

ORIGINAL



**Technical Proposal**

**Subject - Remittance Processing System**

**Response to Solicitation Number - CRFP 0702 TAX1700000001**

**Vendor's Name – J&B Software, Inc., a TransCentra company which is a wholly-owned subsidiary of SourceHOV, LLC**

**Business Address - 4855 Peachtree Industrial Blvd,  
Norcross, GA 30092**

**Vendor's Telephone Number - 678-728-2521**

**Name of Contact Person – Michael Smith**

**Contact Telephone Number - 606.309.6855**

**Contact E-mail address – [mike.smith@sourcehov.com](mailto:mike.smith@sourcehov.com)**

**Authorized Vendor Signature -**

  
W. Todd Shiver, EVP

**Date - April 19, 2017**

Prepared for:

The State of West Virginia, Department of Revenue

**Provided for:**

**Michelle L Childers**

**Bid Clerk**

**Department of Administration**

**Purchasing Division**

**2019 Washington Street East**

**Charleston, WV 25305**

**304.558.2063**

**[michelle.l.childers@wv.gov](mailto:michelle.l.childers@wv.gov)**

04/19/17 09:05:10

WV Purchasing Division

ORIGINAL



# TransCentra

## Technical Proposal

**Subject** - Remittance Processing System

**Response to Solicitation Number** - CRFP 0702 TAX1700000001

**Vendor's Name** – J&B Software, Inc., a TransCentra company which is a wholly-owned subsidiary of SourceHOV, LLC

**Business Address** - 4855 Peachtree Industrial Blvd,  
Norcross, GA 30092

**Vendor's Telephone Number** - 678-728-2521

**Name of Contact Person** – Michael Smith

**Contact Telephone Number** - 606.309.6855

**Contact E-mail address** – [mike.smith@sourcehov.com](mailto:mike.smith@sourcehov.com)

**Authorized Vendor Signature** -

  
W. Todd Shiver, EVP

**Date** - April 19, 2017

Prepared for:

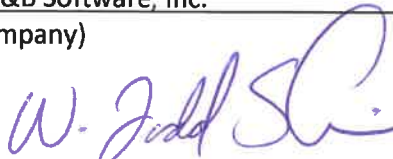
The State of West Virginia, Department of Revenue

**Provided for:**

Michelle L Childers  
Bid Clerk  
Department of Administration  
Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305  
304.558.2063  
[michelle.l.childers@wv.gov](mailto:michelle.l.childers@wv.gov)

By signing below, I certify that have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual-relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

J&B Software, Inc.  
(Company)

  
W. Todd Shiver, Executive Vice President

(Representative Name, Title)

678-728-2521

(Contact Phone/Fax Number)

April 11, 2017  
(Date)

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Michael H. Smith, SR. Director  
(Name, Title)

[Signature]  
(Printed Name and Title)

102 London Shopping Center London, Ky 40741  
(Address)

606-309-6855  
(Phone Number) / (Fax Number)

Mike.Smith@SourceHOV.com  
(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

J&B Software, Inc.

J&B Software, Inc.  
(Company)

[Signature]  
(Authorized Signature) (Representative Name, Title)

W. Todd Shiver, EVP

W. Todd Shiver, EVP  
(Printed Name and Title of Authorized Representative)

04/12/17  
(Date)

678-728-2521  
(Phone Number) (Fax Number)



April 19, 2017

Michelle L. Childers  
Bid Clerk  
Department of Administration  
Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305

Re: Response to Solicitation No. CRFP 0702 TAX1700000001, Remittance Processing System

Dear Ms. Childers:

TransCentra\*, a [SourceHOV company](#), is pleased to present our proposal to the State of West Virginia, Department of Revenue (the Department). We appreciated the opportunity to attend the pre-bid conference held on March 7, 2017 to learn more about this opportunity (note that our attendee, representing TransCentra, signed in under the SourceHOV company name).

Our proposed solution not only meets the Department's requirements of replacing its outdated IBM IFP system, antiquated IBML scanners, and NCR encoders – the proposed TransCentra solution also supports the Department's overarching goals of fewer sorts, comingling of batches, improved document and data recognition, automation of remittance processing, improved data recognition, replacement of obsolete hardware, and the overall goal of a successful implementation. As the Department conducts its evaluation, we are certain that it will take note of:

- The extensive high-volume tax and lockbox processing expertise offered by TransCentra;
- Our outstanding reputation with our current Revenue clients (references provided);
- The extensive experience, proven capabilities, and wide resource bandwidth we offer;
- The risk mitigation and business continuity capabilities we can provide;
- A solution used by the largest Departments of Revenue;
- A turnkey solution that does not use third party scanners;
- Our partnership approach to support; and
- That those attributes set us apart from other competitors in this initiative.

To provide expedited communications between the Department and TransCentra, Mike Smith, Senior Director – Public Sector, will serve as the Department's primary point of contact during the procurement process. He can provide clarification of any of our proposal responses or any additional information required by the Department. Mr. Smith's contact information is listed below:

Mike Smith  
Senior Director – Public Sector  
606.309.6855  
[Mike.Smith@sourcehov.com](mailto:Mike.Smith@sourcehov.com)

TransCentra looks forward to a favorable review of our proposed solution and stands ready to deliver exceptional services to the Department upon award of contract. Thank you for your consideration, and we ask that you honor us with your business.

Regards,

A handwritten signature in black ink, appearing to read 'Arjun Reddy', with a horizontal line extending from the end of the signature.

Arjun Reddy  
Senior Vice President, Public Sector  
TransCentra, a SourceHOV company

*\*TransCentra is contracting under its wholly-owned subsidiary J&B Software, Inc.*

# Table of Contents

Executive Summary.....	1
Attachment A – TransCentra Response Sheet.....	9
Section 4, Subsection 3.1 .....	9
Section 4, Subsection 4.1 .....	43
Section 4, Subsection 4.2 .....	44
Section 4, Subsection 4.3 .....	45
Section 4, Subsection 4.4 .....	47
Section 4, Subsection 4.5 .....	52
Section 4, Subsection 4.6 .....	66
Section 4, Subsection 4.7 .....	71
Section 4, Subsection 4.8 .....	85
Section 4, Subsection 4.9 .....	90
Section 4, Subsection 4.10 .....	97
Section 4, Subsection 4.11 .....	101
Section 4, Subsection 4.12 .....	105
Section 4, Subsection 4.13 .....	112
Section 4, Subsection 4.14 .....	114
Section 4, Subsection 4.15 .....	116
Section 4, Subsection 4.16 .....	128
Section 4, Subsection 4.17 .....	128
Attachment B - Mandatory Specification Checklist.....	141
Section 5, Subsection 5.1 .....	141
Section 5, Subsection 5.2 .....	142
Resident Vendor Preference Certificate .....	147
Addendum Acknowledgment Form.....	148
Purchasing Affidavit .....	150

# Executive Summary

## Introduction

Continually seeking to improve the quality of service its employees provide to taxpayers, the West Virginia Department of Revenue (the Department) is committed to providing the highest standards of service to the agencies and citizens of West Virginia. By setting the standard for efficiency, effectiveness, and service in tax and revenue administration, the Department consistently seeks opportunities to implement continuous improvement efforts, reduce costs, and, above all, make filing and application processes easier for West Virginia taxpayers.

TransCentra is committed to working closely with the Department to achieve a proven processing model that reduces taxpayer refund waiting time, improves cycle time and cash float, decreases the potential for tax fraud, and provides very high quality and accountability at the lowest possible costs to the State.

Through our combined corporate divisions that include BancTec and SourceHOV, we offer the Department cohesive solutions that encompass all remittance processing components: systems and support, hardware and software, BPO support, and integrated solutions.

1. TransCentra provides complete turnkey front end software and Software-as-a-Service (SaaS) products that work seamlessly with the of majority ERP and treasury systems, including core payment processing platforms, AR matching, and electronic content management.
2. BancTec provides lockbox solutions and is one of the nation's two manufacturers and resellers of IntelliScan scanning technology for high-speed, high-volume, multi-application document processing.
3. SourceHOV provides end-to-end tax form processing, including mailroom, scanning, data capture, lockbox, and fraud detection – our tax platform is presently in use by more than 50% of the states that outsource.

Our clients look to TransCentra to be innovative, develop new processing methods, and to provide new products and applications that address the specific needs and challenges they meet every day.

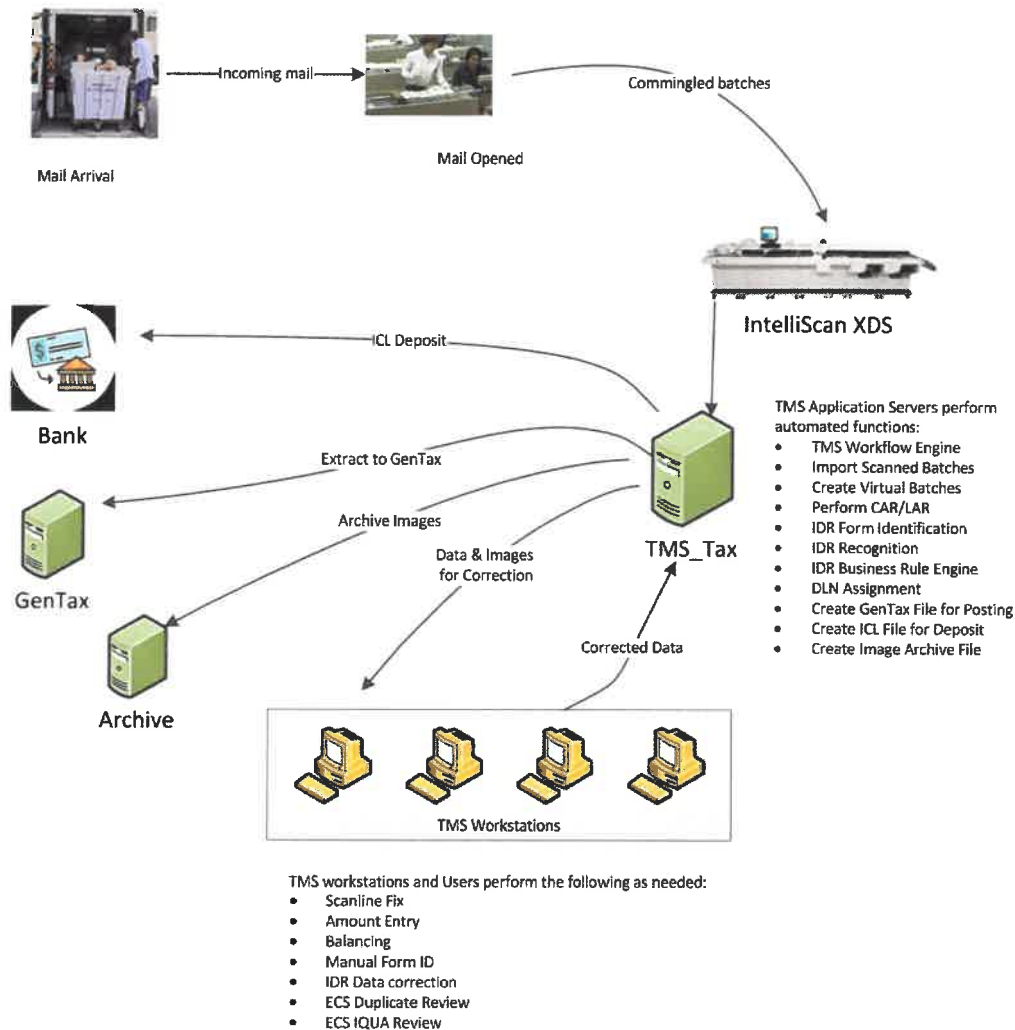
This extensive experience and expertise is unmatched in the outsourcing industry. And equally importantly, TransCentra offers a single support and accountability model. While IBML subcontracts many sites, our field service is supported by our own direct badged employees. By not relying on third parties, the Department will benefit from *a single source contract* through seamless integration, enhanced operational accountability, direct and centralized communication, and no 'finger pointing' between multiple vendors. Offering the industry's only turnkey solution, we can guarantee the highest levels of customer service and support. Our team will always be ready to assist and respond to the Department's needs – from implementation to ongoing support.

## Proposed Solution: TransCentra's Transaction Management System for Tax (TMS\_TAX)

TMS\_TAX incorporates speed, efficiency, and fraud prevention into a single platform for the most effective tax form processing system on the market. Used by states and municipalities around the country, TMS\_TAX greatly improves results while shortening time to market, minimizing exceptions and reducing support and management requirements.



The processing of payments and returns starts at receipt of the Department's mail. To optimize overall throughput, various opening, prepping, and scanning methodologies are employed, matching the solution with the requirement. From there TMS\_TAX takes over the balance of the processing. Import stagers take data and images from various scanning devices and bring them into the TMS\_TAX database where form identification and subsequent virtual batching, workflow management, data capture, data completion, and exception handling take place.

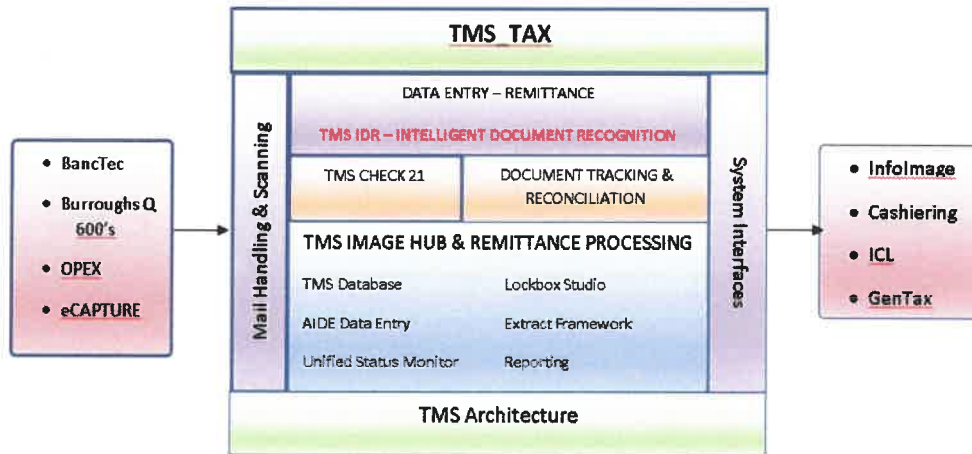


TMS\_TAX is comprised of the following main components.

1. **Document Scanning, Remittance, and Posting.** TMS\_TAX supports image scanning on a wide variety of scanning devices. For the Department, we recommend the use of TransCentra's (BancTec) newest high speed scanner for tax return transactions (vouchers, checks, tax returns, W-2s, and correspondence). The inherent features in the Lockbox Studio and Extract Framework provide all the flexibility that the Department requires to add new clients, remittance workflows, data extracts, and image exports.
2. **Electronic Clearing.** TMS\_TAX's Electronic Clearing Suite (ECS) module provides full image quality analysis (IQA) and duplicate check detection. The system is currently feeding an ICL file to

national banks but can readily accommodate any other bank should the Department change banking relationships.

3. Forms Development and Intelligent Document Recognition (IDR). This platform is unparalleled in its ability to accommodate the addition of new documents and application types. It is an innovative solution that captures, recognizes, understands, and intelligently classifies and routes all information entering the Department’s enterprise from structured, semi-structured, and unstructured documents. This ensures that information is handled efficiently, accurately and in a timely manner, and without the need to pre-sort.



TMS\_TAX fully addresses all Department stated goals. Some examples are provided below.

Department Goals	How TMS_TAX Meets the Department’s Goal
Streamline document sorting, document preparation, and batching	<p>TMS_TAX captures, recognizes, understands, and intelligently classifies and routes all data from structured, semi-structured, and unstructured documents. It also provides the ability to commingle tax types which significantly reduces the sorting, preparation, and batching of work prior to capture.</p> <ul style="list-style-type: none"> <li>▪ Tax types can be scanned together in a single job, eliminating the need to sort the returns prior to scanning.</li> <li>▪ There is no need to develop scanner jobs for different tax types, for different years or for timely versus untimely returns.</li> </ul> <p>This reduces the prep time and also eliminates interruptions at the scanner for stopping and starting jobs, ensuring maximum scanner throughput.</p> <p>Also, because checks can be scanned inline with returns, efficiency is increased because of the reduction of physical check handling.</p>

Department Goals	How TMS_TAX Meets the Department's Goal
<p>Improve document and data recognition</p>	<p>TMS_TAX incorporates image capture, enhancement, separation, OCR, form identification and export packager. Optimized for speed, critical bottlenecks are tuned in assembly for best performance.</p> <p>TMS_TAX's auto learning process continuously improves system recognition without having to actually change the original template that was created. If the data that should be specified in a field can be found on the form page, it is possible to highlight it and eliminate the need for keying. This action has two results: (a) it populates the field and (b) creates an ROI (rectangular region of interest) that is now associated with the field, to be used to improve future processing.</p>
<p>Maximize productivity</p>	<p>The scanners proposed by TransCentra provide very high throughput, with speeds 13% faster than IBML. This translates to, for example, 13,000 taxpayer returns ready a day earlier during peak season when 100,000 returns could be received in one day.</p>
<p>Automate the deposit process</p>	<p>TMS_TAX allows for electronic (and paper) clearing of checks via ACH and Image Exchange. The Electronic Clearing Engine is an intelligent decision engine used to determine the most efficient (fastest and cheapest) clearing mechanism for each check. The advantages of TMS_TAX Check 21 include:</p> <ul style="list-style-type: none"> <li>▪ Improves operational efficiency</li> <li>▪ Lowers deposit fees and other per-item costs</li> <li>▪ Improves funds availability</li> <li>▪ Facilitates image check truncation as recommended by Check 21 Act</li> <li>▪ Processes check images</li> <li>▪ Incorporates multiple clearing endpoints through a decision engine</li> <li>▪ Stores images from multiple sites</li> </ul>
<p>Increase web based access and report functionality; minimize user intervention; increase on-the-fly change capabilities</p>	<p>TMS_TAX provides web-based monitoring of work volumes, along with batch statuses, across multiple suite modules for a specified processing date. In addition to real-time monitoring and reporting, the Department is able to design reports through SQL Server Reporting Services.</p>
<p>System security with an updated audit process</p>	<p>TMS_TAX meets the Federal Information Processing Standards (FIPS) by using the appropriate hashing algorithms (SHA1 or SHA2). In addition, it is reviewed with STIGs (Security Technical Implementation Guides) standards as required by some of the public sector installs. Many of the STIGs checks (the checks we have reviewed so far are Application security and development, .NET, MSSQL 2012, Windows 2012) require extensive audit</p>

