details such as filing frequency, tax codes, and NAICS codes are added.
2. Excise Tax (ET): This system contains data from all filed excise tax returns, down to the tax return level detail, and supports all funding to the general and dedicated funds by Revenue Accounting.
3. Outstanding Returns File (OSR): This system tracks each tax return, based on the taxpayer's filing frequency, as outstanding until the return is filed or otherwise cleared.
4. Taxpayer Accounts Receivable Integrated System (TARIS): This system manages taxpayer receivables by assessing tax liabilities, penalties, interest and accounting for payments until paid in full or written off as uncollectible.
5. Credit Management System (CRMS): This system manages taxpayer refunds, credits, and special credits.
6. Automated Compliance System (ACS): This system allows Revenue Agents to manage items referred for collection by tracking TARIS invoices and outstanding returns from the OSR system.
7. Integrated Document System (IDOCs): This system is the agency-wide imaging system. All tax returns and correspondence coming into DOR are captured here and are available to most users.
8. Electronic Filing System (E-file): This system allows taxpayers to file tax returns electronically and includes upfront validation rules to decrease the number of tax returns with errors.
9. Electronic Case Management System (ECMS): Used by Tax Discovery agents to identify and track non-registered businesses. Once registered the ECMS case is linked to the UBI # on BRMS. When an invoice is generated the ECMS case is linked to the invoice on TARIS. In addition to tracking non-registered business, it is the main system for tracking dollars collected through the Tax Discovery Program.
10. Audit Review System (ARS): This system is used to issue tax assessments from Audit, TAA, Compliance, and Special Programs. This system handles the final review for a credit or debit assessment. Once created the taxpayer is billed or refunded.
11. Electronic Partial Payment Agreement (EPPA): This system allows a Revenue Agent to enter into a partial payment agreement with a taxpayer to automatically debit their bank account regularly to pay off a tax warrant.
12. Transcript System (Field Audit): This system allows Audit to assign an audit number to a taxpayers account and assign the audit to an Auditor.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Tax Types within Scope:

Table 1: Tax Types and Supporting Systems within Scope of Core Tax System Replacement

	BRMS	ET	TARIS	CRMS	OSR	ACS	Trans. (FD)	ECMS	E- File	IDOCS	ARS	EPPA
Mainstream												
B&O Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Retail Sales (state & local)	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Use Tax (Business)	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Consumer Use Tax	X	X	X	X	N/A	X		N/A		N/A		N/A
Public Utility Taxes	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Lodging Taxes	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Rental Car					X	X		N/A		N/A		N/A
Brokered Natural Gas	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Leaded Racing Fuel	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Tobacco Products / Cigar	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Litter Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
E-911 Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Fish Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Hazardous Substance Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Intermediate Care Facilities Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Litter Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Moist Snuff	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Cigar Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Motor Vehicle Sales/Leases	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Petroleum Products Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Refuse Collection Tax	X	X	X	X	X	X	X	N/A	X	N/A	X	N/A
Solid Fuel Burning Devise Fee	X	X	X	X	X	X	X	N/A	X	X	X	N/A
Spirit Taxes	X	X	X	X	X	X	X	N/A	X	X	X	N/A
Syrup Tax	X	X	X	X	X	X	X	N/A	X	X	X	N/A

	BRMS	ET	TARIS	CRMS	OSR	ACS	Trans. (FD)	ECMS	E- File	IDOCS	ARS	EPPA
Tire Fee	X	X	X	X	X	X	X	N/A	X	X	X	N/A
Oil Spill	X							N/A		X		N/A
Non- Mainstream												
Aircraft	X		X	X	N/A	X		N/A		X	X	N/A
Cigarette Tax	X		X	X	N/A	X		N/A		X	X	N/A
Estate	X		X	X	N/A	X		N/A		X	X	N/A
Leasehold	X		X	X	N/A	X		N/A		X	X	N/A
Motor Vehicle Excise Tax	X		X	X	N/A	X		N/A		X	X	N/A
Real Estate Excise Tax	X		X	X	N/A	X		N/A		X	X	N/A
Escheats					N/A	X		N/A		X	X	N/A
Forest Tax (Timber)	X		X	X	X	X		N/A		X	X	N/A
Watercraft Tax	X		X	X	N/A	X		N/A		X	X	N/A
Vessel Tax	X		X	X	N/A	X		N/A		X	X	N/A
Trailer Tax	X		X	X	N/A	X		N/A		X	X	N/A
Mobile Home Fee					N/A	X		N/A		X	X	N/A

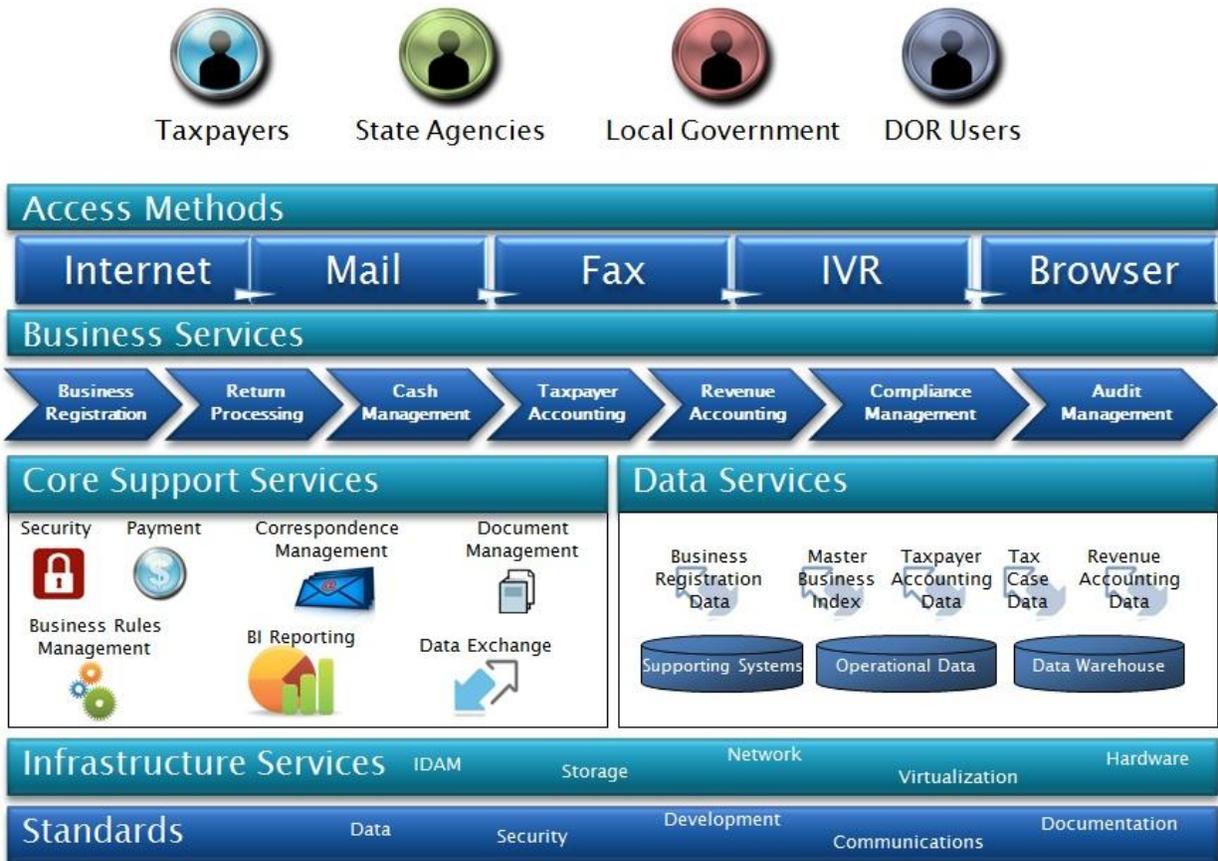
6 Conceptual Architecture

Issue and opportunity recognition help develop a vision for CTSR with regard to the functionality and technical tools needed to meet DOR's Guiding Principles. While the vision sets the strategic target for the Core Tax System, the Conceptual Architecture provides the first step toward realizing the vision through a strategic structure and defined capabilities.

This section presents a summary of capabilities through the use of the Conceptual Architecture below. It is a service-enabled multi-layer architecture aligned with industry best practices in reuse and is suitable for service based deployments. The graphic below illustrates the following architectural sections:

- Stakeholder Access
- Business Services
- Core Support Services
- Data Services
- Infrastructure Services

6.1 Conceptual Architecture



BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

6.2 Stakeholder Access

The stakeholder access layer is the mechanism through which a stakeholder has access to core tax information and activities. Most often, this will be through a web-based portal or direct interfaces for exchanging data. Stakeholders will access the Core Tax System for various reasons:

- Taxpayer: Register a business, file a return, access “My Account” information
- State Agencies: Exchange data files, look up a business
- Local Governments: Exchange data files, look up a business
- DOR Users: Perform daily tasks

6.3 Business Services

The business services layer serves as the coordination layer where the various services implemented for Core Tax are managed. Staff with minimal technical skills or training should be able to configure the business rules for these systems, manage them, and tune their performance based upon process needs.

The core business services within Core Tax are:

- Business Registration: Registering and/or maintaining a taxpayer’s account
- Return Processing: Receiving and processing an original or amended return including processing them through relational edits and tax calculations
- Cash management: Receiving, processing, and managing payments
- Taxpayer Accounting: Maintaining taxpayer accounts including, but not limited to returns processing, establishing debits and credit, working Error out of Balance, applying payment, applying credits, applying penalty and interest, and sending bills
- Revenue Accounting: Forecasting and maintaining fund allocation
- Compliance Management: Tax Discovery, Collections, and Field Visits
- Audit management: Selection, creation, and managing of audit cases

To support these services, Core Tax should use business process management technologies for end-to-end business processes lifecycle management by defining process, tools and technologies for modeling, developing, deploying, managing and governing the business processes. The Core Tax business services layer should be implemented using a set of open standards such as:

- Business Process Engine: Provides the development and run-time environment for business processes simulation, testing, and deployment, as well as run-time configuration.
- Business Activity Monitoring (BAM): Monitors the metrics for the business processes, can be used by the business services layer for aggregation, analysis and presentation of information associated with business events. Business processes can be tracked by their relationship to the key performance indicators for the business. This allows managers and executives to gain visibility to the real-time performance of the business services and make context-based decisions and to optimize the business processes to improve speed and effectiveness of business operations. The historical data captured by BAM can be analyzed to present how well the business process and service trends are adhering to various policies and fulfilling partner service level agreements.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

- Business Rules Engine: Used to externalize various business rules from the business process implementation.