Department Goals	How TMS_TAX Meets the Department's Goal
	process.
Full implementation and training	<p>The Solution Engineering group responsible for the Department's implementation combines the best people and technology available to the industry that specializes in payment solutions, and more specifically tax processing. As a result of implementations for our direct clients and our financial industry partners, we have extensive experience and resources that will be used to ensure the Department's solution is a success.</p> <p>A critical component in the implementation is a comprehensive training plan. TransCentra will work with the Department to develop the requisite learner-centered participant training materials for the software, server, and scanning functionality along with TMS_TAX. The formal classroom training is outlined in the training agendas and will be augmented with on-the-job processes.</p>
Upgrade remittance processing software; improve check recognition	TMS_TAX eliminates the use of NCR encoders/check transports streamlining the check processes, improving cash float and reducing labor efforts.
Improve document recognition and data extraction capabilities	TMS_TAX's sophisticated data recognition and integrated business rules include many unique features. Importantly, TMS_TAX employs multiple ICR engines and voting. Competitors suggest they use multiple engines but they mean multiple different data types – OCR, ICR, and OMR. Included in the TransCentra solution are truly multiple ICR engines. TMS_TAX is the most advanced and complete application for semi-structured documents available today.
Perform all initial new application setup	TMS_TAX has been successfully implemented with multiple tax agencies throughout the United States. Our solution will include setting up the solution and year one of tax returns/schedules. We will comply with the Department's three-phase approach.
Immediate response to support and maintenance requests	<p>TMS_TAX is based upon an integration of proven applications. Because we are delivering an integrated solution for the Department, throughout the project and ongoing support period, TransCentra is positioned to provide the Department with the advantage of a single point of contact for its support needs. A single phone call is required to notify the responsible resource at TransCentra of the Department's requirements, whether that is an emergency software problem, the need for operational assistance, or software enhancement consultation. This will position the Department and TransCentra to build a long-standing relationship.</p> <p>Notably, we are the only vendor that can provide all of the key</p>

Department Goals	How TMS_TAX Meets the Department's Goal
	<p>solution components with our own products. This includes the TMS_TAX solution, payments systems professional services, and the Intelliscan document scanners. We are responsible for the entire Department proposed solution and have direct control of these key components.</p> <p>Unlike others in the industry, TransCentra can commit to long term support for the Department. For example, IBML may run a product for three to five years, then release a new model to generate sales. Over time, equipment becomes obsolete and support is discontinued. Alternatively, we are able to guarantee support on Department purchases for the foreseeable future.</p>
A platform built on a SQL database	<p>With Microsoft SQL Server as the database, TMS_TAX uses the latest features available in SQL Server that allows for scaling up or scaling out. The architecture of TMS_TAX in general is highly modular; functional modules can be added whenever there is a need for the application to process much higher volumes and/or add more users to the system. The database used by TMS_TAX has been designed and tuned to handle high volumes at optimal performance.</p> <p>Functional modules can be added to process additional volumes and new forms. TMS_TAX is running at multiple client sites for processing structured forms (Individual, Corporate, Sales and Use), semi-structured forms (1099s and W2s), and unstructured forms (correspondence), with volumes as low as 1,000 daily transactions to as high as 100,000 transactions per day.</p>
Interface with WVOASIS and allow for implementation of Check21	<p>As required, during due diligence, we will work with the Department to understand filing name conventions, connections, and formats in order to implement our solution. TMS_TAX is currently integrated with GenTax/Fast Enterprise in numerous Departments of Revenue/tax agencies. TMS_TAX can create the posting file to the Department's tax host system in the format required. The file will be created in a shared location for pickup by the host system. The file can be created multiple times per day as needed by the host system.</p>
Enhanced workflow	<p>TMS_TAX is highly configurable and will allow the Department to extend the system to meet its specific processing needs and address any year-over-year changes to tax forms, introduction of new tax types, or changes in business rules. There are three components in the designer toolkit:</p> <ul style="list-style-type: none"> <li>▪ Workflow Designer – defines the routing rules for the various tax forms. In case of failed validations the returns can be routed to a knowledge worker queue. The tasks can be defined by the skill level of the person.</li> </ul>

Department Goals	How TMS_TAX Meets the Department's Goal
	<p>Bad transactions can be routed through different flows to allow for rebuilding of transactions virtually, if desired, rather than having to rescan documents.</p> <ul style="list-style-type: none"> <li>▪ Visual Designer – defines the fields to be captured with the parameters and business rules for each of them using simple tools. Identifies the location of the fields and the data entry view</li> <li>▪ Engine Designer – setup individual engines with different confidence thresholds for each of the fields and also defines voting algorithms to derive the most accurate results.</li> </ul>
<p>Remote capabilities for balancing, keying, deposit, and system administration</p>	<p>TransCentra offers the only solution developed and currently deployed in the Hub and Spoke architecture. TMS_TAX is the solution most specifically designed to meet the distributed processing requirements set forth in this RFP. The Hub and Spoke architecture is proven in high volume, high-speed scanning environments.</p> <p>As required, web access can be extended to additional field or taxpayer service locations to support State compliance and remote data capture solutions, thus supporting the growing requirement for “any time, any place and anywhere” processing.</p>
<p>The Department desires all management tools necessary to administer the system daily and make necessary changes, stats, reports, etc. Please explain how your solution will meet this goal.</p>	<p>TMS_TAX supports not only the needs currently stated by the Department, but can also handle additional volumes and future tax/form types. The Department can operate as independently as desired to add new forms and modify business rules and workflows.</p>

### About TransCentra

With a history of innovation, TransCentra is a recognized leader in the remittance market and the public sector market.

Offering more than 30 years' experience in complex high-speed image processing solutions, TransCentra has one of the largest installed bases with 100 clients processing more than 2 billion checks per year and hundreds of millions of tax returns and related documents. In addition to our state tax agency and treasury department clients, TransCentra has implemented payment processing solutions for three out of the four service providers for the Internal Revenue Service.

Our clients look to TransCentra to be innovative, develop new processing methods, and to provide new products and applications that address the specific needs and challenges they meet every day. Some examples include:

- The first implementation of commingled workflow and virtual batching to reduce sorting and prepping
- The first remote capture solution for field office and in-field collector deposits

- The first solution to address W2 fraud through complex artificial intelligence, machine learning, and electronic separation

And TransCentra continues to make major investments in base applications, new technologies, internet/intranet, host interface, and system integration strategies. Our portfolio management is a dynamic decision process, whereby our business's list of active new product (and R&D) projects is constantly updated and revised. Our portfolio management process is driven by evolving client needs, dynamic opportunities, multiple goals and strategic considerations, interdependence among projects, and multiple decision makers and locations.

Collaborating closely with both our clients and industry experts, we deliver innovation-driven and transformational solutions; across our corporate entities we hold 20 patents and 91 registered trademarks. TransCentra offers the Department carefully architected platforms and solutions, supported by a focused team of IT professionals featuring the most specifically talented resources in our organization, to ensure continuous improvement of business performance and compliance.

### **Conclusion**

In summary, we take this opportunity to reiterate the factors that the Department should consider when making its selection for its vendor-partner include:

- TMS\_TAX delivers a proven solution used by state Departments of Revenue in New York, Indiana, and Idaho, to name a few.
- TMS\_TAX is a complete application developed specifically to address the needs of the Department of Revenue, which includes commingled workflow, virtual batching, tax-specific business rules engine and workflows, returns and W2/1099 data capture, and data completion.
- TransCentra is an early adopter or "first to market" with specialized software and hardware interfaces that benefit our clients.
- TransCentra's projects for other Departments of Revenue and taxation agencies have been delivered on-time and on-budget.
- TransCentra provides the best opportunity for an accelerated system implementation by leveraging the TMS\_TAX system.
- TMS\_TAX provides the industry's only true "turnkey solution"

TransCentra understands tax return processing and the Department's expectations for delivery, implementation, and production. We are committed to providing the Department with an end-to-end, seamless solution through our single supplier model.

## Attachment A – TransCentra Response Sheet

*Within the attached response sheet (Attachment A: Vendor Response Sheet), provide the following: firm and staff qualifications and experience in completing similar projects; references; copies of any staff certifications or degrees applicable to this project; proposed staffing plan; descriptions of past projects completed entailing the location of the project, project manager name and contact information, type of project, and what the project goals and objectives were and how they were met.*

*Also, describe the approach and methodology proposed for this project. This should include how each of the goals and objectives listed is to be met.*

### Section 4, Subsection 3.1

#### 3.1. Project Experience and References:

*3.1.1. Vendor should explain their Experience with the implementation of remittance software for tax operations.*

Through our combined corporate divisions that include BancTec and SourceHOV, we offer the Department cohesive solutions that encompass all remittance processing components: systems and support, hardware and software, BPO support, and integrated solutions.

- TransCentra provides complete turnkey front end software and Software-as-a-Service (SaaS) products that work seamlessly with the of majority ERP and treasury systems, including core payment processing platforms, AR matching, and electronic content management.
- BancTec provides lockbox solutions and is one of the nation’s two manufacturers and resellers of IntelliScan scanning technology for high-speed, high-volume, multi-application document processing.
- SourceHOV provides end-to-end tax form processing, including mailroom, scanning, data capture, lockbox, and fraud detection – our tax platform is presently in use by more than 50% of the states that outsource.

The charts on the following pages identify a sampling of the types of solutions provided by TransCentra and our divisions, as well as the program components being utilized by each agency.



**TransCentra SaaS/Front End Software Solutions**

	Idaho	IL SOS	IN	MO	NY	PA	Bank of America IRS	US Bank - IRS	JPMC - IRS	Northrop Grumman IRS
Contract Inception	2000	2000	2008	2000	2013	2000	2007	2011	1999	2007
Departments of Revenue Services Provided										
Taxpayer Table Lookups	✓		✓	✓	✓	✓	✓	✓	✓	✓
Fraud/Abuse Detection			✓							
Mailroom										
Scanning	✓		✓		✓		✓	✓	✓	✓
Return Coding			✓							
OCR/ICR	✓		✓	✓	✓		✓	✓	✓	✓
Return Entry	✓		✓		✓		✓	✓	✓	✓
Return Validation	✓		✓	✓	✓		✓	✓	✓	✓
Image Hosting/Repository				✓			✓	✓		✓
Lockbox/Remittance/Check21		✓		✓	✓	✓	✓	✓	✓	✓
Document Destruction						✓				
Warehousing (temporary)						✓				
Warehousing (long-term)										
Web Portals						✓				
Outbound Correspondence					✓					
Invoicing					✓					
Refund Checks					✓					
Types of Forms Processed										
Individual Income Tax	✓		✓	✓	✓		✓			
Corporate Tax	✓		✓	✓	✓	✓	✓			

	Idaho	IL SOS	IN	MO	NY	PA	Bank of America IRS	US Bank - IRS	JPMC - IRS	Northrop Grumman IRS
Withholding Tax	✓		✓	✓			✓			
Sales and Use Tax	✓		✓	✓	✓		✓			
Motor Vehicle		✓								
Motor Vehicle Title Registration		✓								
Crash Records/Accident Reports										
Other Misc. Taxes	✓		✓	✓	✓	✓	✓	✓	✓	✓

### BancTec Lockbox and Hardware Installations

	NC	WI	VT	DC Government	IRS	Canadian Revenue Authority
Individual Income Tax	✓	✓		✓	✓	✓
Corporate Tax	✓	✓		✓	✓	✓
Withholding Tax	✓	✓		✓	✓	✓
Sales and Use Tax	✓	✓		✓	✓	✓
Motor Vehicle	✓	✓		✓	✓	✓
Motor Vehicle Title Registration	✓			✓	✓	✓
Misc. Documents	✓	✓	✓	✓	✓	✓

### SourceHOV Traditional BPO Services

	KY	AR	SC	AL	AZ	NYC	NJ
Contract Inception	1998	2000	2008	2000	1998	2013	2014
Departments of Revenue Services Provided							
Taxpayer Table Lookups	✓	✓	✓	✓		✓	
Fraud/Abuse Detection	✓	✓	✓				
Mailroom	✓	✓	✓	✓		✓	✓
Scanning	✓	✓	✓	✓		✓	
Return Coding	✓	✓	✓	✓		✓	✓
OCR/ICR	✓	✓	✓	✓		✓	
Return Entry	✓	✓	✓	✓		✓	
Return Validation	✓	✓	✓	✓		✓	✓
Image Hosting/Repository	✓	✓	✓	✓			
Lockbox/Remittance Processing/Check 21			✓	✓			
Document Destruction		✓	✓	✓		✓	✓
Warehousing (temporary)	✓	✓	✓	✓		✓	✓
Warehousing (long-term)	✓	✓					
Web Portals / E-file Solutions	✓			✓		✓	✓
Outbound Correspondence					✓		
Invoicing					✓		
Refund Checks					✓		
Types of Forms Processed							
Individual Income Tax	✓	✓	✓	✓			✓
Corporate Tax	✓	✓	✓	✓		✓	✓

	KY	AR	SC	AL	AZ	NYC	NJ
Withholding Tax	✓	✓	✓	✓			✓
Sales and Use Tax	✓	✓		✓			✓
Motor Vehicle				✓			✓
Motor Vehicle Title Registration				✓			✓
Crash Records/Accident Reports		✓					
Other Misc. Taxes	✓	✓	✓	✓	✓	✓	✓

**3.1.2. Vendor should explain the Project management tasks including scheduling activities and resources, risk management, quality control, contingency planning, and issue management.**

**Project Plan Development**

TransCentra will develop a full project plan that contains major tasks, deliverables, and milestones, along with corresponding target completion dates, for every stage of this project; supplemental tasks and sub-tasks will be added as necessary to completely describe the level and duration of the effort required. This framework will be distributed to all team members and serve as the structure for full implementation. The project plan is updated as tasks are completed, added, or modified. TransCentra understands the impact that issues can have on a smooth flowing implementation, and we spend a significant amount of time determining the sequence of tasks required for implementation and providing a reasonable duration for their completion. In managing the project, we will monitor the project plan to determine the timeliness of milestones and deliverables, and make any adjustments necessary to ensure critical path items are kept on schedule.

The project schedule will be centered on meeting the Department’s cost, timetable, and quality needs. Working closely with the Department, both parties agree upon the plan and all of its components before the official kick-off of the implementation activities.

**Implementation Management Roles and Responsibilities**

*TransCentra Project Manager*

The TransCentra Project Manager will serve as the single point of contact for the Department and perform the following tasks:

1. Ensure that all TransCentra-related deliverables are provided as per the mutually agreed-to project schedule
2. Manage all requests for project deliverables, system solution clarifications/changes
3. Accept and deliver requested system solution changes (processed through formal change control management)
4. Organize, coordinate, and manage all aspects of the implementation
5. Participate in all critical meetings discussing business needs, system requirements and implementation

6. Conduct the kickoff meeting where project approach, deliverables, milestones, team member responsibilities, contract commitments and timeframes are thoroughly discussed with the Department
7. Direct all TransCentra efforts on the project and ensure that project obligations are met:
  - Monitor project activities for compliance and quality
  - Prepare and conduct project team and management review sessions
  - Manage change control along with the Department Project Manager
  - Review overall project status including Department deliverables on a periodic basis
  - Monitor performance of members of the project team
  - Monitor the project schedule and make updates to staffing and the schedule as needed
  - Manage project risk

#### *The Department Project Manager*

The Department will assign a Project Manager who, among other responsibilities, will ensure that all Department-related deliverables are provided as per the mutually agreed-to project schedule. This individual will serve as the single point of contact for the TransCentra Project Manager. The Department's Project Manager should possess the authority to formally accept all project deliverables, provide system solution clarifications, request additional information from TransCentra, and request system solution changes.

#### **Communication**

TransCentra will plan and track all project activities and schedule forecasts, and communicate project status and planning information to the Department on a pre-established basis. Schedules will be reviewed on a regular basis and used as the baseline to measure our performance at scheduled project review meetings. An important part of our ability to produce superior deliverable work products in a timely manner, these reviews promote early problem identification, facilitate corrective actions without adversely impacting the project, and help to ensure a smooth-running project that meets all Department goals.

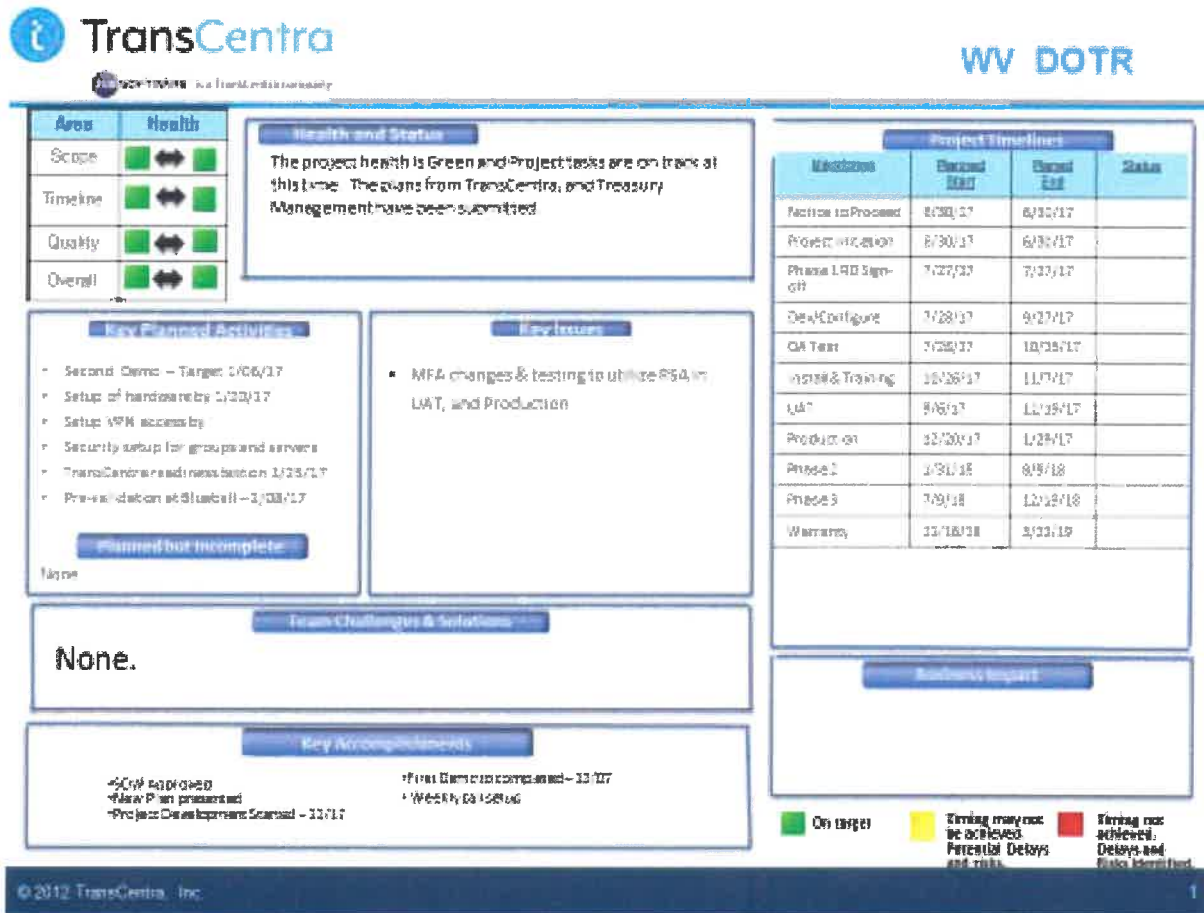
Our client advocacy program will ensure regularly scheduled meetings with the Department. We also conduct internal management meetings/calls to monitor progress, issues, and staffing items, along with complaints or issues, if any. These meetings serve to communicate status, changes in procedures/policies, performance review, staffing needs and ensuring that the project is successfully meeting overall Department goals. TransCentra will make extensive use of formally documented status/progress reports that are prepared prior to project meetings. This approach ensures that the Department remains constantly apprised of project schedule and budget, as well as any identified risks or issues to accurately assess project health.