6.4 Core Support Services

The core support services layer includes various business, technical, data, decision, and security services. These components should be implemented using best practice technology, refined for tax processing and could be exposed as Web Services Interoperability (WS-I) based on service contract specifications.

The following are the high-level service categories that could be implemented in the core support services layer:

- Security Services: Supports access to services based on role and leverages the identity and access management infrastructure. Supports taxpayer/user identity verification and secure access to the taxpayer's account(s).
- Payment Services: Provides for the receipt, accounting and distribution of tax related payments.
- Correspondence Management: Provides configurable, scheduled, and tracked correspondence features.
- Document Management: Provides content search, associate and routing functionality.
- Business Rules Management: Provides externalized business rules repository including, but not limited to, application rules, agency rules, or city rules.
- Business Intelligence Reporting: Provides online reporting capabilities that can be provided as a service to internal and external customers.
- Data Exchange Services: Provides access to the persistent data for the Core Tax System and partners; Extract-Transform-Load (ETL) mechanisms to process and enrich data in bulk transaction processing. (Note that this is not recommending continuation of bulk updates to data that can occur online in real time.)

6.5 Data Services

The data services layer is where all data is stored. The data may include both structured and unstructured data in diversified formats such as:

- Operational Data: Used to support operational activities within Core Tax.
- Data Warehouse: Structured (redundant or additional) to support custom data extracts and statistical/performance reporting and analysis.
- Supporting Systems: Supporting applications, documents and files (e.g., images and spreadsheets).

6.6 Infrastructure Services

The infrastructure layer focuses on the orchestration and virtualization of infrastructure components. The infrastructure layer should ensure resources are available dynamically as required to maximize flexibility. The key characteristics of Core Tax infrastructure layer should be:

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

- Storage Orchestration
- Identity and Access Management
- Hardware, Network
- Infrastructure and Operating System Virtualization where possible

7 High-Level Requirements

The requirements developed by DOR represent the high-level list of requirements identified as essential for reaching the target future vision. These requirements do not represent the full set of requirements that will eventually become part of the Request for Proposal (RFP). Most importantly, they do not represent the list of existing Core Tax Processing capabilities, which will need to be assessed and documented prior to RFP. Instead, they were used to determine which alternative will get the Agency closest to their end goal.

<i>Req. #</i>	<i>Description</i>
Audit	
AUD001	The solution must provide comprehensive audit capabilities to include the tracking, managing, assigning and reporting of audits.
AUD002	The solution must provide for the management, tracking, reporting, and recovery of advance payments for audits.
AUD003	The solution must process and automate the approval processes for managers with multiple levels of approval.
AUD004	The solution must issue, process and track assessments electronically.
AUD005	The solution must provide a robust audit selection tool with the ability to query a set of data to identify those taxpayers that fall outside the norm, using the DOR's data warehouse and providing the process of creating leads. (this is a non-mandatory requirement)
AUD006	The solution must provide an Audit Narrative with standard paragraphs that allow for editing.
AUD007	The solution must provide statistical sampling tools available to an auditor which allows sampling of taxpayer records.
AUD008	The solution must provide the ability to streamline Audit 2000 workpapers capabilities and syncing to the server.
AUD009	The solution must query audit activity based on tax classifications or industry types of deductions.
AUD010	The solution must provide business rules that stay in synch between systems (e.g., Audit 2000 and E-file (rates and time periods)) with one rate database.
AUD011	The solution must provide case management system that can process different types of cases, provide different cases based on the types of receivables being collected (e.g., forest tax) and become part of the Core Tax System.
AUD012	The solution should allow for the support of federal tax information with the ability to utilize the information to meet Pub 1075 standards.
AUD013	The solution must pay assessments on protested and unprotested amounts by issue or tax period with ability to split periods or split issues.
AUD014	The solution must provide the ability to remote access the system.
AUD015	The solution must provide the ability to work offline, but also synch with the central server and includes all information that would be available to the auditor when they're logged into the network in the office.
AUD016	The solution must provide taxpayer future reporting instructions and the ability to flag the taxpayer if they've been given future instructions.
AUD017	The solution must process settlement transactions and provide an audit trail of who performed the settlement and include the settlement details.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
AUD018	The solution must track refund validation audits, different refund request processes, including the amount of time it takes to close with ability to see when it was sent between divisions (remove the need to track via email).
AUD019	The solution must track waivers from start to finish.
AUD020	The solution must track public works contract clearances from start to finish.
AUD021	The solution must provide an account summary or the equivalent of a transcript system (auditor assignment and parameters of audit) that is easy to understand.
AUD022	The solution must consolidate all of the detailed tracking and handoffs in the case tracking system.
AUD023	The solution must download transcripts that include the return and account history information.
AUD024	The solution must measure performance, dollars by hour, timeliness, and how long an audit has been open.
Cash Management	
CM001	The solution must include a role based security with the ability to provide an audit trail of adjustments to taxpayer accounts.
CM002	The solution must deposit money directly from the system to the state treasurer.
CM003	The solution must be smart coded so that the line item on the return maps to the source code and fund with the ability to export information.
CM004	The solution must scan checks and supporting documents and stores as one image.
CM005	The solution must load information directly to AFRS and the state treasurer systems.
CM006	The solution must allow a taxpayer the ability to indicate where a payment should be applied (as long as business rules are passed).
CM007	The solution must allow payment processing and deposits within 24 hours of receipt.
CM008	The solution must accommodate information regarding NSF transactions into the core tax accounting system.
CM009	The solution must centralize payment information and consolidate the view of payment history.
CM010	The solution must consolidate BLS payments into the Core Tax System.
CM011	The solution must include payment allocation logic to determine where a payment should be applied and the hierarchy of posting the payment.
CM012	The solution must integrate with multiple Core Tax System components to provide payment capabilities that support e-check, credit card, debit card, cash and paper check.
CM013	The solution must support the ability to process payments electronically (e.g., debit cards) in the field office.
CM014	The solution must provide transparency of financial transactions and the ability to identify and trace payments from transactions through distribution of revenue to the state funds.
CM015	The solution must provide the ability to split payments automatically across tax types.
CM016	The solution must process real time reporting and include ability to deposit cash the same day.
CM017	The solution must generate refunds electronically with ability to credit back a taxpayer's account.
CM018	The solution must support advanced search capabilities with multiple data field selection and allow for simplified processing of checks without supporting documentation.
CM019	The solution must streamline the batch process regardless of the tax type and remove the need to split batches up when they are received in cash management.
CM020	The solution must brand a receipt with a UBI and a breakdown of money that is attributed

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

<i>Req. #</i>	<i>Description</i>
	to a city or town.
CM021	The solution must include a field office receipting capability that is tightly integrated with the tax accounting system.
CM022	The solution must utilize tax type information and the amount from returns as “direct” basis for receipt posting (e.g., Retail sales tax would be posted for the amount from returns instead of the current monthly allocation processing performed by the Revenue Section.)
Compliance	
COMP001	The solution must process and automate penalty waivers per business rules for bankruptcy cases.
COMP002	The solution must process, track and maintain bankruptcy related tax returns and payments that include pre-petition and post-petition payments.
COMP003	The solution must have the ability to generate, track and image Proof of Claim for bankruptcy cases.
COMP004	The solution must automate the exchange of information with bankruptcy courts.
COMP005	The solution must provide a system transaction history, system generated notes and ability for users to enter comments into the system when actions are performed on an account.
COMP006	The solution must provide notification letters with user ability to manage and maintain correspondence templates.
COMP007	The solution must manage the creation and documentation of letters and provide views of the letters for the user.
COMP008	The solution must provide workflow for collection letters and electronic case folders to store incoming and outgoing correspondence.
COMP009	The solution must interface with the court systems to populate information for bankruptcy cases.
COMP010	The solution must be able to create, serve and print, and track legal documents.
COMP011	The solution must provide e-withhold on wage levies that include business rules by dollar amount.
COMP012	The solution must include tablets that allow for payments to be made using a magnetic reader, ability to scan the check, pick up the MICR line (e.g., routing and account numbers).
COMP013	The solution must allow multiple tax periods and invoices to be included in a payment plan.
COMP014	The solution must process electronic payment agreements with the ability to add multiple warrants or add new warrants (or invoices).
COMP015	The solution must provide taxpayer self-service on payment agreements and include business rules to allow or disallow payment agreement criteria.
COMP016	The solution must consolidate taxpayer views which include estimating payment amount and calculating penalty & interest.
COMP017	The solution must provide reports with the ability to report on performance measures and standards.
COMP018	The solution must provide tablets for Revenue Agents to provide the taxpayer with detailed information on what they owe and the ability to generate an invoice or file a tax return in the field. Would provide the capability to synch that data to the central system.
COMP019	The solution must provide the ability to flag taxpayers who go in and out of compliance or high profile accounts.
COMP020	The solution must provide the ability to assign work based on role with validation for current assigned workload.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
COMP021	The solution must provide the ability to adjust deferral codes so that DOR can properly categorize revenue accounting and other reports.
COMP022	The solution must automate the bankruptcy process that includes internal checks and balances.
COMP023	The solution must automate wage levies.
COMP024	The solution must be able to serve Notice of Order to Withhold and Deliver electronically.
COMP025	The solution must provide the ability to bulk assign referrals.
COMP026	The solution must provide the ability to estimate tax due for delinquent taxpayers.
COMP027	The solution must consolidate systems (e.g., closing agreements database, NOWD database, and E withhold).
COMP028	The solution must provide the ability to accept voice activated notes automatically.
COMP029	The solution must flag cases that are under criminal investigation and limit the amount of information that the user can see based on their role.
COMP030	The solution must include electronic filing of liens.
COMP031	The solution must provide the ability to manage (e.g., balance) the number of referrals by office.
COMP032	The solution must process field office move address changes.
COMP033	The solution must provide the ability to drill down by office, FTE, and invoice types.
COMP034	The solution must provide the ability to determine accounts filing status (e.g., marital status, single or divorced).
COMP035	The solution must provide the ability to press a button to generate a cell phone call or a text message.
COMP036	The solution must provide aging of receivables beyond 30 days.
COMP037	The solution must provide asset management (e.g., property, wage, and bank).
COMP038	The solution must provide e-file internal system to generate the tax return and post without mathematical errors.
COMP039	The solution must provide information on the age of the receivables (e.g., how long a receivable has been outstanding).
COMP040	The solution must provide workflow for approvals on deferred accounts, closing agreements, and tax assessments.
COMP041	The solution must score accounts (e.g., NAICS code) and assign to a treatment strategy based on that score.
COMP042	The solution must provide Revenue Agents the ability to clear outstanding returns by estimating tax returns with approval, checks/balances, and ability to convert to an actual tax return.
COMP043	The solution must automatically process warrant satisfactions and "vacates" including the cause number assigned.
COMP044	The solution must include the valuation of property.
COMP045	The solution must allow multiple contact phone numbers for taxpayers.
COMP046	The solution must maintain Revenue Agent's contact information.
COMP047	The solution must provide multiple invoices for a single payment plan and the ability to determine which periods or invoices to include.
COMP048	The solution must automate vendor and other agency offsets.
General	
GEN001	The solution must be able to receive information from varied data exchanges and file formats.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
GEN002	The solution must include the ability for other state agencies and local governments to view account information with secure access.
GEN003	The solution must provide data validation and verification, using third-party data when necessary (i.e., Certified Postal standardization for Zip Code + 4 when entering addresses).
GEN004	The solution must include a comprehensive view of the account to the user, providing data in a concise, easy to follow view.
GEN005	The solution must provide a history or journal that authorized users can view to see changes to an account over time, and who made those changes. Histories and journals must display the real names, rather than the Login IDs, of the users who save changes, along with the date and time of the change.
GEN006	The solution must assign work items based on business rules (roles and system validations); allow supervisors to manually assign work items, with the ability to bulk assign more than one at one time.
GEN007	The solution must provide the ability to manage business rules by storing and allowing users to maintain select system business rules and validations via configuration by non-IS staff.
GEN008	The solution must provide the user configurable components where appropriate.
GEN009	The solution must automate and standardize correspondence to taxpayers; allowing for customized messages to be added by users.
GEN010	The solution must provide or leverage an enterprise content management solution, including but not limited to: document management, upload/submit/attach electronic attachments in multiple file formats, document retention and archiving capabilities.
GEN011	The solution must provide, at the least, the same or higher level of functionality that is currently offered in the Core Tax System.
GEN012	The solution must have informative user friendly screens that include word wrap and spell check features that clearly identify data, and allow users to perform multiple functions in one place.
GEN013	The solution must provide a comprehensive, context-sensitive help system to provide guidance to all users for all processes and pages.
GEN014	The solution must provide document management that is automated and requires minimal manual intervention for processing.
GEN015	The solution must provide one integrated environment with common system functions that leverage new technology.
GEN016	The solution must have a consistent look and feel to all web pages, navigation, features, functionalities, and capabilities.
GEN017	The solution must provide easy navigation through the system and the ability to perform actions within the system with minimal key strokes (eliminating the need for function keys.)
GEN018	The solution must process tax payments; electronic and paper, and allocate funds to the proper accounts.
GEN019	The solution must assess and process multiple types of interest, tax, penalties, fees, and court costs automatically.
GEN020	The solution must allow abatement of interest, tax, penalties, fees, and court costs.
GEN021	The solution must operate on a WA DOR preferred platform (See Enterprise Technical Architecture Standards).
GEN022	The solution must provide real time processing for transactions in the system.
GEN023	The solution must process taxpayer registrations; electronic and paper.