- **Schedule:** comparison of project progress against the mutually agreed upon schedule, with a focus on milestones and deliverables
- **Budget:** identification and analysis of any out of scope requirements, and the costs of any out of scope modifications
- **Risks:** the identification of any risks and the status of mitigation and management plans
- **Issues:** the identification of any project-related issues and our approach to mitigation and management plans, as well as action item updates

## Project Steering Committee

Behind TransCentra's visible management structure resides the firm commitment of our corporate executive management to ensure that the means and mechanisms are in place for the successful execution of the TMS\_TAX solution. Given the importance we place upon this partnership with the Department, TransCentra will assemble a project steering committee to serve as the official governing body of this contract. This committee will direct attention to the project at a strategic level and ensure that our relationship receives the corporate visibility required to ensure project success.

The project steering committee members will consist of project managers, account managers, Department and TransCentra executive staff and senior managers. This team will meet at regular intervals during the project implementation. A dashboard will be distributed prior to each steering committee meeting, showing the project status at a glance. This dashboard is created by the TransCentra Project Manager with input from the Department Project Manager. A sample dashboard is shown below:



## Change Control Management

TransCentra adheres to a historically successful change control process for requesting and managing client changes to established project scope. We will implement a mutually agreed upon change control process with the Department during the planning phase of the implementation to provide adequate

balance between flexibility and scope management. A change request is defined as any material alteration to the project's scope, schedule, or budget after each is considered complete and/or has been baseline approved.

Changes are subject to a multi-layered submittal, review, completion, and approval process to reduce risk and increase quality. In addition, our change control process also facilitates communication about requested changes among project stakeholders, provides a common process for resolving requested changes and reported problems, and reduces the uncertainty around the existence, state, and outcome of requested work product changes. TransCentra's change management methodology includes multiple steps, including recordation, assessment (cost, benefit, and risk), approval, management and coordination of change implementation, monitoring and reporting on implementation, reviewing, and closing.

### **Risk Management and Contingency Planning**

TransCentra's risk management provides a mechanism to expose and address critical issues that could potentially jeopardize project success. It facilitates early detection of risk items, documents actions needed when a risk item is identified, and tracks each risk item to a final conclusion. Once a potential risk item is identified, the item is documented including its impact, probability and risk exposure values. This information is evaluated to determine if the item has sufficient risk to warrant the development of a mitigation approach or a contingency plan. All decisions are formally documented.

Prior to implementing any project, TransCentra evaluates and assesses any risks that could interfere with the provision of client solutions. Our implementation successes are predicated, in part, upon:

- The development of full risk assessments and mitigation strategies prior to the initiation of each project
- Our ability to leverage a shared knowledge base and 'lessons learned' on previous implementations
- The development of realistic project plans to ensure that timelines, milestones, and deliverables are met
- Technology-based monitoring of all project plans
- The selective deployment of resources possessing experience and expertise in the given arenas and industry verticals
- Task and schedule prioritization of project requirements to ensure all deadlines are met

TransCentra will use scope, time, and quality deviations as the Key Performance Indicators (KPI) to measure and monitor the Department's TMS\_TAX project. Risks are rated and monitored throughout the project cycle. The KPIs, risk assessment, and action plans to minimize the risks are tracked, recorded, and shared with all the stakeholders as part of both the project status report and the steering committee dashboard published by the TransCentra Project Manager. The objective is to manage these important KPIs proactively. A sample entry from a risk assessment is shown below:

Risk	Severity	Description	Mitigation/Avoidance Plan
Providing Fixes to the System Post User Acceptance Testing	High	Any changes to the system especially toward tax form validation rules will need to be scrutinized	<ul style="list-style-type: none"> <li>▪ Any changes will be reviewed and evaluated by both the client and TransCentra</li> <li>▪ Changes to stored procedures are preferable to any DLL changes</li> <li>▪ Back-out procedures and scripts are required for releases</li> </ul>

### Quality Management

TransCentra employs an iterative testing methodology to ensure that defects are caught early. It allows for incremental modular addition and testing. Testing starts with the base system and requires iterative testing as new modules are added. The objective is to discover as many defects as early as possible. Four separate types of testing are conducted: unit, integration, system and regression.

- Unit testing is done by the developer to verify the technical specifications of the high level and low level designs were implemented correctly.
- Integration testing is performed by the development team as an end to end test of normal scenarios that ensures that the integrated system is solid and has no obvious defects.
- The system test is performed by the independent QA team in an environment controlled by them that is completely separate from the development environment. It encompasses all aspects of the system solution, including the completeness of the release and the installation process.
- Regression testing is conducted at the conclusion of the project to confirm that the changes introduced by the project have not interfered with the pre-existing features and functionalities of the system.

Ideally, the regression scripts and test decks used by the Department and by TransCentra are similar or the same, with mutual sharing of both the test scenarios and test results. Additionally, root-cause analysis is performed by the QA team on issues that are reported during user acceptance testing, to ensure that any missing use cases are added to the regression deck, and any errors or omissions in test scripts or outcome expectations are corrected.

### Business Requirements Definition and Design

During the planning phase, business requirements and application design sessions are conducted. Emphasis is placed on high-level assessment of the project's strategic business objectives, critical business requirements, priorities, broad project scope and timelines, potential risks and key customization requirements. It involves extensive and detailed discussions with the Department's stakeholders. The resulting documentation from those sessions is the Business Requirements Document (BRD). This report is completed by TransCentra. The BRD defines the scope of the project and serves as the foundation for all development. During the meetings with the Department, TransCentra will detail each processing workflow, define data entry requirements, document business rules and edits, finalize





Project Closing. Monitoring and Controlling processes happen throughout the life cycle. The detailed steps of our approach are outlined below:

#### *Project Initiation*

- The Department awards the project contract.
- All project stakeholders are identified.
- TransCentra and the Department conduct the project kick-off meeting, where project approach, deliverables, the review and approval process for all deliverables, milestones, team member roles and responsibilities, and timeframes are discussed.
- The Statement of Work is finalized by the joint team.

#### *Monitoring and Controlling Phases (occurring throughout the project)*

- The TransCentra Project Manager provides regular status reports for the project status meetings and for the project steering committee.
- The TransCentra Project Manager regularly updates the Project Management Plan.
- The TransCentra Project Manager regularly reviews and updates the risk register at team meetings and in status meetings with the Department.
- The impact of any change requests is documented by the TransCentra Project Manager in updates to the schedule, cost and scope baselines in the Project Management Plan.

#### *Planning Phase*

- TransCentra updates the initial Project Management Plan.
- TransCentra finalizes procurement contracts and SOWs with hardware vendors and dates are committed for the hardware installation.
- TransCentra and the Department work together to create the Business Requirements Document (BRD).
- The TransCentra project manager and project team define the detailed project schedule, showing activity durations, interdependencies and required activity sequencing.
- Risk identification is underway with all of the project stakeholders, along with discussions on risk management strategies. The risk register is created.
- The communications strategy is proposed and agreed upon between the project stakeholders, including the types of communication needed, the format and frequency, the distribution list for each type of communication, and the persons responsible.
- The TransCentra and the Department Project Managers institute change control processes.

#### *Execution Phase*

- The Department and TransCentra project teams work together to define the use cases for the system.
- The project team generates the detailed design documents. These include the system design document, the system plan, the interfaces plan, and the integration plan.
- The project team begins development.

- TransCentra provides the system hardware and software pre-requisites checklist to the Department, to ensure that the site will be ready for the installation team. This includes any tasks for which the Department is responsible, including installation of the network, servers and workstations.
- The Quality Assurance (QA) team creates system test scripts based on the use cases. These scripts are provided to the Department and their feedback is used to improve the scripts. The Department and TransCentra test teams agree on the test data, the complete set of scenarios and the final test plan.
- TransCentra creates the project-specific technical and training documentation.
- Development team performs integration testing, testing system components together and exercising all interfaces.
- Integration test results are reviewed by the development team leader and the QA manager.
- QA accepts the project for system testing. The project team delivers a release containing the system and the documentation to the QA team. The system is installed by the QA team, using only the documentation provided with the release.
- The QA team performs the suite of system test scripts, reporting issues back to the development team. As the TransCentra project team releases fixes to the QA team, failed tests are repeated.
- TransCentra conducts live web sessions with the Department to demonstrate data entry screens and other functionality. This provides early feedback for corrective action prior to installation at the site.
- QA performs a second cycle of system testing. The system test results and data are provided to the Department, as well as sample reports, ICL files, data extract, and image export files.
- The Department and the hardware vendors install the required system hardware and software.
- TransCentra creates the final release, and it is installed in a new environment at TransCentra. A round of regression testing confirms that the release is complete.
- TransCentra installer arrives at the Department. The implementation at the Department includes creation of the development environment and installation of the software in both development and test environments, as well as defining any site-specific configurations such as paths for output files.
- The installer performs a flow test to confirm that the system was installed correctly.
- The Department's technical team works with TransCentra to ensure that user authority levels and access rights are defined properly, database maintenance procedures are in place and system backup and recovery are functioning properly.
- TransCentra executes the training plan, covering details of the new system for operations, the test team, system administrators, supervisors and the technical staff.
- The Department begins user acceptance testing, following test scripts and acceptance criteria.
- The Department and TransCentra communicate on issues and releases following the processes and formats defined previously. TransCentra and the Department's Project Managers work together to prioritize issues and plan the bug-fix release schedule.

- Any change requests are generated following the change management plan. Requested changes are reviewed and approved or denied by the Department's change management oversight.
- When the Department has completed their test scripts and the acceptance criteria have been met, the system is ready for live production.
- The Department executes the system migration plan, with TransCentra's assistance.
- TransCentra provides onsite support when the Department goes live.
- The Department and TransCentra monitor the process and look for opportunities for improvement as volumes increase.

#### *Closure*

- TransCentra transitions the project to the TransCentra support department:
  - Pre-requisites: The project must be live for at least one month and have no open A priority issues and less than 10 lower priority issues, with a plan for the project team to address those issues.
  - A project technical lead and the Project Manager provide documentation and training for the support team on the specific options and features of the Department's system.
  - The technical lead installs and demonstrates the system for the Support team.
  - The support team compiles the system and compares the files with those in the Department's production system (provided via CD or backup to FTP) to confirm that all code has been included in the version control system and released to the customer. The final step is a call with the Department, TransCentra manager, and the support manager to review long-term support procedures, and to review all open issues.
  - Since the Department team will perform their own development, procedures for keeping support's source control in sync are defined, as well as the arrangements for TransCentra's provision of development support.
- A customer satisfaction survey is sent to the Department, requesting feedback.
- TransCentra and the Department conduct a final lessons learned session, and produce a project closeout report.

#### **Project Implementation**

Project implementation consists of the following steps:

1. Hardware and infrastructure installation
2. Application installation
3. Staff training
4. User acceptance testing
5. Migration to production
6. Post-production support

#### *Hardware and Infrastructure Installation*

When the system hardware and software arrive onsite at the Department's production facilities, the Department installs, configures, and maintains the server and workstation hardware and network

infrastructure required to support the TMS\_TAX system. TransCentra is proposing new Intelliscan scanning equipment which will be installed, configured, and supported by senior TransCentra/BancTec service technicians.

#### *Application Installation*

Upon completion of the hardware and infrastructure installation and the successful completion of the system test at TransCentra, we will install and configure the TMS\_TAX system onsite at the Department's production facilities. The installation includes:

- Implementation of all of the application software components
- Execution of a network connectivity test with the application software
- Execution of an onsite flow test to confirm proper installation
- Documentation of the installation, including services and licenses installed on each server, any third party software provided and its server location, databases and their properties, web applications, and data paths for all input and output files

TransCentra is responsible for the support of the application software. TransCentra also has included technical training and development support for the Department's technical staff, to enable them to perform such ongoing maintenance tasks as adding new tax types or tax forms.

#### *Staff Training*

During the project planning phase, TransCentra will finalize the training plan with the Department, which will address the Department's training needs and include training scope, class prerequisites, training agendas, assumptions, and training schedules. The Department personnel that participate in operational training include testers, trainers, equipment operators, data entry operators, supervisors, system administrators, and technical support staff.

#### *User Acceptance Testing*

Once TMS\_TAX has been installed, the system has been flow tested in the Department's test environment, and training is complete, the Department will conduct user acceptance testing (UAT) as documented in the user acceptance test plan. UAT gains user acceptance of the business solution by validating that the proposed applications operate correctly to satisfy Department business requirements, and to ensure end-to-end compliance with functional requirements. A daily meeting during the UAT period is held to discuss testing progress, identification and review of all newly reported issues, the status of previously reported issues and plans for the next testing day. TransCentra provides onsite and remote support.

#### *Migration to Production*

The migration plan is used for moving a release into production. It defines the length of time needed for the migration of work to the new system, the order in which new types of work will go live and the management of any system resources (such as scanners) that must be shared between the old and new systems during the migration. If the release adds a new work type or tax type to the TMS system, the migration plan defines how the work moves to the new system, including any limits on the volume of work to be processed in the initial days of production. Interdependencies with other systems are also defined. For example, a new GenTax release might need to be moved into production at the same time as the TMS\_TAX release. The migration plan also specifies any hardware modifications, new hardware or system software that is needed.

### *Post-Production Support*

TransCentra will provide onsite (and remote) support to the Department during the days immediately following the move into production. Any issues will be discussed and prioritized in regular calls with the Department, and any necessary releases of software fixes are provided. As the TransCentra and Department Project Managers review the success of the project, including things that worked well, processes that should be improved, and lessons learned. Root cause analysis is done to determine the reasons why issues were missed.

Once the TMS\_TAX solution has been moved into live production, TransCentra will deliver software releases to address production issues. Each release is accompanied by a software release letter that includes a release version number, a list of software changes included in the release, and a directory listing of the release, modules affected by the release, and recommended testing procedures.

#### *3.1.4. Vendor should explain their proposed training as it relates to end users and development staff, including instructions on new forms training.*

TransCentra will provide in-depth train-the-trainer sessions to the Department that fully cover the administration and use of TMS\_TAX. Our approach to client training ensures that Department employees are fully prepared to perform their jobs using TMS\_TAX.

Operations, supervisory, and administrative training sessions are conducted prior to the Department's UAT. Technical training is provided after the system has been delivered and tested. Training dates will be mutually agreed to between the Department and TransCentra during the project's planning phase.

Training consists of class presentations, demonstration, class exercises, and hands-on training.

### **Prerequisites**

The following is a list of recommended prerequisites for class attendees.

#### *All Attendees*

- Familiar with Windows operations

#### *System Administrator*

- Microsoft Certified Windows

#### *System Support Personnel*

- Fluent in Windows operating systems

### **Training Materials**

TransCentra will provide the most current version of the following published user manuals, as well as the help files for the system. The manuals and help files are provided on a CD, for copying to a Department shared drive or other common location. The CD also contains Adobe software that allows the manuals to be viewed and printed.

- TMS\_TAX Data Entry User's Manual \*
- TMS\_TAX System Administration Manual \*
- TMS\_TAX Web Administration Manual

- TMS\_TAX Intelligent Document Recognition (IDR) Form Studio User Manual
- TMS\_TAX IDR Extract Configuration User Manual

\* TMS\_TAX Help is also available on the system.

## **Training Modules**

### *BancTec Scanner Operations*

This training will be performed onsite and will consist of demonstration and hands-on training. Additionally, each IntelliScan has BancTec's in-depth context sensitive help screens that provide access to all instructional content.

### *Data Entry Operations*

Course topics for data entry training include:

- TMS\_TAX IDR Data Entry Overview
- Review of Workflows
- Transaction Processing Concepts
- TMS\_TAX IDR Data Entry Processes
  - User Interface
  - Functions
  - Exception Handling
- Unified Status Monitor –IDR Tab

### *Supervisor Operations*

Course topics for supervisor training include:

- Review of Workflows
- Transaction Processing Concepts
- New User and Recognition Statistics Reports
- Review of Tax Reports
- Unified Status Monitor –IDR Tab
- IDR Controller – Monitor Work Throughput

### *System Administration*

Course topics for system administration training include:

- User Maintenance – Setting Appropriate Authority Levels for Functions
- DLN Assignment/Maintenance for Tax Types
- IDR Enterprise Manager –Managing Automated Services
- Unified Status Monitor –IDR tab, Services in Services Monitor
- Controller –Monitor Throughput and Processing Speeds for Stations
- Configuration Tool – Viewing and Modifying IDR Configurations
- System Troubleshooting
- System Audit Capabilities
- Database Maintenance: Database Tables, Statistics

### *TMS\_TAX IDR Technical Training*

This training will enable Department staff to add and modify forms and add new work types to the system. Course topics are presented below.

Day One	<ul style="list-style-type: none"> <li>▪ Architecture Overview</li> <li>▪ Installation Steps for Development Environment</li> <li>▪ Enterprise Manager</li> <li>▪ Form Designer Overview</li> <li>▪ Flow Properties</li> <li>▪ Adding Pages, Field Groups, Fields, Tables &amp; Exceptions Fine Tuning and Recommendations</li> <li>▪ ROI Properties</li> <li>▪ OCR Designer &amp; Virtual Engines</li> <li>▪ Data Entry Completion Layouts</li> <li>▪ Day 1 Exercises</li> </ul>
Day Two	<ul style="list-style-type: none"> <li>▪ Day 1 Quick Review and Quiz Rules</li> <li>▪ Lookup Tables</li> <li>▪ Selecting OCR engines, Routing Rules</li> <li>▪ Auto Run Stations</li> <li>▪ Statistics</li> <li>▪ Day 2 Exercises</li> </ul>
Day Three	<ul style="list-style-type: none"> <li>▪ Day 1 &amp; 2 Quick Review &amp; Quiz</li> <li>▪ Custom Coding</li> <li>▪ Functions and Validations</li> <li>▪ Station Events</li> <li>▪ Exercises</li> </ul>
Day Four	<ul style="list-style-type: none"> <li>▪ Explore Custom Station</li> <li>▪ Exercise: Build IDR Application</li> </ul>
Day Five	<ul style="list-style-type: none"> <li>▪ Continuing Custom Application Build</li> <li>▪ Review of Week</li> </ul>

### Assumptions and Considerations

1. The Department is responsible for ensuring that course attendees are present for the duration of all sessions, that the scheduled courses are not interrupted and that the course attendees are not disturbed during training.
2. The Department will make available a conference room and presentation equipment for the duration of the training.
3. The Department will ensure that at least one person knowledgeable in the Department's specific procedures attends each session.
4. The Department will use trained personnel to conduct the User Acceptance Test.
5. The Department will use trained personnel to train the remaining the Department personnel, after UAT.
6. Batches created specifically for practice exercises are used in training. With assistance from the Department, TransCentra will create these batches.
7. During training, TransCentra provides appropriate course materials and administrative and operations manuals in both printed and electronic format.



8. Generally, the number of attendees for each class should not exceed six students.
9. A class day does not exceed six hours. Classes are not conducted on holidays recognized by TransCentra or the Department.

***3.1.5. Vendor should describe their proposed testing methodologies.***

TransCentra employs an iterative testing methodology to ensure that defects are caught early. It allows for incremental modular addition and testing. Testing starts with the base system and requires iterative testing as new modules are added. The objective is to discover as many defects as early as possible. Four separate types of testing are conducted: unit, integration, system and regression.

- Unit testing is done by the developer to verify the technical specifications of the high level and low level designs were implemented correctly.
- Integration testing is performed by the development team as an end to end test of normal scenarios that ensures that the integrated system is solid and has no obvious defects.
- The system test is performed by the independent QA team in an environment controlled by them that is completely separate from the development environment. It encompasses all aspects of the system solution, including the completeness of the release and the installation process.
- Regression testing is conducted at the conclusion of the project to confirm that the changes introduced by the project have not interfered with the pre-existing features and functionalities of the system.

Upon completion of TransCentra's regression testing, TMS\_TAX will be ready for user acceptance testing by the Department. Root-cause analysis is performed by the QA team on issues that are reported during this phase, to ensure that any missing use cases are added to the regression deck, and any errors or omissions in test scripts or outcome expectations are corrected.

***3.1.6. Vendor should describe their developing and managing conversion/migration efforts.***

TransCentra has extensive experience in developing and managing conversion/migration efforts for both public sector and financial industry projects.

In the financial market, TransCentra provides in-house solutions to many of the top lockbox processors. In addition, we provide lockbox services as a private label provider to both banks and direct clients. These projects require the onboarding or conversion of thousands of individual customers with unique remittance processing requirements. In a sense, each "lockbox" or client work type is similar to a "tax type" for public sector projects. Each has its own business rules, fields to be captured and keyed, checks to be balanced, etc.

In the public sector arena, we provide TMS\_TAX solutions to both direct public sector clients, and also to banks which provide payment services to both state and federal government entities. In all cases there is a need to setup, convert, or migrate multiple tax types and forms in conjunction with remittance processing. Please reference our public sector client profiles in this proposal for an overview of the conversion and migration efforts we have helped those clients complete.

In addition to developing and managing conversion/migration efforts of the core tax and remittance processing as processed by our TMS\_TAX solution, we also have extensive experience integrating our solution to multiple and various core government revenue systems. We understand that a transaction is not complete until it is successfully posted to the core revenue system. We are diligent about ensuring that transaction integrity is provided across all platforms, and work with our clients and their partners to achieve that end.

**3.1.7. Vendors should provide references and project summaries to support the experience and knowledge in the areas listed above. Project summaries should include at a minimum the following:**

- 3.1.7.1. Client organization**
- 3.1.7.2. Project overview**
- 3.1.7.3. Contract value**
- 3.1.7.4. Start and end dates**
- 3.1.7.5. Project status (in progress or complete, on/ahead/behind schedule, over/under budget)**
- 3.1.7.6. Service provided**
- 3.1.7.7. Primary deliverables**
- 3.1.7.8. Technologies and platforms involved**

Client Organization	Idaho State Tax Commission
Project Overview	In conjunction with the purchase of new hardware and software the Idaho State Tax Commission (I.S.T.C.) engaged TransCentra to upgrade our existing TMS SE 1200 tax processing system. The software upgrade included TMS Suite 2011 and the Electronic Clearing Suite (ECS) 2011 for Check 21 capabilities. In addition, the upgrade was to replace the TMS Mitek Doctus application with the TMS eFlow platform.
Contract Value	Approximately \$2,000,000
Start   End Dates	2001 - 2011 (With Upgrades)
Project Status	Completed
Service Provided	Requirements Definition creation, software design, testing, implementation and support. (Onsite support during project design and implementation.)
Primary Deliverables	TMS_TAX, ECS for Check 21, eCapture for Remote capture and deposit, IDR for form identification and field recognition.
Technologies and Platforms Involved	Software is built on .Net Framework; programming languages used are C# and SQL; TMS_TAX platform was deployed

Client Organization	State of Missouri, Department Of Revenue
Project Overview	The Missouri Department of Revenue has maintained a relationship with TransCentra which began with the initial project in 1996. This agreement allowed for the implementation of an automated Remittance Processing System (RPS). The RPS provides for automated document and check processing which uses document scan technology to capture return and payment information necessary to update the various tax systems and prepare paper checks for deposit. As technology has changed, there have been numerous upgrades to the RPS hardware and software over this nearly 20 year span.
Contract Value	Approximately \$1,200,000
Start   End Dates	2012 - 2017
Project Status	In Progress – Phase one completed on time, Phase two on schedule.
Service Provided	TransCentra continues to be the primary maintenance and support for the RPS. In addition to this support, they provided staff training for RPS operators as well as training for our technical support group on operating and maintaining the RPS

	and development of sort pattern applications for new document types. When our technical unit needs assistance, J&B is our primary contact for technical support issues related to system functionality.
Primary Deliverables	TMS_TAX, ECS for Check 21, IDR for form identification and field recognition
Technologies and Platforms Involved	Software is built on .Net Framework; programming languages used are C# and SQL; TMS_TAX platform was deployed

Client Organization	New York State Department of Tax & Finance
Project Overview	The New York State Department of Taxation & Finance issued an RFP in December, 2010 for a document imaging system for their corporate income tax returns. Prior to this project, New York State Department of Taxation & Finance was using a bank as a lockbox processor.
Contract Value	Approximately \$1,200,000
Start   End Dates	2011 - 2013
Project Status	Completed
Service Provided	Requirements definition creation, software design, testing, implementation and support (onsite support during project design and implementation)
Primary Deliverables	TMS_TAX, ECS for Check 21, IDR for form identification and field recognition
Technologies and Platforms Involved	Software is built on .Net Framework; programming languages used are C# and SQL; TMS_TAX platform was deployed

Client Organization	Indiana Department of Revenue
Project Overview	The State of Indiana Department of Revenue (INDOR) issued an RFP in February, 2007 for a document imaging and retrieval system for their individual and income tax returns. On average INDOR processes 2.1 million full page tax returns annually. Their goal was to be live for the 2008 tax season. With the contract completed in September 2008, J&B installed the TMS eFLOW system and INDOR went into production in January, 2009. They successfully completed the 2008 processing year ahead of INDOR's schedule.
Contract Value	Approximately \$1,200,000
Start   End Dates	2008 - 2009
Project Status	Completed
Service Provided	Requirements definition creation, software design, testing, implementation and support (onsite support during project design and implementation)
Primary Deliverables	TMS_TAX, ECS for Check 21, IDR for form identification and field recognition
Technologies and Platforms Involved	Software is built on .Net Framework; programming languages used are C# and SQL; TMS_TAX platform was deployed

Client Organization	State of Arizona Department of Economic Security
Project Overview	The Department of Economic Security (DES), a client since 1999/2000, uses TMS_TAX to process payments and clear the checks electronically. The payments consist of vouchers and checks. DES processes approximately one million checks per year (primarily unemployment withholding). They have gone through multiple system upgrades with TransCentra.
Contract Value	Approximately \$600,000
Start   End Dates	2007-2008
Project Status	Completed
Service Provided	Requirements definition creation, software design, testing, implementation and support (onsite support during project design and implementation)

Primary Deliverables	TMS_TAX, ECS for Check 21
Technologies and Platforms Involved	Software is built on .Net Framework; programming languages used are C# and SQL; TMS_TAX platform was deployed

*3.1.8. Vendor's should provide project summaries, including the names, titles, email addresses, and telephone numbers of at least five (5) references to support the experience reported in this section.*

**Idaho State Tax Commission**

Justine Weaver, Automated Systems Specialist Coordination and Automation Bureau  
208.334.7805  
[JWeaver@TAX.IDAHO.GOV](mailto:JWeaver@TAX.IDAHO.GOV)

Please refer to our response to question 3.1.7 for a project summary description.

**State of Missouri**

Dwayne L. Maples, Project Manager – Taxation Division  
573.751.2578  
[Dwayne.Maples@dor.mo.gov](mailto:Dwayne.Maples@dor.mo.gov)

Please refer to our response to question 3.1.7 for a project summary description.

**New York State Department of Taxation and Finance**

Irving Friedman, Special Assistant  
518.591.1936 (office) | 917.81.2855 (mobile)  
[Irving.Friedman@tax.ny.gov](mailto:Irving.Friedman@tax.ny.gov)

Please refer to our response to question 3.1.7 for a project summary description.

**Indiana Department of Revenue**

Roger Sharritt, Project Manager - Modernization  
317.234.5436 ext. 78111 (office) | 317.519.5902 (mobile)  
[rsharritt@dor.IN.gov](mailto:rsharritt@dor.IN.gov)

Please refer to our response to question 3.1.7 for a project summary description.

**State of Arizona Department of Economic Security**

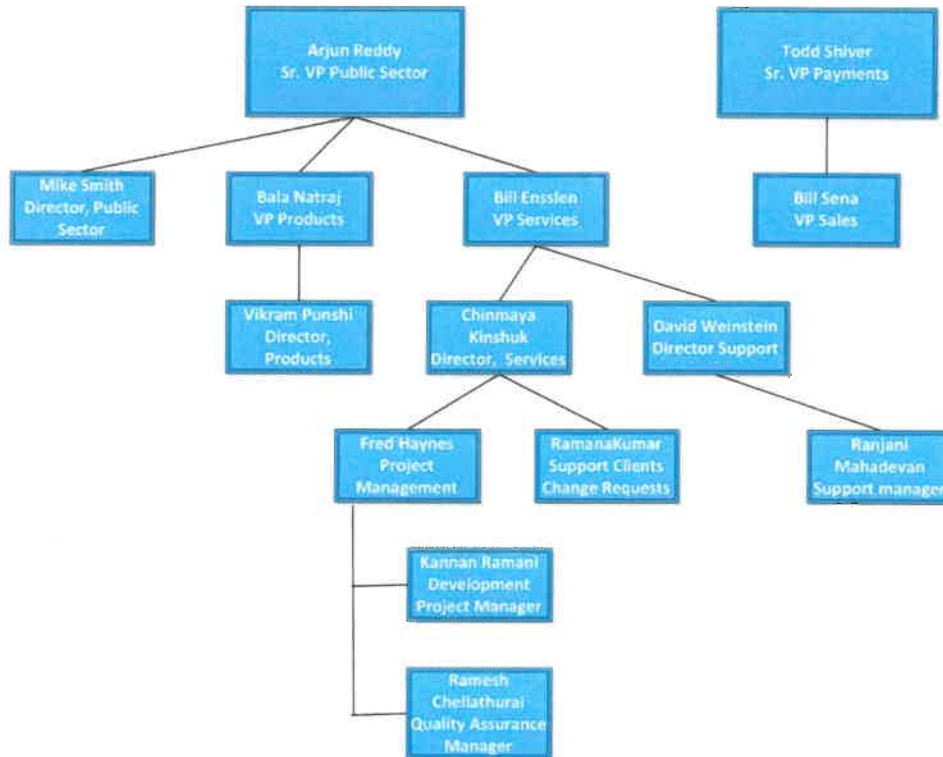
Lulu Guss, Chief of Tax  
602.771.3724  
[lguss@azdes.gov](mailto:lguss@azdes.gov)

Please refer to our response to question 3.1.7 for a project summary description.

**3.2. Proposed Project Staff**

*Vendor should propose a project team organization for the management and execution of the work outlined in the proposal. Please include a proposed project organization chart.*

TransCentra offers the Department extensive industry and company talent to manage and support this contract. This type of expertise provides the Department both an expansive knowledge base and thought leadership capabilities, and enables TransCentra to ensure project success through enhanced foresight and control of all implementation and operational processes. The following project organization chart depicts the key staff members to be assigned to the Department’s project:



We also offer the commitment and sponsorship of our executive team through our project steering committee forum. TransCentra's executive team will bring direct attention to the project at a strategic level and monitor progress and any issues on a regular basis. Some examples of the expertise to be included in this committee include:

***Mike Smith, Senior Director Public Sector***

Mike Smith has been involved in Business Processing Outsourcing (BPO), specifically DOR/Tax initiatives, since 1997. Given his experience in the outsourcing industry and membership on numerous industry advisory boards, Mr. Smith brings an informed perspective on trends and best practices in BPO solutions. His expertise encompasses process improvement, cash float reduction, fraud, cost reduction, and overall taxpayer satisfaction efforts. Directing the sales cycle and implementation of eight state and city Department of Revenue engagements to date, he has helped these organizations reduce infrastructure costs by as much as 40% while improving quality and taxpayer satisfaction.

Mr. Smith has presented topics at the national and regional stage for the Federation of Tax Administrators Association and has also authored numerous documents.

- Author, *Move Over, Manual Processes: E-document Processing Improves Compliance and Increase Efficiency*, Journal of State Taxation May-June 2012
- Author, *Automated Lockbox Services Reduce Check Deposit Time, Improve Cash Flow and Increase Efficiencies in Revenue Processing*, 2012
- Author, *Prepared to Deal with High Volume Processing?*, 2011
- Author, *Uncovering Hidden W-2 Fraud*, 2011
- Presenter, *Federation of Tax Administrators Technology Conference*, August 2012
- Presenter, *The Institute of Financial Operations' Capture: Imaging to Archive Conference*, February 2011

His industry recognitions include:

- Information Capture Professional, TAWPI 2010
- Certified Document Imaging Architect, CompTIA 2011
- Managed Healthcare Professional, AHIP 2012
- Professional, Academy for Healthcare Management, AHIP 2012

*Bill Ensslen, VP Solutions Delivery*

Bill Ensslen has over 38 years of experience in sales, marketing, product management and services management. He has been involved in the complete cycle, from sales to implementation, of numerous large projects with Fortune 100 companies and Public Sector clients. Mr. Ensslen is responsible for Services Delivery and Support for Payment Systems.

*Arjun Reddy, Senior Vice President, Public Sector*

Arjun Reddy is responsible for the company's federal, state, and local government business. Mr. Reddy is part of the senior leadership team whose primary responsibility is to help clients succeed by seeking to bring value-added solutions to client's business needs. Mr. Reddy is a client-focused executive whose professional experience includes large program management and organizational transformation experience, C-suite IT/technology strategy and execution, business process reengineering, and enterprise infrastructure design and management. He has over 23 years of experience with leading and developing client-facing teams within the public and private sectors within the US, and across Europe, Asia, the Middle East, and India. By leveraging his public sector and financial services industry experience and his technology consulting domain knowledge, Mr. Reddy:

- Is the lead for all public sector client portfolio strategy and management across all of the company's product and services
- Is the executive point of contract for all public sector client relationships
- Possesses vast experience with large-scale business and IT transformation program management for both public sector and commercial clients
- Possesses domain expertise in the areas of cloud service strategy, enablement, and implementation for both public sector and commercial markets

*Todd Shiver, Executive Vice President, Sales & Marketing*

Todd Shiver has more than 25 years of experience in the financial services industry. He currently oversees all aspects of sales, pricing, client delivery, project management, solution engineering and marketing for TransCentra. Mr. Shiver also has total responsibility for TransCentra's private label wholesale operation.

Prior to joining TransCentra, Mr. Shiver managed all facets of Jack Henry's Lending Solutions product group including sales, operations, and software development. He increased revenue more than 25% in less than two years while improving margins. He also managed the operations and development of the Web Solutions product group that successfully integrated three disparate product groups into one cohesive unit. This unit supported more than 1,000 client financial institutions.

Prior to Jack Henry's acquisition of Goldleaf Financial Solutions, Inc., Mr. Shiver was executive vice president of sales and marketing for Goldleaf. In that role, he oversaw all facets of sales and marketing for Goldleaf's full range of technology-based products and services including product positioning, training sessions, sales seminars and trade show activities. Mr. Shiver also led all integration efforts of more than seven acquisitions in less than three years.

Mr. Shiver joined Goldleaf from Fidelity Information Services where he was the senior vice president of client management, leading the efforts for client relationships across the United States, Puerto Rico, Mexico, and Guam. These efforts included support and sales for a full range of services such as: core banking software, item processing, ATM/EFT processing, debit card programs, data communications management, check imaging, loan collateral management systems, on-line teller systems and regulatory reporting software.

He joined Fidelity Information Systems (formerly InterCept) from Netzee where he was senior vice president and national sales manager. Prior to that, Mr. Shiver was senior vice president of Towne Services, Inc. a provider of asset-based lending software for community financial institutions. He also managed the product development and customer implementation areas for Directo, Inc., the largest paycard company in the US. This experience provided him valuable insight into stored-value card technology.

Mr. Shiver gained banking insight at The Bankers Bank and NationsBank (now Bank of America). As senior vice president of business development at The Bankers Bank, Mr. Shiver managed the business development efforts of the largest banker's bank in the country covering nine states in the Southeastern US. His position as vice president of private banking at NationsBank garnered him experience in managing relationships for the super-regional financial institution. Mr. Shiver also served as commercial branch manager, retail branch manager, and collections manager at NationsBank. Mr. Shiver graduated from Georgia Institute of Technology with a bachelor's in Management.

*Resumes should be provided for all key staff and must include name, education, training, technical experience, functional experience, specific dates and names of employers, relevant and related experience, past and present projects with dates and responsibilities, and any applicable certifications.*

TransCentra brings comprehensive, experienced leadership in tax processing to the State of West Virginia project. We carefully assembled this group of talented professionals, each of whom has deep experience in remittance and tax document processing operations. Our core team includes the following key players:

- Chinmaya Kinshuk, Director of Services
- Fred Haynes, Senior Project Manager
- Vikram Punshi, Director of Products
- Ramesh Chellathurai, Quality Assurance Manager
- Kannan Ramani, Development Project Lead

Together, this team has the tax processing experience, project management expertise, and technical savvy – individually and collectively – to provide comprehensive leadership to the Department project.

### **Chinmaya Kinshuk, Director of Professional Services**

Chinmaya Kinshuk is the Director of Solutions Delivery for TransCentra. He has twenty years of experience in the payment systems and financial services industries in the areas of professional services and product management, including the development of TransCentra's product portfolio.

Extensive professional experience, including:

- Full lifecycle engagement management including financial management, project management and executive client interfaces.
- Experience solving business problems across multiple industries with a variety of technologies including web, client server, recognition and document imaging technologies.
- Leading, organizational transformation and growth.
- Account and client relationship management development and growth.
- Identification, design and implementation of professional services process improvements and transformation.
- Product management, development and market analysis.

Professional Highlights:

- Responsible for the Professional Services practice for TransCentra that included P/L, HR, business development and service delivery.
- Lead a strong team of Project Management and technical leads with in-depth experience deploying public sector solutions at various states.
- Support a strong project management methodology at TransCentra which integrates and documents company-wide lessons learned and industry best practices. This initiative includes a skills upgrade program, training, methodology templates, an ongoing process for knowledge management and an off shore development model.

Mr. Kinshuk holds a Master's Degree in Business Administration from the Goa Institute of Management.

### **Fred Haynes, Senior Project Manager**

TransCentra

1991 – Present

Fred Haynes has over 20 years of experience as a senior project manager in the payment systems and financial services industries. Mr. Haynes has managed many complex projects for TransCentra in several business sectors, including state and federal government, lockbox, and commercial accounts. Mr. Haynes' projects include the following:

- January 2013 – Present: Senior project manager for the current upgrade of the Missouri Department of Revenue TMS\_TAX 2011, incorporating commingled remittance and tax processing on scanners, IDR for recognition and data correction of tax returns, Check 21 for deposit of payments, and export to RSI.
- May 2003 – Present: Senior project manager for the implementation and customization of the solution for a large wholesale and retail lockbox provider. The solution processes both commercial payments and tax receipts at several locations nationwide.



- Senior project manager for other government projects, Pennsylvania DOR (2001), Illinois DOR (2000), JPMC processing for NYS taxes (1999), Ohio Dept. of Taxation (1999) and West Virginia Dept. of Taxation (1998).
- Mr. Haynes has managed many other projects over the years, including American Cities Business Journal, Consumers Energy, RCash, Allstate Insurance, American Family Insurance, and Sallie Mae.
- Previously Mr. Haynes was a project manager at Unisys Corp.