Req. #	Description
GEN024	The solution must create and assign/associate the State standard Unified Business Identifier (UBI) that maintains new UBI numbers, as well as maintain all existing UBI numbers.
GEN025	The solution must process tax returns, single or multiple; electronic and paper, monthly, quarterly and annual.
GEN026	The solution must provide extensive search capabilities to search for account information.
GEN027	The solution must include ability to delegate authority for account access which includes security for profiles with one account login that allows entry through a secure self-service portal (e.g., Secure Access Washington (SAW)).
GEN028	The solution must provide a robust training module for system functions.
GEN029	The solution must provide extensive online editing and error checking. Errors and error messaging must be real-time and viewable from the page to enable efficient error resolution.
GEN030	The solution must allow users to sort and filter work queues.
GEN031	The solution must provide a comprehensive view to the taxpayer of their account and the transactions processed for one specific or multiple periods.
GEN032	The solution must allow easy updates to data, with minimal key strokes required.
GEN033	The solution must provide alerts and notifications where appropriate.
GEN034	The solution must provide separate development and testing environments that will mirror production to allow for robust testing efforts.
GEN035	The solution must provide automatic population of data whenever possible.
GEN036	The solution must provide role-based security that complies with state security standards.
GEN037	The solution must provide DOR staff with the ability to manage user access and control. The solution must allow user security representatives within the user divisions to manage application permissions for their division staff.
GEN038	The solution must track and maintain tax appeals.
GEN039	The solution must cross match multiple identifying data sources to register an account or recognize an account that is already registered.
GEN040	The solution must expand data sources and provide detailed matching capabilities for the data warehouse.
GEN041	The solution must provide the ability to review unfiled tax returns.
IDOCS	
IDOCS001	The solution must provide tighter integration with Core Tax and allow indexing and sorting of imaged documents with comprehensive descriptions to identify and filter documents by type.
IDOCS002	The solution must capture secure messages into imaging without having to print and scan the message.
Registration	
REG001	The solution must provide bulk update capabilities where the taxpayer has multiple locations.
REG002	The solution must provide the ability to validate the taxpayer's address in real time and validate their location(s).
REG003	The solution must provide the ability to store multiple bank accounts at the account level.
REG004	The solution must provide internal account administration (e.g., DOR employees via an admin screen) so that system administration does not require programmers to support.
REG005	The solution must provide data warehouse functionality to provide reports, data, etc.
REG006	The solution must support the extension of the due date on a tax return to avoid a penalty when they've already paid.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
REG007	The solution must provide the ability for other agencies to view registration information electronically.
REG008	The solution must allow the taxpayer to set up their confidential taxpayer authorization upfront.
REG009	The solution must allow the user to set up their bank account at the time of registration.
REG010	The solution must capture all of the information that the UBI agencies need – requiring it from the taxpayer the first time through.
REG011	The solution must include the reseller permit process as part of registration.
REG012	The solution must provide the ability to receive registration information through BLS.
REG013	The solution must provide the ability to save during the registration process if the taxpayer doesn't have all of the information during the registration process.
REG014	The solution must require that all information is completed the first time through, including all branch information.
REG015	The solution must standardize naming conventions before the account is registered.
REG016	The solution must support automated tax reporting indicators, standard report layout, ad hoc reporting, real time reporting, sorting, and query capabilities.
REG017	The solution must provide role based permissions in "My Account".
REG018	The solution must include advance search capabilities (including wild card searches) to research account information.
REG019	The solution must include self-service capabilities for taxpayers and users.
REG020	The solution must include the ability to access related accounts (e.g., see all clients for CPAs).
REG021	The solution must provide an opportunity for power users to perform work without entering a registration wizard.
REG022	The solution must provide intuitive help, by means of a wizard (e.g., branch accounts).
REG023	The solution must provide the ability for taxpayer to access their account information electronically.
REG024	The solution must provide the ability for the taxpayer to enter their information only one time.
REG025	The solution must provide the ability for updates to be handled once.
REG026	The solution must provide the ability for users to create an account that the taxpayer could log into via "My account" and must include a permanent login id.
REG027	The solution must provide the taxpayer electronic means for changing their account information or structure.
REG028	The solution must remove the need for taxpayers to re-enter information by providing the ability to pre-populate information instead having users enter over and over again.
REG029	The solution must require taxpayers to enter demographic information only once.
REG030	The solution must require taxpayers to file electronically.
REG031	The solution must allow DOR to share information with other agencies.
REG032	The solution must validate information internally and with other agencies to determine previous compliance (closed a business and reopening under a new name).
REG033	The solution must track tradeshow accounts (e.g., out of state businesses performing business via tradeshow).
REG034	The solution must indicate if supporting documentation is necessary.
REG035	The solution must send field specific confirmation email to the taxpayer when information on the account has changed.
REG036	The solution must have ability to revoke business licenses.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

<i>Req. #</i>	<i>Description</i>
REG037	The solution must include one data set for trade names.
REG038	The solution must include the administration of the cash bond process.
REG039	The solution must provide management of outstanding returns (OSRs) and business closures based on the filing frequency on the account.
REG040	The solution must provide the ability to process legal entity registration (i.e., SOS registration).
REG041	The solution must support the need to validate taxpayer identity when they call in or walk into the front counter.
Revenue Accounting	
REV001	The solution must map line codes to the source code to be easily updatable without requiring programming.
REV002	The solution must not force the front funding process for local funds (Need to consider the un-funding based on partial payments or NSF and the impact to the local accounts).
REV003	The solution must provide a detailed view for the taxpayer based on Revenue Accounting division needs.
REV004	The solution must provide an online financial transaction summary.
REV005	The solution must provide other agencies with specific information necessary to support their inquiries and process needs.
REV006	The solution must automate the interest calculation for local tax.
REV007	The solution must interface, reconcile, and report payments processed with the state's financial management system.
REV008	The solution must allow read only access to other state agencies to view financial information.
REV009	The solution must provide auto population for financial reports.
REV010	The solution must capture cash and accruals when taxpayers short pay.
REV011	The solution must provide detailed revenue information and taxpayer analytics to support revenue forecasting of the Forecast Council.
REV012	The solution must provide the ability to assign and report state and federal account codes to all financial transactions specific to a program year.
REV013	The solution must automatically process Statue of Limitation and returned warrants.
REV014	The solution must have the ability to track, manage, and report program data for the appropriate fiscal years (FY) to the regulatory authority.
REV015	The solution must comply with state statute, policy, accounting standards and internal control requirements (allows segregation of duties (e.g., controls who can process refunds and who has supervisory level approvals).
REV016	The solution must include or leverage a central accounting solution that includes fee calculation, reconciliation, collection and receipt of payment, and accounting rules that are configurable and utilize standard double-entry accounting.
REV017	The solution must manage one to many taxpayer relationships and changes that occur over time.
REV018	The solution must process full accrual receivables with stable financial accounting system capabilities. Examples include: Control account summation and subsidiary account detail, Account aging, Invoicing/statement capabilities, Compatibility with AFRS coding, Write-off and allowance for doubtful accounts capability, Online account inquiry for agency and taxpayer use, Support for accounts receivable analysis
REV019	The solution must provide comprehensive accounting and finance capabilities.
REV020	The solution must provide for forecasting based on historical trends.
REV021	The solution must provide historical trends to support Revenue Accounting forecasting