Education: B.S. in Computer Science and Mathematics Central Michigan University

Credentials: Project Management Professional (PMP)

### **Vikram Punshi, Director of Products**

TransCentra

2002 – Present

Mr. Punshi is responsible for the TMS\_TAX Intelligent Document Recognition (IDR) initiative at TransCentra. As the IDR program manager, Mr. Punshi assists sales and marketing to demonstrate the capabilities of the IDR product. Mr. Punshi plays an active role in the Public Sector practice, participating in programs, workshops and trade forums that help to educate and inform regarding best practices for forms development and design and system implementations. Mr. Punshi also provides oversight and guidance for the IDR implementations in the tax processing sector at TransCentra.

#### Professional Highlights:

- Current – 2010: Successfully built Integrated Receivables product to handle paper and electronic remittance and payments and deployed in a large. Continue to work with public sector customers to enhance hand and machine print recognition. Expanded W2 data capture to add all the fields on the wage statement to be captured as part of the TMS\_TAX product suite.
- Sept 2008 – June 2009: Successfully completed the modernization of tax processing for the Department of Revenue at the State of Indiana. Starting from requirements gathering to design, development, testing, installation, user acceptance to production roll out was completed in the short time span of 4 months. These were high volume tax returns like Individual income tax and tax returns with numerous fields like Corporation tax forms. The project also included identifying the W2s, W2G (gambling wage statement), 1099R and 1099Misc and capturing data from them to enable INDOR to reconcile the wages reported by employers with those reported by employees.
- Sept 2007 – April 2008: Project Manager for the implementation of one of the first IDR initiatives undertaken by TransCentra. The project required coordination with the development team in India and the development efforts of the IDR components in the U.S. Integration and testing were conducted in the U.S. The project was successfully implemented at Idaho State Tax Commission using semi-structured and unstructured technologies without the use of templates.
- 2004 – 2005: Technical Lead for installing a multi-tax processing site for New York State which includes withholding, A/R, estimated and corporate tax forms. The processing center is scaled to process up to 120,000 transactions during peaks. The site uses high speed scanners to process full page documents and payments. The data from full pages is captured using ICR technology to reduce labor and improve accuracy.

- 2003: Project Manager for the implementation of a TMS Hub & Spoke lockbox customer in the Mid-West. The customer had 3 spokes and an average daily volume of 100,000 payments. Implemented Interactive Lockbox (ILB) for this customer to help their customers reduce the turnaround time for processing exception items.

Tanker Scheduling System for OCC,  
Ministry of Petroleum, India

January 2001- June 2002

Mr. Punshi worked for Tata Infotech Ltd on the Tanker Scheduling System (TSS) as an application programmer. Activities included detailed design, development of the GUI using ASP and COM using Visual Basic, development of reports using Seagate Crystal Reports and Oracle Stored Procedures, and System Testing.

TransCentra

December 1998 – December 2000

Mr. Punshi worked as an application programmer on a variety of projects including West Virginia Department of Revenue, Arizona Department of Taxation, Minnesota Power, Reliant Energy, Texas Farm Bureau, Liberty Mutual Insurance, Mississippi Farm Bureau, Campus Crusade for Christ, and NIPSCO. His work included business requirement analysis and design, development, testing, installation, production support and customer training.

Education: Bachelor of Engineering in Electronics from the University of Bombay, India, 1997.

### **Chellathurai Ramesh, Quality Assurance Manager**

Project Management and Quality Assurance professional with more than a decade's experience in manual, automated and performance testing of World Class ERP, Payment Solution products, BFSI applications and Embedded Systems. Qualified Project Management Professional (PMP) with experience in successful project management of testing projects spread across geographical locations and diverse time zones. Experience in owning end to end delivery for varying sizes (US \$1~5 M to 4 M) in revenue involving Vertical & Service Line teams along with different delivery models.

#### **Professional Experience Summary**

- Working with TransCentra FTS Pvt. Limited as Manager-Technology from Nov 2015 till date
- Worked with 3i Infotech Limited as Test Manager from April 2013 till Oct 2015
- Worked as Associate Test Manager with 3i-infotech from Jan 2010 to March 2013
- Worked as Test Lead at Majoris Consultancy Services from August 2007 to December 2009
- Worked as Senior Quality Assurance engineer at Oracle India Limited from November 2005 to June 2007
- Worked as Senior Associate at Covansys from October 2004 to October 2005
- Worked as Software Engineer at BitSoft Systems from January 2003 to September 2004
- Worked as Software Engineer at Suyoga Technologies from January 2000 to January 2003

## **Kannan Ramani, Development Project Lead**

**Proactive, performance-driven professional** with 19+ years of experience, specializing in banking and financial applications, with extensive experience in the full life cycle of the software development process including requirements definition, prototyping, proof of concept, design, development, testing, maintenance and support.

Experienced in applying new technologies and developing interfaces to existing enterprise applications to create seamless solutions for the organization. Success-oriented business leader in highly complex implementation at global scale, product development and program management activities.

Articulate communicator with exceptional interpersonal skills to interact successfully with management, staff, customers, onsite team and vendor partners.

### **Profile Summary**

- Working as a Senior Project Manager for the Services Division of the company, leading the delivery team(s) and managing projects, with a team size of 20+ resources.
- Has extensive experience in managing large product teams and designing product upgrade methodologies.
- Solid management skills, demonstrated proficiency in leading complex projects and mentoring individuals to maximize levels of productivity, while forming cohesive team environments.
- Analytical thinker that consistently resolves ongoing issues or defects, often called upon to consult on problems that have eluded resolution by others.
- Self-motivated, committed, hardworking, quick learner and results-oriented...Effective and good communicator...enjoy working under pressure...maintain a professional manner...
- Is confident and familiar with Microsoft dot net technologies and project management tools.
- Highly capable in managing cross-functional and cross-regional teams along with vendor management.
- Has worked with some of the Fortune 500 customers directly at customer sites in US and Canada.

TransCentra FTS India Pvt Limited (Acquired from 3i-Infotech Ltd) - Chennai  
Senior Project Manager (April 2011 – Present)

### *Job Profile:*

- Mentoring and guiding a team comprising of Project Managers, Technical leads, Development and QA teams, reporting to the Associate Vice President is involved in the following activities:
- Project Planning: Involved in RFP and technical pre-sales, budgeting and scheduling, requirements and feature analysis, designing and release planning.
- Development and Delivery of Projects: Requirements definition and tracking through traceability matrix, development of new features as per PCI standards, integration, testing and rolling into maintenance.
- Working with the client's project management group, architects, build and release teams, documentation and QA to ensure a successful, high quality deliverable is released.
- Team Leadership: Leading large teams and managing daily operations, mentoring and developing team skills and staff management including career development, performance management, and organizational development.

- Stakeholder Management: Working between offshore, onsite and the client organizations, coordinating all activities between the organizations for a successful quality delivery, on time.
- Account Management: Cost / P&L Management, revenue growth, effective resource utilization, developing & maintaining client relationship, planning, tracking, monitoring/ assessment and reporting/ escalation/ continual visibility for the projects and overall programs.

*Achievements:*

- Leading a massive implementation for New York State – Department of Taxation and Finance, by implementing a quality solution, NYS was able to see the benefits much ahead of their expectation. We are continuously working with them by adding additional features and enhancements to the existing tax types and new tax types.
- Merrill Lynch – Bank of America was able to get the prestigious CIO Plus award in the US for the solution implemented to them.

3i-Infotech Ltd (Acquired from J&B Software) - Chennai  
Project Manager (Jun 2008 – March 2011)

*Job Profile:*

- Led large development teams, responsible for delivery and account management including coordinating with the Client & business units to develop and document, functional and business requirements.
- Creating a project plan in adherence to the software development process methodology with resource utilization & job scheduling in coordination with the Project leads, Test manager and other stake holders.
- Maintained service level agreements, performance metrics and outage resolutions for software applications
- Worked with customers on new developments, enhancements, contracts, pricing and troubleshooting
- Acted as the central coordination point to facilitate communication and synchronization across internal development teams and vendor teams for various projects and business development activities.
- Worked as a Product Manager and designed product upgrade methodologies and source control by implementing simplified customization process.
- Prepare, maintain, and evangelize the product roadmap which defines product enhancements for short- and long-term releases
- Functional and technical assistance to the development and QA teams to deliver a quality solution.

*Achievements:*

- Had the opportunity to work as the Product Manager to get the product PCI certified.
- Was able to lead and implement a massive “Mobile Deposit with Electronic clearing” solution to ING Direct by which ING was able to cash their transactions on the same day against a 3 day clearing process.

**Other Assignments**

- TransCentra FTS Pvt Limited, Senior Project Manager

- 3i-Infotech Limited, Project Manager / Senior Project Manager
- J&B Software Pvt. Ltd., Associate Project Manager/Project Leader/Sr. Software Engineer
- Arkin Systems Pvt. Ltd., Software Engineer
- Avantage Solutions Pvt. Ltd., Programmer
- Pentium Computer Academy, Programmer/Faculty

**Awards**

- Hall of the Fame award for Project Management.
- Best employee of the year, Jewel of the company and Star Performer awards.
- Special Appreciation Award from Canadian Imperial Bank of Commerce.
- Appreciations from Citi Bank and JPMC.
- Best Project Award (Inter Company award) - New York State – Department of Taxation and Finance.

**Education**

MSc – APA College, Palani

MBA (Systems), Barathidasan University, Tiruchirapalli

**Technical Expertise**

Application Programming Concepts used	Microsoft Dot net, Visual Basic, Power Builder, Delphi Silverlight, MVC, WCF, MSMQ, Web services and Web security concepts
Databases	Microsoft SQL Server
Project Management Tools	Microsoft Projects, Microsoft Project server
Development Methodologies	Agile, Waterfall and Spiral

**Recent Projects**

Project: New York State - Tax processing

Account: NYS DTF (New York State – Department of Taxation and Finance), USA.

Team Size: 20 – 25.

*Customer Profile*

NYS DTF headquartered in Albany NY, is a US State Tax processing organization, which processes different tax types across the state. Some of the primary tax types include Personal Income Tax, Sales Tax, Corporation Tax, Property Tax, Highways Unit tax and Withholding tax.

*Project Synopsis*

NYS DTF – Tax Processing solution is an integrated enterprise solution to automate the tax processing and do an electronic check clearing across the state. The tax forms, which spans across multiple pages, are scanned using high speed scanners and the data is extracted out from the images using multiple recognition engines, validated and send to the back end systems. Data is extracted from different type of tax forms daily using automated techniques and sent to their backend systems for further analysis and archival. Checks are cleared electronically on the same day.

The following are the key features of the project

- Document capture using high speed scanners

- Elimination of mail opening and pre-sorting through automatic form identification/classification
- Improved data recognition by using multiple smart engines
- Minimized data entry, reducing the labor costs
- IQA (Image Quality Assurance) parameters verified for qualifying the checks electronically
- Data integrity and security maintained to meet out the US government regulations
- Flexible setup capabilities with Open architecture
- Efficient measures to track operator productivity and accuracy

Project: Transaction Management System with Check 21  
 Client: Merrill Lynch Investments (Bank of America), USA  
 Team size: 10 – 14

#### *Customer Profile*

Merrill Lynch is one of the world’s leading financial management and advisory companies, providing financial advice and investment banking services. They are one of the world’s leading wealth management, capital markets and advisory companies with offices in 37 countries and territories and total client assets of approximately \$1.5 trillion.

#### *Project Synopsis*

Merrill Lynch – Transaction Management System is an end to end solution for Merrill’s check 21 initiative. The following are the key features of the project

- Front and rear images of the documents captured and sent to the central site from 1000 + remote locations
- Business validations applied and checks endorsed on the back.
- Data extracted from 40 different deposit slips, using automated recognition techniques.
- Image Quality Assurance parameters verified during the capture process for qualifying a check for Check 21 clearing.
- Transactions failing business rules validations are routed for review process at the central site.
- Once the data is verified and corrected, checks are cleared electronically and deposit slips are archived.

### **3.3. Competitive Position**

*Each Vendor should provide an explanation of what puts their company at a competitive advantage, including:*

**3.3.1. Vendor should describe the unique features of the product/service that differentiates the bidder from the competition.**

TransCentra, as a company, has many advantages over the competition in the industry:

- ✓ The Solution Engineering group responsible for the Department’s implementation combines the best people and technology available to the industry that specializes in payment solutions, and more specifically tax processing. As a result of implementations for our direct clients and our financial industry partners, we have extensive experience and resources that will be used to ensure the Department’s solution is a success.
- ✓ We are the only vendor that can provide all of the key solution components with our own products. This includes the TMS\_TAX solution, payments systems professional services, and the

Intelliscan document scanners. We are responsible for the entire Department proposed solution and have direct control of these key components.

- ✓ Our public sector client references will attest to the high level of integrity and professionalism. We are committed to the success of every project and work closely with our clients and their partners to ensure a timely implementation by addressing issues that may impede our mutual progress.
- ✓ TransCentra offers a single support and accountability model. While IBML subcontracts many sites, our field service is supported by our own direct badged employees. By not relying on third parties, the Department will benefit from a single source contract through seamless integration, enhanced operational accountability, direct and centralized communication, and no 'finger pointing' between multiple vendors.
- ✓ Unlike our competitors, TransCentra can commit to long term support for the Department. For example, IBML may run a product for three to five years, then release a new model to generate sales. Over time, equipment becomes obsolete and support is discontinued. Alternatively, we are able to guarantee support on Department purchases for the foreseeable future.

The proposed TransCentra TMS\_TAX solution has several advantages over the competition in the industry:

- ✓ The scanners proposed by TransCentra provide a higher throughput, with speeds as high as 13% faster than IBML. This translates to, for example, 13,000 taxpayer returns ready a day earlier during peak season when 100,000 returns could be received in one day.
- ✓ Elimination of manual sorts – TMS\_TAX Intelligent Document Recognition (IDR) captures, recognizes, understands, and intelligently classifies and routes all information entering the Department's enterprise from structured, semi-structured, and unstructured documents. This ensures that information is handled efficiently, accurately, and in a timely manner and without the need to presort.
- ✓ Sophisticated data recognition and integrated business rules that include these unique features: multiple recognition engines, voting, structured, semi-structured and unstructured form formats and form/data layout "learning" technology. TransCentra's IDR platform employs multiple ICR engines and voting. Competitors suggest they use multiple engines but they mean multiple different data types – OCR, ICR, and OMR. Included in the TransCentra solution are truly multiple ICR engines. TMS\_TAX IDR is the most advanced and complete application for semi-structured documents available today.
- ✓ W2 data capture to help reduce fraud. TMS\_TAX can identify and read the same data elements across different W2 forms, without requiring the cumbersome and labor intensive approach of template based recognition. Data validation can include validation against external databases or imported data files for further data perfection.
- ✓ TMS\_TAX IDR auto learning process continuously improves system recognition without having to actually change the original template that was created. If the data that should be specified in a field can be found on the form page, it is possible to highlight it and eliminate the need for keying. This action has two results: (a) it populates the field and (b) creates an ROI (rectangular region of interest) that is now associated with the field, to be used to improve future processing.

- ✓ Another unique feature of data keying is the ability to align pages within a transaction in a certain sequential order. The images can be reshuffled to put them in the correct order or rescanned from a desktop with a scanner attached to it. The designated operator can insert pages, delete pages and rescan an image. This simple but helpful functionality helps in minimizing rejection of transactions due to doc-prep or scanner issues. Instead the transaction can be corrected without having to re-run the full transaction.
- ✓ The TMS\_TAX IDR platform is highly configurable and will allow the Department to extend the system to meet any the Department's specific processing needs and to address any year-over-year changes to tax forms, introduction of new tax types, or changes in business rules. There are three components in the designer toolkit:
  - Workflow Designer – defines the routing rules for the various tax forms. In case of failed validations the returns can be routed to a knowledge worker queue. The tasks can be defined by the skill level of the person. Bad transactions can be routed through different flows to allow for rebuilding of transactions virtually, if desired, rather than having to rescan documents.
  - Visual Designer – defines the fields to be captured with the parameters and business rules for each of them using simple tools. Identifies the location of the fields and the data entry view
  - Engine Designer – setup individual engines with different confidence thresholds for each of the fields and also defines voting algorithms to derive the most accurate results.
- ✓ TMS C21, our Check 21 module, provides a library of ICL formats that are available should the Department Treasury decide to change or add banking relationships.
- ✓ TransCentra offers the only solution developed and currently deployed in the Hub and Spoke architecture. TMS\_TAX is the solution most specifically designed to meet the distributed processing requirements set forth in this RFP. The Hub and Spoke architecture is proven in high volume, high-speed scanning environments.

### *3.3.2. Vendor should describe all new features and functionality introduced during the last eighteen months*

Multiple features and functionality have been introduced in the last 18 months, for example:

- End of day (EOD) balancing utility to reconcile the data extract and the check clearance (Check21 and/or paper) extract files
- Unified Status Monitor enhancements to monitor work volume and extract cut-off time monitoring
- Capability to scan paper check returns
- Enhanced reporting for electronic check clearance (Check21)
- Multi environment capability for processing multiple agencies' work through a single instance of TMS\_TAX but keeping the data segregated into separate databases.
- Zone-based recognition enhancements – auto detect word spacing and enhanced the line collation process for full text OCR data recognition
- Image export/plugin enhancement to export non-core images such as batch header, transaction separator, etc.



- Added functionality for auto TCP/IP client/server connection recovery
- Image recognition and export enhancements – faster OCR'd text output, enhanced quality of full page OCR PDF export, text underline in image, option to name output file by batch description
- Form toolkit – added functionality for new form ID types, added new functionality for form ID test, increased accuracy of custom zone interpolation, optimized memory usage in custom zone interpolation setup, added "cross-zone" relative interpolation method, added multi-line label search functionality for "Label Search" interpolation method
- Zone-based OCR toolkit - enhanced field multiple image value processing and rectification, enhanced result selection and rectification for multiple engine processing (SmartText Zone), added support for Tesseract Zone OCR engine, added support for ABBYY Zone OCR engine
- Enhanced selectivity for removal of large objects functionality for form/template matching
- Added method for detection/removal of large objects
- Full text OCR functionality – added support for Tesseract FullPage OCR engine, added support for ABBYY FullPage OCR engine
- ImageExport Toolkit – added PDF text export capabilities for Tesseract FullPage and ABBYY FullPage OCR results

*3.3.3. Vendor should describe any new features and functionality announced for the next release and the expected release date.*

These are some of the feature and enhancements planned for the next release in Q4 2017:

- Additional recognitions engines to further enhance recognition capability
- Update to the latest recognition engines, i.e. Tesseract
- New classification mechanisms for documents
- More bar code formats, such as datametrics and QR
- Upgrading the system to the latest system environment (SQL 2016, Windows Server 2016, Windows 10) and browsers (Chrome, Firefox, IE)
- Long term archive enhancements – quick search, favorite search
- Unified Status Monitor - providing more statistical information in Dashboard format with both real-time and historical data
- Electronic Clearing Suite
  - Returns reports generated automatically via end of day tool
  - United Kingdom check clearing
- Multi-lingual support in the TMS\_TAX platform

*3.3.4. Vendor should explain how enhancements/release components are prioritized.*

We are continually evaluating changes to improve product functionality and performance. Enhancements are prioritized using several factors including:

- New or improved functionality
- New or improved technology
- Increased stability
- Platform compatibility
- Client requests

## Section 4, Subsection 4.1

### 4.1. Fewer Sorts/Streamlined Document Preparation

*The Departments desire is to find a solution that will provide a reduction in document sorting, document preparation and batching. Potential opportunities and improvements include reduction in the number of PO Boxes used for returns and remittances; Reduction in sorting, preparations and batching of work prior to capture; and elimination of separator sheets. Please describe how this goal will be attained.*

#### *4.1.1. Reduction in the number of PO Boxes used for returns and remittances*

The number of PO boxes can be reduced by utilizing the virtual batching capabilities of the solution. This will create batches of defined types and enables prioritization of specific work types i.e. high dollar.