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
	capabilities.
REV022	The solution must provide information on the source or nature of a receivable.
Tax Accounting Administration	
TAA001	The solution must have the ability to split rates and tax returns mid tax period.
TAA002	The solution must include, track, and manage all credit programs for DOR.
TAA003	The solution must include an application to verify information such as employment data, square footage, bushel capacity, and annual surveys.
TAA004	The solution must reconcile automatically when buying down credits for a new employee credit.
TAA005	The solution must have the ability to recreate correspondence previously sent to taxpayer.
TAA006	The solution must automatically process credit program caps and thresholds with ability to change or turn off cap.
TAA007	The solution must provide an automated system recovery process if the processing of e-file returns fails.
TAA008	The solution must track performance measure calculations that include the action date.
TAA009	The solution must include a hierarchy of actions when multiple errors are found during returns processing.
TAA010	The solution must have the ability to sort work queues by multiple variables.
TAA011	The solution must track and manage outstanding tax returns and allow more than one outstanding return (e.g., Sales, B&O) for a tax period.
TAA012	The solution must process Program CAP, Individual Cap, Annual Program Cap, and Annual Individual Business Cap.
TAA013	The solution must provide ability to send, receive, and manage compliance leads from other state agencies.
TAA014	The solution must calculate penalty and interest for short/partial payments and penalty waivers.
TAA015	The solution must include automated notification to taxpayers using business rule validations.
TAA016	The solution must include multiple addresses, multiple locations and multiple contacts for taxpayer accounts.
TAA017	The solution must support amended tax returns before, on or after the due date.
TAA018	The solution must clearly display information for taxpayers (e.g., taxpayer confusion around payment due dates which is the 26 th).
TAA019	The solution must consolidate taxpayer information, correspondence, or contact with the department into once location that is easily viewable by the user.
TAA020	The solution must successfully perform in peak volume times (e.g., annual filers).
TAA021	The solution must flag specified tax returns for review based business rules that can validate at the line item level.
TAA022	The solution must monitor tax returns that fail to process.
TAA023	The solution must allow a taxpayer to clear a prior filed tax return prior to it being processed.
TAA024	The solution must allow a taxpayer to file a return prior to the due date.
TAA025	The solution must allow early filing and scheduling of a payment for a specified due date.
TAA026	The solution must include wizard type functionality for new users filing a return for the first time.
TAA027	The solution must provide the ability for the taxpayer to customize the tax return and retain customization based on their logon id/user profile.

Req. #	Description
TAA028	The solution must process Journal Voucher transactions for e-file accounts with ability to move tax returns to other accounts.
TAA029	The solution must include validations for identification of errors, warnings and information messages.
TAA030	The solution must reduce errors (EOB) through tax return validation.
TAA031	The solution must allow multiple users the ability to perform work on the same taxpayer account at one time.
TAA032	The solution must include a consolidated workflow management system to support all work (e.g., EOB, secure messaging, IDOCS).
TAA033	The solution must assign precedence/hierarchy of system validations.
TAA034	The solution must be flexible and stable.
TAA035	The solution must identify anything outstanding on that taxpayer return.
TAA036	The solution must save taxpayer information while in process so the taxpayer may come back to continue with the tax return prior to submitting.
TAA037	The solution must include the allowance for doubtful accounts to determine the discount rate (e.g., what's active debt).
TAA038	The solution must send a corrected statement of account after an adjustment has been made to a taxpayer account.
TAA039	The solution must manage approval levels and hierarchies based on multiple criteria that are user configurable (e.g., returns, amount, documents, adjustments).
TAA040	The solution must automatically process Trust Fund Accounts within core tax and include "successorship" payment processing while maintaining an audit trail.
TAA041	The solution must support new Special Programs providing flexibility to support nuances of the special program (e.g., caps, pro rate).
TAA042	The solution must track and maintain special credits for taxpayers.
TAA043	The solution must provide drill down capabilities that are better than the current core tax system capabilities.
TAA044	The solution must provide information that is available real time.
TAA045	The solution must support the fed wire process with the ability to reverse the fed wire transaction.
TAA046	The solution must process fees and taxes.
TAA047	The solution must accurately calculate funding for state accounts and dedicated funds.
TAA048	The solution must be tightly coupled to remove overnight batches.
TAA049	The solution must automate account reconciliation.
TAA050	The solution must automatically calculate interest.
TAA051	The solution must automatically create detailed account reconciliation and provide ability to send to the taxpayer.
TAA052	The solution must allow users to pull a paper check refund.
TAA053	The solution must apply payments at issuance of an assessment and provide the ability to correct payments.
TAA054	The solution must support automated billing and refund processing.
TAA055	The solution must match AFRS with refund reason codes.
TAA056	The solution must roll multiple invoices into a refund.
TAA057	The solution must automatically perform short pay calculations including penalty brackets.
TAA058	The solution must create, manage and track all compliance assessments including Trust Fund Assessments.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Req. #	Description
TAA059	The solution must allow payments to be moved from one tax period to another without requiring payments to be deleted and re-posted.
TAA060	The solution must automate the write-off process with an audit trail to see who wrote it off and the date.
TAA061	The solution must calculate and apply tax rates for multiple counties and multiple tax types.
TAA062	The solution must have the ability to cancel warrant payments.
TAA063	The solution must have the ability to rescind actions performed.
TAA064	The solution must include drill down capability for detailed period tax type level financial details (would require a pay down structure to support).
TAA065	The solution must process transactions and view information with the least amount of "clicks" required to complete the process.
TAA066	The solution must include the ability to prepare supplemental warrants.
TAA067	The solution must include the ability to write off debt.
TAA068	
Technical	
TECH001	The solution must support mobile applications and functions (with adequate security).
TECH002	The solution must include a technology-neutral business and information architecture or otherwise meet DOR standards.
TECH003	The solution must include clearly defined set of descriptive models/documentation for user profiles and use cases for testing/training.
TECH004	The solution must be developed in either a multi-tiered or Service Oriented Architecture model.
TECH005	The solution must include definition of phased approach including development, testing and release schedules that integrate with DOR Operating cycles.
TECH006	The solution must include architecture description and definition necessary to support DOR's efforts to manage cost, risk, flexibility and quality of change.
TECH007	The solution must reduce or eliminate technology platforms, multiple development approaches, testing approaches, release strategies, and versioning.
TECH008	The solution must include separate Development, Test and Production environments for all application areas.
TECH009	The solution must include complete architecture reference material including but not limited to system documentation, training materials, and configuration.
TECH010	The solution must deploy reusable modules or services for common functions that exposed to different business areas or even other agencies.
TECH011	The solution must deploy real-time processing of Core Tax events.
TECH012	The solution must document and provide for the scalability to support necessary levels of performance needed for new tax types.
TECH013	The solution must be flexible, scalable, and extensible.
TECH014	The solution must support other non-Core Tax systems/Apps.
TECH015	The solution must be configurable and capable of supporting new legislation.
TECH016	The solution must establish a disaster recovery and business resumption strategy based on the new solution.
TECH017	The solution must include a business rules discovery and documentation strategy. (May require a lean or process reengineering effort).
TECH018	The solution must include business rules management capabilities.