#### *4.1.2. Reduction in sorting, preparation and batching of work prior to capture*

TransCentra provides the ability to commingle tax types which significantly reduces the sorting, preparation, and batching of work prior to capture. TMS\_TAX IDR manages the capture of documents through its commingled workflow that substantially reduces the sorting and preparation of mail prior to the scan process. Tax types may be scanned together in a single job, eliminating the need to sort the returns prior to scanning. There is no need to develop scanner jobs for different tax types, for different years or for timely versus untimely returns. This reduces the prep time and also eliminates interruptions at the scanner for stopping and starting jobs, ensuring maximum scanner throughput.

Once the images and data are captured from the scanners, TMS\_TAX IDR begins the process of form identification and ICR recognition to gather the required data from the forms. Virtual sorting into batches of like items is done after scanning. "Like" batches are created for prioritization and process control. TMS\_TAX IDR automates document classification, data capture and content validation of semi-structured forms such as W2s as well. The semi-structured and unstructured documents have their own flows for data capture, indexing and data correction/validation.

#### *4.1.3. Elimination of separator sheets*

The commingled workflow can be configured to use the envelope as a transaction separator. The following work types may be processed intermixed:

- Single stub with single check
- Single stub with multiple checks
- Multiple stubs with single check
- Multiple stubs with multiple checks
- Single or multiple documents with single or multiple checks
- Single or multiple zero stubs (no financial information and no check)
- Single or multiple stubs (financial information and no check), and check or remittance only (no stubs)

It may be more efficient to pre-sort the single or multiple zero stubs transactions into separate batches, so that the workflow can be optimized for this unique work type. A separate workflow is provided for processing of late payments, with keying of the postmark date from the envelope or stub.

## Section 4, Subsection 4.2

### 4.2. Improved Document and Data Recognition

*The Departments desire is to improve document and data recognition. Please describe how this goal will be attained in the following areas:*

*4.2.1. Advanced forms and data recognition functionality are expected to provide improvements in the following functions:*

TMS\_TAX IDS is unparalleled in its ability to accommodate the addition of new documents and application types. It is an innovative solution that captures, recognizes, understands and intelligently classifies and routes all information entering the Department's enterprise from structured, semi-structured and unstructured documents. This ensures that information is handled efficiently, accurately, and in a timely manner without the need to pre-sort.

*4.2.2. Reduction in manual intervention and data entry*

TMS IDR uses advanced OCR and forms recognition technologies that achieve unprecedented recognition accuracy. Its multi-engine processing architecture enables quick and easy creation of powerful "super engines" from basic recognition engines. Coupled with "code free" definition of validation rules, human intervention is reduced to a minimum, immediately yielding reduced labor costs and higher data quality.

*4.2.3. Improved utilization and recognition of Mark Sense, Barcodes and other aides for forms and data recognition and completion*

TMS comes with multiple recognition engines packaged with the toolkit to capture machine print, handprint, OCR, ICR, OMR, 1D barcode, 2D barcode, patch sheets, US Postal System Smart Code, CAR, LAR, and MICR. The Department can make use of any of these engines after the initial deployment as deemed fit. A2iA and Mitek are used for CAR, LAR, while engines such as ABBYY, Nestor, OCE, Kadmos, TIS, Expervision, Parascript, JustICR, Clear Image and other processing engines designed for reading OCR, ICR, OMR, 1D barcode, patch sheets, US Postal System Smart Code, 2D barcode, 3-of-9 barcode formats including special characters are also available.

Each of the leading processing engines detailed above has its own classifiers that are designed for specific sets of characters and fonts. Each engine can have its confidence levels adjusted in terms of acceptance or rejection. This is defined graphically at setup time and can be adjusted when necessary on a field-by-field basis.

*4.2.4. Expanded tolerance thresholds and improved recognition of hand print and data completion in pen and pencil and various color inks*

TMS contains a trainable algorithm for character processing. For example, the JustICR processing engine has fast learning abilities, which enable it to achieve substantial processing results with a small number of samples such as 100 to 1,000 samples per character or symbol. This unique capability allows us to constantly improve on our already high recognition rates. In addition, each field in each Return can be tuned for the specific data type - machine print, handwritten, alpha, numeric, alphanumeric, date, mark detection, barcode etc. Therefore, the system can handle any kind of symbol or check box.

**4.2.5. Greater tolerance of print variations from the official form set. Variations include, but are not limited to, shifts in registration marks, shrink to fit printing and variations in barcodes**

The proposed solution provides the ability to enhance forms design in order to improve read rates and data quality. For structured forms the platform uses the physical characteristics of the form to find a matching image. Physically, a form may have many variations – differences in the exact location or size of the fields on the page, some common static words on the form and lines on the edges of the form and so on. The same form, printed by different printers, may have a different ink color, contain minor printing differences, or may have information or fields placed in slightly different locations. For example, a barcode on one form may be printed somewhat higher than on another form. Several editions of the same form may not be exactly the same size.

However, in spite of minor physical differences, all the variations still represent the same form. Additionally, in the Forms Designer, development capabilities allow for each form to be enhanced to handle the more pronounced variations created by the substitute vendors. For semi-structured or unstructured documents the platform uses a technique called supervised learning to classify documents with little or no prior knowledge about them. The software examines a limited sample of documents from each document class, and automatically learns the unique characteristics of that class. This process is called training. From that point onwards, Smart is able to classify any incoming document into the trained classes, with a high level of accuracy, and with no human intervention. In order to further improve data capture, TransCentra recommends that the Department redesign their forms to minimally include a 1D barcode for form identification. Other recommendations for form redesign are as follows:

- Minimum six lines to an inch
- Cents separated from the dollar or a bold decimal point where they cannot be separated

## **Section 4, Subsection 4.3**

### **4.3. Advanced System Functionality**

*The Department wishes to maximize productivity in a replacement system. Please explain how your solution will accomplish this goal in the following:*

#### **4.3.1. Upgrade the existing Quick Modules 3.0 platform to latest Quick Modules software platform.**

We will replace the Quick Modules platform with the TMS\_TAX IDR solution. Our solution allows the Department to gain operational efficiencies and reduce staff throughout the workflow including:

- Elimination of manual sorts – TMS\_TAX IDR captures, recognizes, understands and intelligently classifies and routes all information entering the Department’s enterprise from structured, semi-structured and unstructured documents. This ensures that information is handled efficiently, accurately and in a timely manner and without the need to presort.
- Sophisticated data recognition and integrated business rules including these unique features: multiple recognition engines, voting, structured, semi-structured and unstructured form formats and form/data layout “learning” technology. TMS\_TAX IDR is the most advanced and complete application for semi-structured documents available today. It can identify and read the same data elements across different W2 forms, without requiring the cumbersome and labor intensive approach of template based recognition. Data validation can include validation against external databases or imported data files for further data perfection.

- TMS\_TAX IDR auto learning process continuously improves system recognition without having to actually change the original template that was created. If the data that should be specified in a field can be found on the form page, it is possible to highlight it and eliminate the need for keying. This action has two results: (a) it populates the field and (b) creates an ROI (rectangular region of interest) that is now associated with the field, to be used to improve future processing.

*4.3.2. Provide a common, single software platform for all inbound tax/form types including remittance processing and Check 21; eliminating the need of multiple systems and environments.*

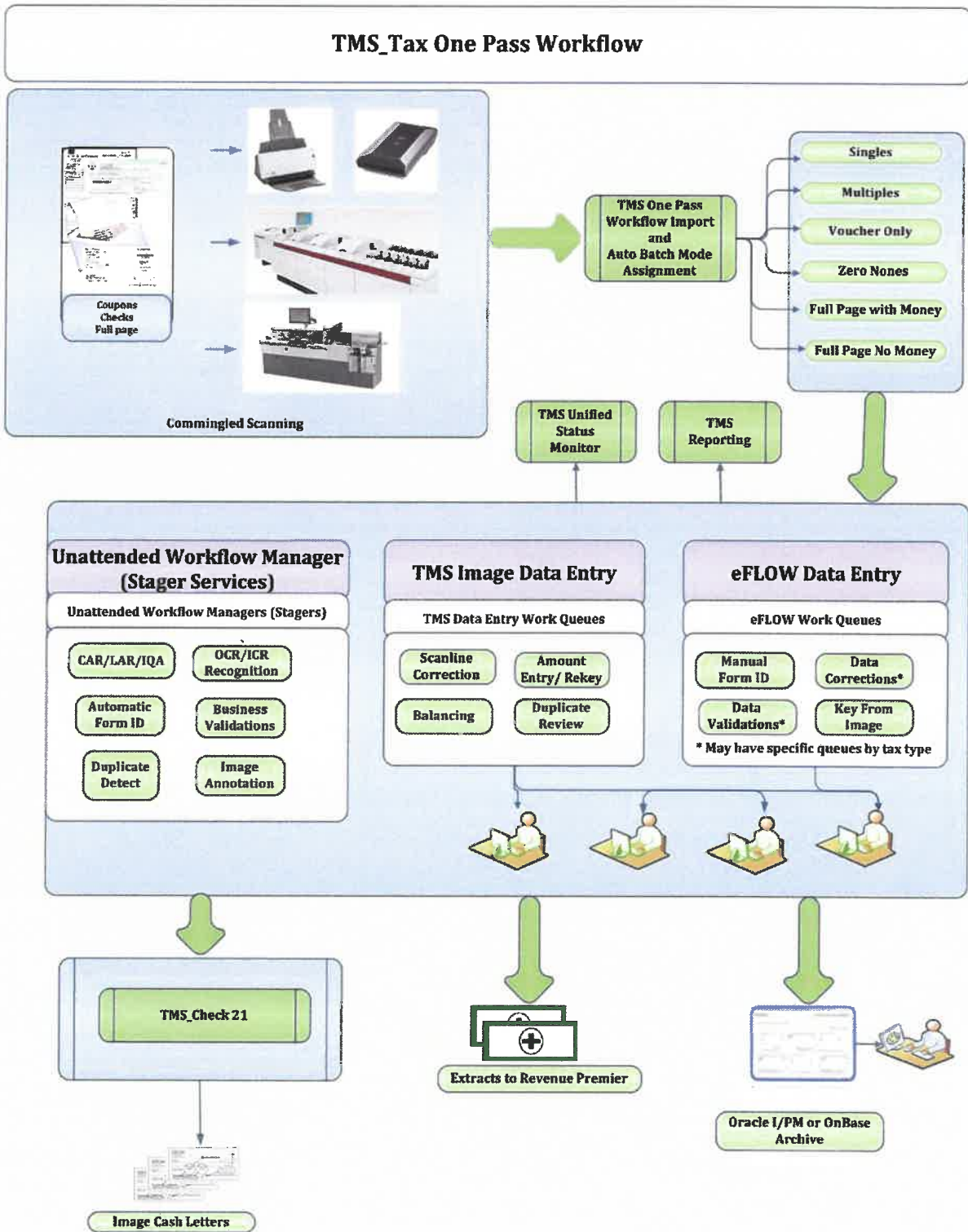
TransCentra's solution provides a single software platform that does not depend on subcontractors. As the manufacturer of the high speed scanners, there will never be any finger pointing between the scanner manufacturer and the software manufacturer – we are the same company. TransCentra provides the only true single point of contact solution.

TMS\_TAX is a robust transaction processing solution specifically designed to address the remittance and document processing needs of a tax agency. The TMS\_TAX architecture features an "Open System Approach" using the Microsoft SQL database, Windows workstations, Windows Servers, and .NET architecture which supports the latest recognition technology (CAR, LAR, Business LAR, OCR, and ICR). TMS\_TAX provides tools to provide effective and efficient data entry/data perfection augmenting powerful data capture technologies.

TMS\_TAX is a comprehensive tax processing solution based on an integration of proven applications tailored to meet the needs of tax agencies. TMS\_TAX is comprised of the following modules:

- TMS\_TAX Image
- TMS\_TAX IDS
- TMS\_TAX Check21
- TMS\_TAX Unified Status Monitor and Reporting

A high-level view of the TMS\_TAX workflow is presented below.



#### Section 4, Subsection 4.4

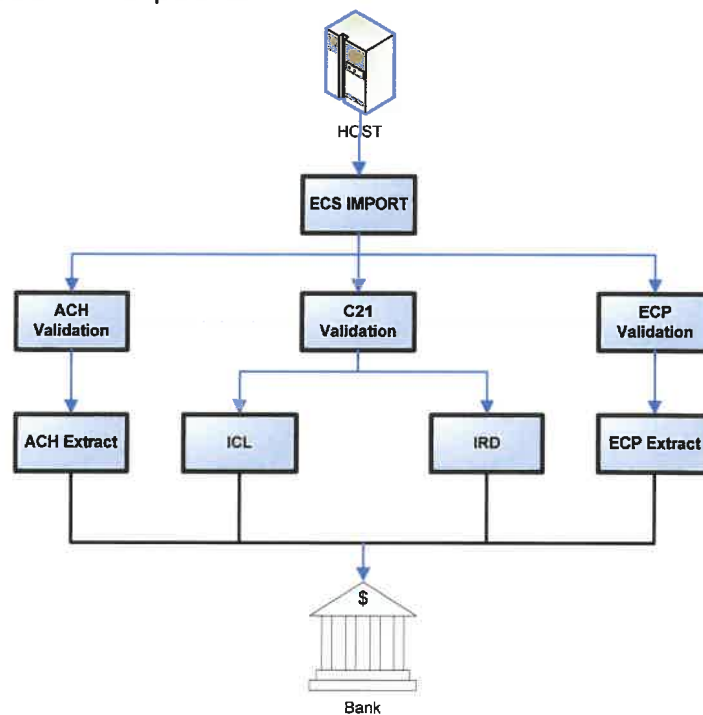
*The Department desires to implement check 21 and automate the deposit process electronically. Please explain how your solution will accomplish this goal in the following:*

4.4.1. The current remittance and bank deposit operations are labor intensive. The lack of automation prohibits WV TAX from taking advantage of Check 21 Image Cash Letters to accelerate funds availability and reduce depository fees. Please explain how your solution will meet the Agencies desired improvements in the following:

4.4.1.1. Eliminate intensive manual effort required for processing of checks and deposit preparation

The TransCentra solution brings additional cost savings for the Department. Because checks can be scanned inline with the returns, check transports and related maintenance fees are eliminated. And efficiency is increased because of the reduction of physical check handling. The Electronic Clearing Suite (ECS) is a software system that combines ARC and Check 21 processing. It allows for electronic (and paper) clearing of checks via ACH and TMS\_TAX Image Exchange. The Electronic Clearing Engine or ECE is an intelligent decision engine used to determine the most efficient (fastest and cheapest) clearing mechanism for each check. The advantages of TMS\_TAX Check 21 include:

- Improves operational efficiency
- Lowers deposit fees and other per-item costs
- Improves funds availability
- Facilitates image check truncation as recommended by Check 21 Act
- Processes check images
- Incorporates multiple clearing endpoints through a decision engine
- Stores images from multiple sites



**TMS Check 21**

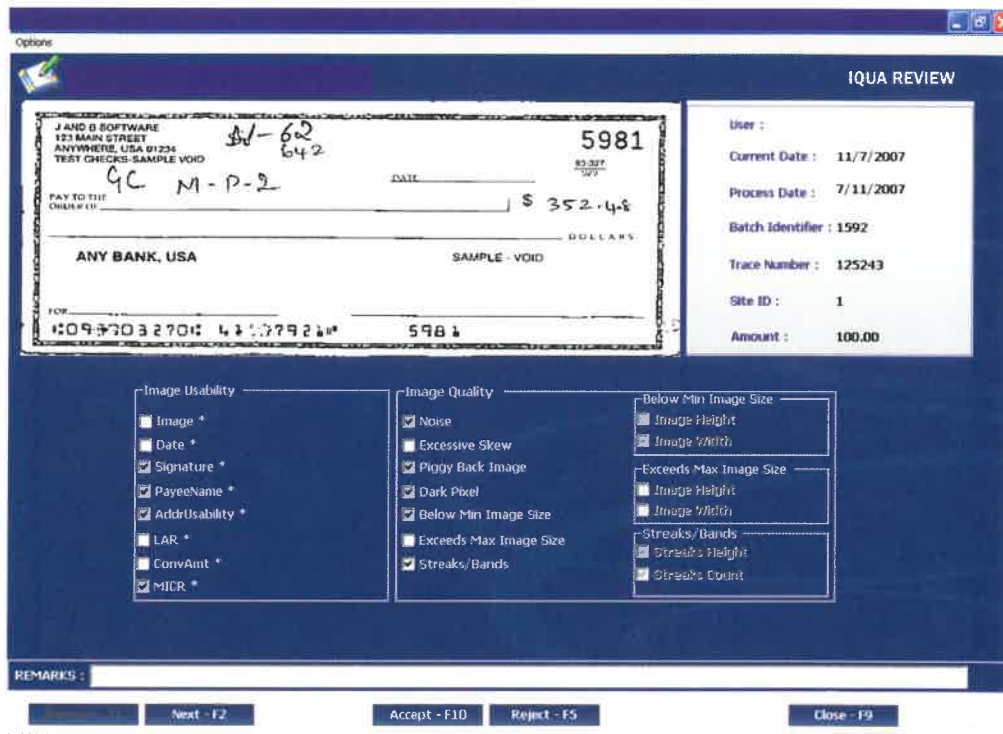
TransCentra's TMS\_TAX Check 21 Electronic Clearing Suite (ECS) module, a comprehensive and proven solution, provides a means for payment processors to comply with the provisions of the latest legislation regarding electronic clearing methods. Features include:

- Item clearing decision engine
- Image quality assurance (IQA/IUA)
- Image exchange, image replacement document (IRD) and paper checks

- Image security and transmission
- Centralized and distributed capture
- Check truncation at the source of capture
- Process control
- Duplicate detection and review
- Return items processing

The TMS\_TAX Check 21 Decision Engine qualifies each transaction to determine the clearing method based on Routing and Transit numbers (RTs) and work source, amount, Image Quality and Assurance (IQA) results and endpoint decisioning. For Check 21-qualified transactions, the Extract component generates the extracts in X9.37 format. An X9.37 file or Image Cash Letter (ICL) is created based on the requirements of the Department's bank or banks. ICL files can be created manually or automatically (based on configured cut-off times), and generated once or multiple times a day, for one or multiple endpoints. Payments are sorted into deposit files based on tables defining the criteria for each endpoint.

The Department has the ability to review checks failing IQA and determine alternate routing or the need to deposit through a paper deposit. The image below depicts an example of IQA review:



The following is an example of the real-time monitoring of TMS\_TAX Check 21 in the TMS\_TAX Unified Status Monitor:



JBB Web Status Monitor - Windows Internet Explorer

10.0.0.77

TMS STATUS MONITOR TMS DIGITAL DASHBOARD

Home Capture Data Entry Clearance Exception

List | Pie Chart | Vertical Bar | Horizontal Bar 3D chart

ECS ECS Extract

ECS Extract Status	Checks	Check Amount	Status	Stat Amount
ARC Extract Waiting	1740	478990.4	0	0
ARC Extracted	4296	1156236.66	0	0
Check21 Extract Failed	2	154	0	0
Check21 Extract Waiting	1362	274188.32	0	0
Check21 Extracted	3580	762650.00	0	0

Endpoint	CutOffTime	Checks	ExtractAmount	Failed	FailedAmount
Bank of America	18:01:00	0	0.00	0	0.00
Bank of America	16:01:00	96	15022.66	0	0.00
Bank of America	16:01:00	844	154951.00	0	0.00
Bank of America	16:25:00	125	127974.40	0	0.00
Bank of America	16:15:00	116	154951.00	0	0.00
Bank of America	18:16:00	885	154951.00	0	0.00
Wellsfargo	12:16:00	0	0.00	2	114.00
Wellsfargo	18:16:00	171	30830.38	0	0.00
Wellsfargo	18:16:00	182	123851.52	0	0.00
Paper / IFD		710	292358.8	0	0

The following are examples of the extensive reporting capabilities of the TMS\_TAX Check 21 Module:

**Extract Detail** Page 1 of 1

Branch	WorkSource	Transaction No	Trace No	RT No	Account No	Aux OnUs No	Check No	Amount
<b>Job Date : 10/01/2008</b>								
<b>Job No: 1072 CutOff Time : 12:35 Clearing Channel CHECK21 End Point : BOFA File Name 20081001-12-2-0-001.D AT</b>								
			898	111000614	7654321897		9495	1,938.00
			899	031304050	746-746123		1160	1,000.00
			900	111000614	7654321897		9495	1,938.00
			901	031304050	746-746123		1160	1,000.00
<b>Branch Total</b>				<b>Items : 4</b>				<b>Amount : 5,876.00</b>
<b>File Total</b>				<b>Items : 4</b>				<b>Amount : 5,876.00</b>
<b>Job No: 1073 CutOff Time : 12:35 Clearing Channel CHECK21 End Point : WELLS File Name 20081001-12-7-0-001.D AT</b>								
			902	065302303	1234567		7367	364.00
			903	081914856	0234567893		4341	500.00
			904	091302788	123-456		1326	100.00
			905	081017342	390-199-1		156	100.00
			906	065302303	1234567		7367	364.00
			907	081914856	0234567893		4341	500.00
			908	091302788	123-456		1326	100.00
			909	081017342	390-199-1		156	100.00
<b>Branch Total</b>				<b>Items : 8</b>				<b>Amount : 2,128.00</b>
<b>File Total</b>				<b>Items : 8</b>				<b>Amount : 2,128.00</b>

**Extract Summary**

Branch ID	Work Source	Transaction Number	Total Checks	Amount
<b>Job Date :</b> 10/01/2008				
<b>Job Number</b>	1072	<b>CutOff :</b> 12:35	<b>End Point :</b> BOFA	<b>FileName :</b> 20081001-12-2-0-001.DAT
26985	0000000001	0010000026	4	5,876.00
<b>Branch Total :</b>			<b>4</b>	<b>5,876.00</b>
<b>File Total :</b>			<b>4</b>	<b>5,876.00</b>
<b>Job Number</b> 1076 <b>CutOff :</b> 13:18 <b>End Point :</b> BOFA <b>FileName :</b> 20081001-13-2-0-003.DAT				
26985	0000000001	0010000026	2	2,938.00
<b>Branch Total :</b>			<b>2</b>	<b>2,938.00</b>
<b>File Total :</b>			<b>2</b>	<b>2,938.00</b>
<b>Grand Total</b>			<b>6</b>	<b>8,814.00</b>

**Extract Grand Summary**

Job No	CutOff	Clearing Channel	Work Source	Count	End Point	File Name	Amount
1072	12:35	CHECK21	0000000001	4	BOFA	20081001-12-2-0-001.DAT	5,876.00
1073	12:35	CHECK21	0000000002	8	WELLS	20081001-12-7-0-001.DAT	2,128.00
1076	13:18	CHECK21	0000000001	2	BOFA	20081001-13-2-0-003.DAT	2,938.00
1077	15:46	CHECK21	0000000002	4	WELLS	20081001-15-7-0-002.DAT	1,064.00
<b>Grand Total</b>				<b>18</b>			<b>12,006.00</b>

In order to accommodate the small percentage of checks that may not be cleared electronically though Check 21, TMS\_TAX Check 21 produces a separate cash letter for paper deposits. Daily deposit reports are created for both the paper and electronic clearings. The advantages of TMS\_TAX Check 21 include:

- Improves operational efficiency
- Lowers deposit fees and other per-item costs
- Improves funds availability
- Facilitates image check truncation as recommended by Check 21 Act
- Processes check images
- Incorporates multiple clearing endpoints through a decision engine
- Stores images from multiple sites

**4.4.1.2. Provide functionality to employ and take advantage of latest bank depository functionality (Image Cash Letter)**

Please refer to our response to question 4.4.1.1. TransCentra's ECS module provides the functionality required to create and submit Image Cash letters to the bank(s) desired by the Department.

#### *4.4.1.3. Provide opportunity to reduce deposit transportation expenses*

Please refer to our response to question 4.4.1.1. With the use of TransCentra's ECS module, deposit transportation expenses are significantly reduced as a result of the various electronic deposit methods provided. Only those items which were deemed ineligible for electronic deposit (e.g. failed Image Quality Analysis), will require manual deposit.

#### *4.4.1.4. Provide opportunity to reduce depository fees*

Please refer to our response to question 4.4.1.1. TransCentra's ECS module has an **Electronic Clearing Engine** which determines least cost deposit based on the combination of business rules and the Department's banking relationships and associated fees. This logic is used on each item to be deposited to ensure that deposit fees are minimized.

#### *4.4.1.5. Provide opportunity to accelerate funds availability*

Please refer to our response to question 4.4.1.1. TransCentra's ECS module provides multiple methods of depositing funds electronically. This substantially accelerates funds availability by connecting the deposit method of choice with the desired bank account. This enables the Department to determine the preferred method of deposit based on deposit fees and funds availability.

## Section 4, Subsection 4.5

### 4.5. Features and Functionality

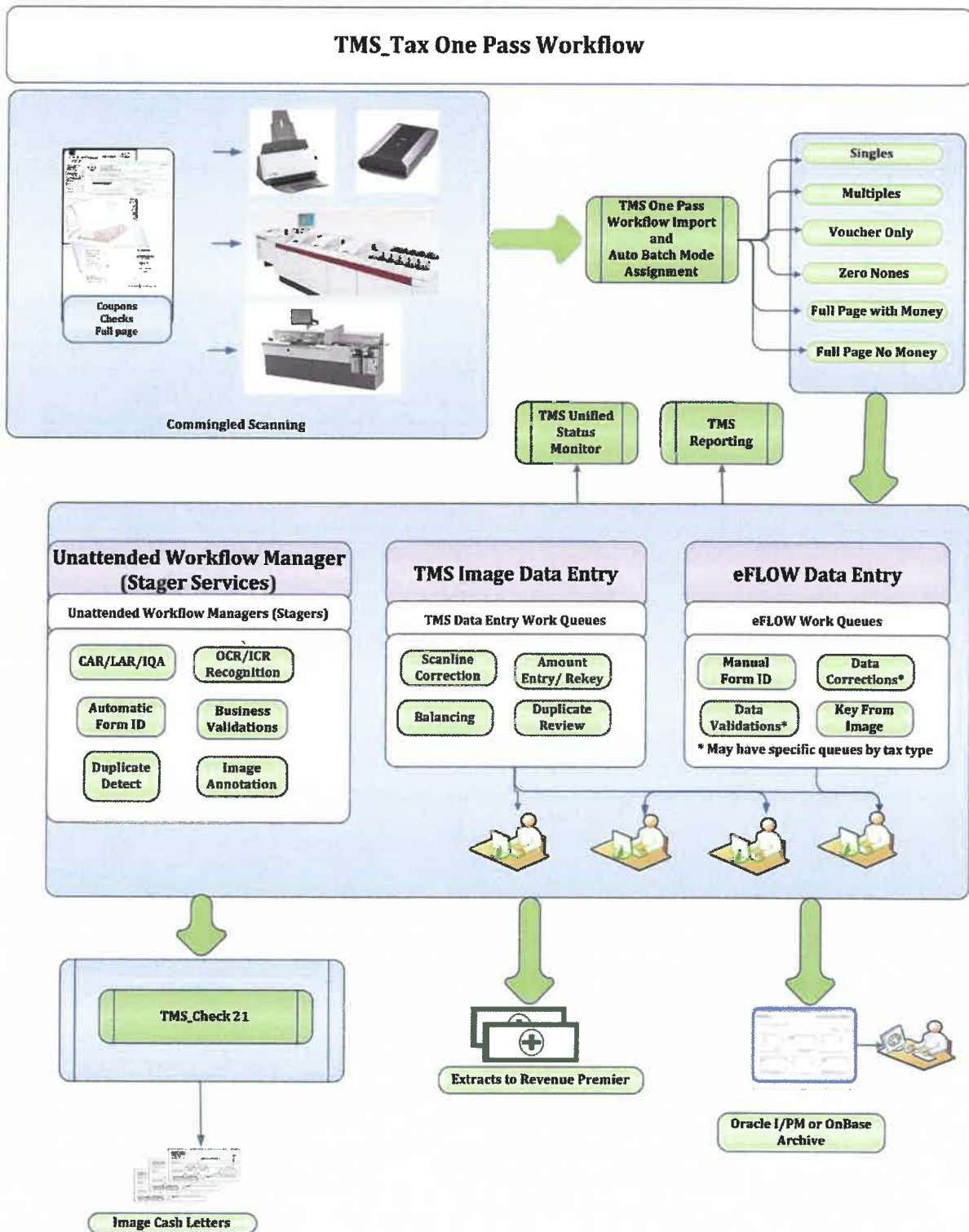
*The Department desires to update features and functionality to enable more web based access and more report functions and ability to process returns with minimal user intervention. To have the functionality to make changes without interruption to the system, changing and creating new reports, changes in workflow. Please explain how your solution will accomplish this goal.*

*4.5.1. Provide a description of the proposed solution which outlines a common, single product platform which addresses the requirements of this RFP.*

TMS\_TAX is a comprehensive tax processing solution based on an integration of proven applications tailored to meet the needs of tax agencies. TMS\_TAX is comprised of the following modules:

- TMS\_TAX Image
- TMS\_TAX IDR
- TMS\_TAX Check21
- TMS\_TAX Unified Status Monitor and Reporting

A high-level view of the TMS\_TAX workflow is presented below.



### TMS\_TAX Image

TMS\_TAX Image serves as an enterprise framework that provides all the traditional remittance processing features, and functionality such as check and stub data entry, scanline fix and balancing. TMS Image is highly customizable through configuration options. The setup process defines the expected

documents and how to validate, fix, sort, image and imprint them. It allows the definition of multiple workflows for different types of documents, including exception conditions. It establishes the processing completed in each workflow step.

The bulk of the configuration options are stored in the TMS Image database. Their values can vary by user, program and work source. For example, in scanline fix or check amount entry, the Department may allow experienced users to return to previously entered items, but disallow this feature for other data entry operators.

Security is managed through Windows Domain Security or traditional TMS\_TAX Image security. Users and authority groups defined through Windows may be assigned to TMS Image. When TMS Image is started at a workstation, that current user name is checked against the allowable TMS Image list. Through TMS\_TAX Image, users are assigned to work groups, which consist of a list of sites and work sources. During startup, the operator sees only those sites, work groups and work sources to which they are assigned. During work selection, the operator sees only batches for the chosen site, work group and work source. TMS Image manages the import of scanned images and data, and the overall workflow workflow – Pass 1 image capture, read of OCR and MICR scanlines, CAR/LAR processing, keying of failed CAR/LAR reads, scanline fix (OCR and MICR), ICR data capture of machine print and handwritten information from vouchers and tax documents, transaction balancing, data perfection of the data captured from tax documents, generation of ICL files, Pass 2 encoding (if desired), data extracts, image exports and reporting.

During Pass 1 image capture, the system can be configured to prompt the operator to enter any desired run-level data for the work type such as received date, deposit date, split batch flag, mail receipt time, mail opening operator ID and other parameters. The transport operator ID is automatically captured and associated with the batches being processed. Batch numbers and batch-relative sequence numbers are automatically assigned to the work, using the batch number ranges configured in the system. Batch numbers restart at the beginning of the range at the beginning of a new processing day. Batch numbers are unique for a given processing date, and a duplicate batch number cannot be created by the system, since the batch number is a primary key for the batch control table in the database.

If the commingled workflow is designed to use the envelope as a transaction separator (an available option on the optional transports), the following work types may be processed intermixed: single stub with single check, single stub with multiple checks, multiple stubs with single check, multiple stubs with multiple checks, single or multiple documents with single or multiple checks, single or multiple zero stubs (no financial information and no check), single or multiple stubs (financial information and no check), and check or remittance only (no stubs). It may be more efficient to pre-sort the single or multiple zero stubs transactions into separate batches, so that the work flow can be optimized for this unique work type. A separate workflow is provided for processing of late payments, with keying of the postmark date from the envelope or stub.

The required confidence level thresholds for the CAR/LAR results and the ICR data capture results are configurable. After CAR/LAR processing, batches may be automatically prioritized based on available batch-level data, including such fields as the tax type and the total CAR amount for the batch. This TMS prioritization allows scanline repair, amount entry and balancing to be performed in the order required by the Department's priorities. Subsequent processing in TMS\_TAX IDR and the optional on base content management solution may be further prioritized with different work queues for different types of items.

TMS\_TAX Image provides Anywhere Item Data Entry applications that automatically retrieve the images of checks, payment and document stubs and present the images to operators for scanline correction, amount entry and balancing. The transactions in a batch may be split across multiple operators for faster keying of the higher priority work types.

All images and extract data may be stored in the TMS\_TAX Image file storage medium and Microsoft SQL database (respectively) for up to three years. The SQL database supports a transaction roll-back process in case of corruption of the primary data before process completion.

TMS\_TAX Inquiry is an application that allows an internal user to search the TMS\_TAX database based on check account number, routing number, amount, tax identification number, unique document identifier, date processed, item type, or other data elements as determined by the Department, and then view data and images for the selected items or transactions.

All documents, vouchers and checks are endorsed at the time of capture (Pass 1) on both front and back with a unique document identifier of up to 15 digits tying all items of the transaction together. In a Single Pass workflow utilizing Check 21 for check deposit, image annotation is used prior to creation of the Image Cash Letter to add the Department -defined bank endorsement to the rear check images. The annotation may also be configured to annotate other information to the front and/or rear of the voucher, document and check images.

The system extracts and exports contain document and payment data and images for selected batches (or all batches waiting for extract/export). The files are produced in the Department specified format. The data extract contains all data required for the integrated tax system. The image export includes the front and rear images for stubs, documents and checks and all necessary index information, so that the image records may be stored in the Department's image archival system. Archiving is performed based on the Department rules, with image outputs stored in directories organized by date and batch number.

The extract and export files may be generated once or multiple times a day. A new interface will be developed to send the files to GenTax. The image archival system is updated with the annotated images for all transactions that have been processed that day. The data and batch file transfers via LAN are transparent to the system workstations and operators, and do not significantly degrade the performance of the workstations.

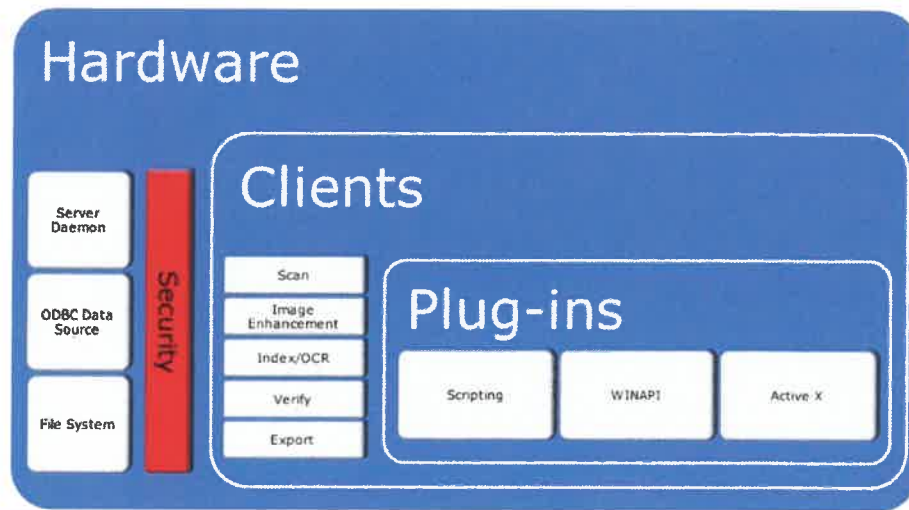
### **TMS\_TAX Intelligent Document Recognition (IDR)**

As an end-to-end imaging solution, TMS\_TAX IDR incorporates image capture, enhancement, separation, OCR, form identification and export packager. Optimized for speed, critical bottlenecks are tuned in assembly for best performance. TMS\_TAX IDR provides enhanced usage of equipment with distributed computing and multithreading/multi-instancing. TMS\_TAX IDR is also highly configurable. Third party and internal toolkits can be added, and toolkits can be written in any language supporting WINAPI, ActiveX, and .Net. It provides advanced image manipulation capabilities; scripting accessible API provides access for image functions such as auto rotation, image cleanup, color dropout, form identification, and more.

- End to end scanning solution
  - Image Capture, Enhance, Separation, OCR, Database Lookups, Index, Verification, QC, Export

- Optimized for speed
  - Critical bottlenecks are written in C++ and tuned in assembly for best performance
  - Optimized usage of the equipment with distributed computing and multithreading/multi-instancing
- Configurable
  - 3rd party and internal toolkits can be added
  - Toolkits can be written in any language supporting WINAPI, ActiveX, .NET
  - Support for scripting
- Secure
  - User/workstation/job permissions management
- Advanced image manipulation
  - Scripting accessible API provides access for image functions such as auto rotation, image cleanup, color dropout, form identification, and more

TMS\_TAX IDR architecture is depicted below:



### TMS\_TAX Check 21

TransCentra's TMS\_TAX Check 21 Electronic Clearing Suite (ECS) module, a comprehensive and proven solution, provides a means for payment processors to comply with the provisions of the latest legislation regarding electronic clearing methods. Features include:

- Item clearing decision engine
- Image quality assurance (IQA/IUA)
- Image exchange, image replacement document (IRD) and paper checks
- Image security and transmission
- Centralized and distributed capture
- Check truncation at the source of capture
- Process control
- Duplicate detection and review
- Return Items processing

The TMS\_TAX Check 21 Decision Engine qualifies each transaction to determine the clearing method based on Routing and Transit numbers (RTs) and work source, amount, Image Quality and Assurance (IQA) results and endpoint decisioning. For Check 21-qualified transactions, the Extract component generates the extracts in X9.37 format. An X9.37 file or "Image Cash Letter (ICL) is created based on the requirements of the Department's bank or banks. ICL files can be created manually or automatically (based on configured cut-off times), and generated once or multiple times a day, for one or multiple endpoints. Payments are sorted into deposit files based on tables defining the criteria for each endpoint.