Req. #	Description
TECH019	The solution must include user configurable and/or table-based management of tax related law, policy, and rules.
TECH020	The solution must include a centralized business rule repository.
TECH021	The solution must provide user/business configurable thresholds that change runtime processing and workflow.
TECH022	The solution must include Organizational Design/Change Management as part of the Core Tax Replacement project or effort, that involves release, customer expectations, IS expectations, and application support.
TECH023	The solution must establish enterprise governance for all aspects of business, information, technology and organization change during the CTRS project and beyond.
TECH024	The solution must allow user configurability workflows and process development.
TECH025	The solution must support infrastructure refresh cycles.
TECH026	The solution must include technology lifecycle management aligned with project phasing.
TECH027	The solution must support development, deployment and reconfiguration with minimal interruption to operations.
TECH028	The solution must allow users to maintain and manage correspondence.
TECH029	The solution must include the hardware and software for a centralized data repository.
TECH030	The solution must optimize external data utilization for quality and completeness.
TECH031	The solution must provide and execute a legacy system data migration strategy and implementation plan.
TECH032	The solution must define a comprehensive data management strategy, conceptual data model and logical data model aimed at balancing data access, performance, replication, and duplication.
TECH033	The solution must capture relevant data with increased quality and completeness.
TECH034	The solution must create a comprehensive set of data services optimizing access and data security.
TECH035	The solution must minimize or eliminate the need for MS Access databases.
TECH036	The solution must provide data services for common data.
TECH037	The solution must expose metadata to business users.
TECH038	The solution must include the adopted department standards for database management solutions.
TECH039	The solution must support data exchange and interfaces with the new state wide "My Account".
TECH040	The solution must deploy data exchange and interface standards for interaction with external systems.
TECH041	The solution must provide the capability for ad hoc reporting.
TECH042	The solution must allow business users to create and manage their own reports.
TECH043	The solution must work with or improve DOR network security (logical separation).
TECH044	The solution must deploy open security standards to enable secure data exchange with others including the 5-city portal, other state agencies, city partners, etc.
TECH045	The solution must include data security for sensitive and confidential data during processing, transit and at-rest.
TECH046	The solution must include user access/role based security.
TECH047	The solution must include an integrated security solution with documentation.
TECH048	The solution must include best practices and industry trends in imaging and data capture, workflow management, business rules management, service deployment and management, business intelligence, performance and activity monitoring, information exchange, web management, and mobility support.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

<i>Req. #</i>	<i>Description</i>
TECH049	The solution must include best practices and industry trends in imaging and data capture, workflow management, business rules management, service deployment and management, business intelligence, performance and activity monitoring, information exchange, web management, and mobility support.
TECH050	The solution must include modern Graphical User Interfaces (GUI) with standard browser based GUI capabilities.
TECH051	The solution must include testing (regression) strategy, plan and documentation.
TECH052	The solution must include a comprehensive training program for a modern development organization including but not limited to: platform certification, development tools exposure, testing methodology, and lifecycle management.
TECH053	The solution must include knowledge transfer, practical training and experience for DOR staff.
TECH054	The solution must include clearly defined and documented support services.
TECH055	The solution must include necessary user training modules and materials in digital format.
TECH056	The solution must include training infrastructure for optimal staff education.
TECH057	The solution must include Business Process Management tools and capabilities for measurable, manageable and configurable workflow of manual and automated processing.
TECH058	The solution must define the department standard for business process management technology, documentation, skills and process development for entire department.

BLS System Replacement Study	Version: 2.0
High-Level Requirements	Date: 12/13/2013

Appendix A – Requirements Traceability Matrix



CTSR Requirements
Traceability Matrix v (