The Department has the ability to review checks failing IQA and determine alternate routing or the need to deposit through a paper deposit. Figure C-190 below depicts an example of IQA review:



The following is an example of the real-time monitoring of TMS\_TAX Check 21 in the TMS\_TAX Unified Status Monitor:



JBB Web Status Monitor - Windows Internet Explorer

10.0.0.77

TMS STATUS MONITOR

Home Capture Data Entry Clearance Exception

List | Pie Chart | Vertical Bar | Horizontal Bar 3D chart

ECS ECS Extract

ECS Extract Status		Checks	Check Amount	Stub	Stub Amount
ARC Extract Waiting		1740	479500.4	0	0
ARC Extracted		4298	1155238.88	0	0
Check21 Extract Failed		2	154	0	0
Check21 Extract Waiting		1952	274188.32	0	0
Check21 Extracted		3089	762850.68	0	0

EndPoint	CutOffTime	Checks	ExtractAmount	Failed	FailedAmount
Bank of America	18:01:00	0	0.00	0	0.00
Bank of America	18:01:00	96	15022.63	0	0.00
Bank of America	18:01:00	868	184297.00	0	0.00
Bank of America	18:25:00	135	127974.40	0	0.00
Bank of America	18:15:00	884	154951.90	0	0.00
Bank of America	18:16:00	865	154951.90	0	0.00
Wellsfargo	18:16:00	0	0.00	2	114.00
Wellsfargo	18:16:00	171	30835.38	0	0.00
Wellsfargo	18:16:00	882	123961.52	0	0.00
Paper / IRD		710	292358.8	0	0

The following are examples of the extensive reporting capabilities of the TMS\_TAX Check 21 Module:

**Extract Detail** Page 1 of 1

Branch	WorkSource	Transaction No	Trace No	RT No	Account No	Aux OnUs No	Check No	Amount
<b>Job Date : 10/01/2008</b>								
<b>Job No: 1072 CutOff Time : 12:35 Clearing Channel CHECK21 End Point : BOFA File Name 20081001-12-2-0-001.D AT</b>								
	26985	0000000001	0010000026	898	111000614	7654321897	9495	1,938.00
	26985	0000000001	0010000026	899	031304050	746-746123	1160	1,000.00
	26985	0000000001	0010000026	900	111000614	7654321897	9495	1,938.00
	26985	0000000001	0010000026	901	031304050	746-746123	1160	1,000.00
	<b>Branch Total</b>			<b>Items : 4</b>	<b>Amount :</b>			<b>5,876.00</b>
	<b>File Total</b>			<b>Items : 4</b>	<b>Amount :</b>			<b>5,876.00</b>
<b>Job No: 1073 CutOff Time : 12:35 Clearing Channel CHECK21 End Point : WELLS File Name 20081001-12-7-0-001.D AT</b>								
	23445	0000000002	0010000027	902	065302303	1234567	7367	364.00
	23445	0000000002	0010000027	903	081914856	0234567893	4341	500.00
	23445	0000000002	0010000027	904	091302788	123-456	1326	100.00
	23445	0000000002	0010000027	905	081017342	390-199-1	156	100.00
	23445	0000000002	0010000027	906	065302303	1234567	7367	364.00
	23445	0000000002	0010000027	907	081914856	0234567893	4341	500.00
	23445	0000000002	0010000027	908	091302788	123-456	1326	100.00
	23445	0000000002	0010000027	909	081017342	390-199-1	156	100.00
	<b>Branch Total</b>			<b>Items : 8</b>	<b>Amount :</b>			<b>2,128.00</b>
	<b>File Total</b>			<b>Items : 8</b>	<b>Amount :</b>			<b>2,128.00</b>

**Extract Summary**

Branch ID	Work Source	Transaction Number	Total Checks	Amount
<b>Job Date:</b> 10/01/2008				
<b>Job Number</b>	1072	<b>CutOff:</b> 12:35	<b>End Point:</b> BOFA	<b>FileName:</b> 20081001-12-2-0-001.DAT
26985	0000000001	0010000026	4	5,876.00
<b>Branch Total :</b>			<b>4</b>	<b>5,876.00</b>
<b>File Total :</b>			<b>4</b>	<b>5,876.00</b>
<b>Job Number</b> 1076 <b>CutOff:</b> 13:18 <b>End Point:</b> BOFA <b>FileName:</b> 20081001-13-2-0-003.DAT				
26985	0000000001	0010000026	2	2,938.00
<b>Branch Total :</b>			<b>2</b>	<b>2,938.00</b>
<b>File Total :</b>			<b>2</b>	<b>2,938.00</b>
<b>Grand Total</b>			<b>6</b>	<b>8,814.00</b>

**Extract Grand Summary**

Job No	CutOff	Clearing Channel	Work Source	Count	End Point	File Name	Amount
1072	12:35	CHECK21	0000000001	4	BOFA	20081001-12-2-0-001.DAT	5,876.00
1073	12:35	CHECK21	0000000002	8	WELLS	20081001-12-7-0-001.DAT	2,128.00
1076	13:18	CHECK21	0000000001	2	BOFA	20081001-13-2-0-003.DAT	2,938.00
1077	15:48	CHECK21	0000000002	4	WELLS	20081001-15-7-0-002.DAT	1,064.00
<b>Grand Total</b>				<b>18</b>			<b>12,006.00</b>

In order to accommodate the small percentage of checks that may not be cleared electronically though Check 21, TMS\_TAX Check 21 produces a separate cash letter for paper deposits. Daily deposit reports are created for both the paper and electronic clearings. The advantages of TMS\_TAX Check 21 include:

- Improves operational efficiency
- Lowers deposit fees and other per-item costs
- Improves funds availability
- Facilitates image check truncation as recommended by Check 21 Act
- Processes check images
- Incorporates multiple clearing endpoints through a decision engine
- Stores images from multiple sites

**TMS Unified Status Monitor and Reporting**

TMS\_TAX offers a comprehensive set of tools to assist the Department in the daily management of the solution and provide a historical view for future staffing and system requirements. System monitoring is provided through the TMS\_TAX dashboard which provides real-time reporting of system functions and workflow queues. The graphical tools provide a quick snapshot for constant monitoring to quickly identify and address bottlenecks in either operator or unattended (background) processes. In this manner, the Department is able to monitor and proactively manage the TMS\_TAX solution for maximum performance and throughput.

In addition to real-time monitoring and reporting, TMS\_TAX provides historical end-of-day reporting. The TMS\_TAX reporting subsystem offers dozens of standard reports. The lister reporting application automatically prints a configured set of reports for each batch. The following reports are included:

- Deposit detail (electronic and paper items), summary and grand totals, deposit reconciliation, IQA failures
- DLN summary, tax type summary, received date
- Remittance register, automatic check report
- Payment extract detail, payment extract summary
- Batch detail, batch summary, stub detail, check detail
- Data entry and transport operator statistics
- Recognition statistics
- Rejected item detail
- Audit and control reporting including batch audit logs, amount change reporting and system logs

### **Technical Architecture Features**

The proposed system adopts an N-tier architecture approach by organizing and encapsulating functionality into various independent modules. This distributes the various modules on to separate servers to optimize for a server for a specific role and improves scalability. Apart from this major operational benefit, this achieves parallel development of the various tiers and eases maintenance and support. The data entry modules are built on a service oriented architecture using web services accessible over standard internet protocols. This distributes the keying function over a wider area without compromising security or performance.

The system architecture fully utilizes Microsoft Enterprise Library leveraging the realm of Microsoft recommended and proven .Net application development practices to bring consistency, extensibility and ease of use and integration. In order to isolate custom development from the standard code, user exits (custom hooks) are provided in all the modules. This maintains a standard product version across customers making upgrades simpler.

### **Hardware Features**

The proposed scanners comply with the following requirements:

- Certified by UL, CSA or other applicable safety standards
- Meets all FCC standards and regulations
- Fully protected from power surges (plus and minus)
- Have manufacturer's direct parts and service support available within North America
- Runs successfully in an office environment which includes typical temperature and humidity variations and air contamination from dust
- Runs on dedicated 200-240 volt alternating current supply (VAC)
- Processes envelopes with checks and documents
- Prints a front and required back endorsement on the same document
- Endorses, at a minimum, up to 300 documents per minute

- Prints transaction audit trail data on checks and other remittances as well as documents
- Sort checks and other remittances, documents and rejects, into multiple sort pockets
- Support Check 21 functions
- Provide a means to test the image quality while scanning is in process
- Process on a primarily straight track and be as open as possible to the operator in order to minimize jamming and recovery downtime

#### *4.5.2. Can you process envelopes with tax returns and remittances? Describe the process.*

Yes, envelopes can be processed with tax returns and remittances. The BancTec Intelliscan identifies the envelope as such. This is one method to scan work without a transaction separator. The envelope and contents can be scanned without pre-sorting, the system creates virtual batches based on the transaction contents. The following work types may be processed intermixed: single stub with single check, single stub with multiple checks, multiple stubs with single check, multiple stubs with multiple checks, single or multiple documents with single or multiple checks, single or multiple zero stubs (no financial information and no check), single or multiple stubs (financial information and no check), and check or remittance only (no stubs). It may be more efficient to pre-sort the single or multiple zero stubs transactions into separate batches, so that the work flow can be optimized for this unique work type. A separate workflow is provided for processing of late payments, with keying of the postmark date from the envelope or stub.

#### *4.5.3. With what frequency do you provide software upgrades?*

Patch upgrades are made available generally to address a specific issue or to accommodate an emergency patch by Microsoft. The Department can qualify the release in its test environment and then install in the production environment by following the release notes and instructions.

TMS\_TAX software upgrades are made available to all clients under maintenance at no additional charge. Our solutions undergo periodic revisions and our maintenance clients have access to these upgrades and may implement them at their discretion. TransCentra encourages clients to stay as current as possible, but does not enforce timelines for upgrading. In some cases TransCentra may be required to assist in the installation and testing.

Product releases are grouped into two broad categories, major releases and update releases. A major release typically includes significant additions of new features and/or technology upgrades. Update releases would include minor improvements and corrections to issues either reported by clients or found during TransCentra's internal quality assurance process. Typically, there is one major release and one update release every year.

#### *4.5.4. Describe your data entry features and functionality, for financial reporting and deposit configuration.*

The TransCentra TMS\_TAX Check 21 electronic clearing module provides a comprehensive and proven solution. The module provides a means for payment processors to comply with the provisions of the latest legislation regarding electronic clearing methods.

- Item clearing decision engine
- Image quality assurance (IQA/IUA)
- Image exchange, image replacement document (IRD) and paper checks



The following are examples of the extensive reporting capabilities of the TMS\_TAX Check 21 Module:

Extract Detail								Page 1 of 1	
Branch	WorkSource	Transaction No	Trace No	RT No	Account No	Aux OnUs No	Check No	Amount	
-----									
Job Date : 10/01/2008									
-----									
Job No:	1072	CutOff Time:	12:35	Clearing Channel:	CHECK21	End Point:	BOFA	File Name	20081001-12-2-0-001.D AT
26985	0000000001	0010000026	898	111000614	7654321897		9495	1,938.00	
26985	0000000001	0010000028	899	031304050	746-746123		1160	1,000.00	
26985	0000000001	0010000026	900	111000614	7654321897		9495	1,938.00	
26985	0000000001	0010000026	901	031304050	746-746123		1160	1,000.00	
<b>Branch Total</b>				<b>Items :</b>	<b>4</b>		<b>Amount :</b>	<b>5,876.00</b>	
<b>File Total</b>				<b>Items :</b>	<b>4</b>		<b>Amount :</b>	<b>5,876.00</b>	
-----									
Job No:	1073	CutOff Time:	12:35	Clearing Channel:	CHECK21	End Point:	WELLS	File Name	20081001-12-7-0-001.D AT
23445	0000000002	0010000027	902	065302303	1234567		7367	364.00	
23445	0000000002	0010000027	903	081914856	0234567893		4341	500.00	
23445	0000000002	0010000027	904	091302788	123-456		1326	100.00	
23445	0000000002	0010000027	905	081017342	390-199-1		156	100.00	
23445	0000000002	0010000027	906	065302303	1234567		7367	364.00	
23445	0000000002	0010000027	907	081914856	0234567893		4341	500.00	
23445	0000000002	0010000027	908	091302788	123-456		1326	100.00	
23445	0000000002	0010000027	909	081017342	390-199-1		156	100.00	
<b>Branch Total</b>				<b>Items :</b>	<b>8</b>		<b>Amount :</b>	<b>2,128.00</b>	
<b>File Total</b>				<b>Items :</b>	<b>8</b>		<b>Amount :</b>	<b>2,128.00</b>	

Extract Summary					Page 1 of 1
Branch ID	Work Source	Transaction Number	Total Checks	Amount	
-----					
Job Date : 10/01/2008					
Job Number	1072	CutOff:	12:35	End Point:	BOFA
				FileName:	20081001-12-2-0-001.DAT
26985	0000000001	0010000026	4	5,876.00	
<b>Branch Total :</b>			<b>4</b>	<b>5,876.00</b>	
<b>File Total :</b>			<b>4</b>	<b>5,876.00</b>	
Job Number	1076	CutOff:	13:18	End Point:	BOFA
				FileName:	20081001-13-2-0-003.DAT
26985	0000000001	0010000026	2	2,938.00	
<b>Branch Total :</b>			<b>2</b>	<b>2,938.00</b>	
<b>File Total :</b>			<b>2</b>	<b>2,938.00</b>	
<b>Grand Total</b>			<b>6</b>	<b>8,814.00</b>	

Extract Grand Summary							Page 1 of 1
Job No	CutOff	Clearing Channel	Work Source	Count	End Point	File Name	Amount
-----							
Extract Job Date 10/01/2008							
1072	12:35	CHECK21	0000000001	4	BOFA	20081001-12-2-0-001.DAT	5,876.00
1073	12:35	CHECK21	0000000002	8	WELLS	20081001-12-7-0-001.DAT	2,128.00
1076	13:18	CHECK21	0000000001	2	BOFA	20081001-13-2-0-003.DAT	2,938.00
1077	15:46	CHECK21	0000000002	4	WELLS	20081001-15-7-0-002.DAT	1,064.00
<b>Grand Total</b>				<b>18</b>			<b>12,006.00</b>

In order to accommodate the small percentage of checks that may not be cleared electronically through Check 21, TMS\_TAX Check 21 produces a separate cash letter for paper deposits. Daily deposit reports are created for both the paper and electronic clearings as shown previously. The advantages of TMS\_TAX Check 21 for the Department include:

- Improves operational efficiency
- Lowering deposit fees and other per-item costs
- Improves funds availability
- Facilitates image check truncation as recommended by Check 21 Act
- Processes check images
- Incorporates multiple clearing endpoints through a decision engine
- Stores images from multiple sites

**4.5.5. Describe the system's ability to capture, display and archive images in color, gray scale, or black and white.**

TMS\_TAX Image can display and archive images in bitonal, gray scale or color. Note Image Cash letters must be bitonal. The primary use of this functionality is to selectively display gray scale images during data entry when the bitonal image is not readable (e.g. money orders). This allows an operator to confirm the correct information and amounts for the transaction. Once an operator asks to display the gray scale image, this is used as the default image going forward. The other typical use for this functionality is to store appropriate images in the archive. For example, if the color image is important to retain, then that can be stored in the archive. Storage of various types of images impacts disk storage requirements.

The proposed IntelliScan scanner has the ability to produce multiple image formats and resolutions from a single pass. Images can be captured in bi-tonal TIFF, grayscale, and jpeg formats at both 200dpi and 300dpi, all at scan time without any degradation in speed.

**4.5.6. Describe your image display capabilities and operator display options.**

Image Mode allows users to manipulate the display of the image. All TMS\_TAX screens use a common interface for manipulating the image, zoom, rotate, etc. as described below.

The image keys, on the numeric keypad, are used as follows. Some functions leave Image Mode on while others turn it off, allowing users to return to data entry mode without having to take additional action - see column three below. Image Mode must be OFF to allow the keying of data. Changes made to the image-display are reflected in all image areas of the screen. If a user changes windows within a function, a change in display may not be reflected on the subsequent screen until a new item is displayed.

Image Key	Action	Image Mode Status
Slash (/)	Toggle Image Mode	
Plus (+)	Increase image size (zoom in)	On
Minus (-)	Decrease image size (zoom out)	On
Asterisk (*)	Return image to original size	Off
1	Rotate the image 90°	Off
2	Scroll zoomed image down	On
3	(not used)	

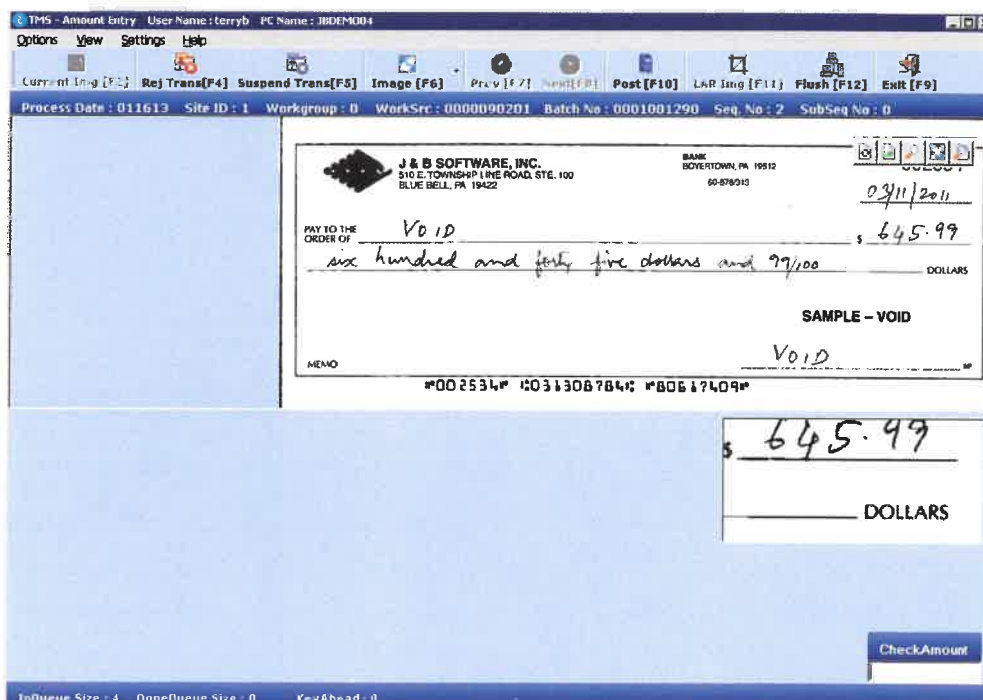
Image Key	Action	Image Mode Status
4	Scroll zoomed image left	On
5	Rotate the image 180°	Off
6	Scroll zoomed image right	On
7	Flip the image; show other side	Off
8	Scroll zoomed image up	On
9	Show alternate image, if available	Off

Additional hot keys are associated with image mode:

Hot Key	Used to
/A	Toggle Stay-On-Alternate option. It shows the alternate image for all transactions until turned off. The default state is off. If on, key ahead is disabled in Amount Entry.
/H	Displays the Image Key help window.
/P	Print current image. You are not prompted for confirmation.
/S	Toggle Use-Smart-Fit. For large images, the top of the image is displayed and it is sized to fit the width. For small document images, the image is sized to fit the image area. The default state is on.
/Z	If on, the image is zoomed automatically for each item. The default state is off.

Changes made to the orientation (/1, /5, and /7) or which image is shown (/9 and /A) are remembered and used in subsequent programs. For example, if an image is rotated in Scan Line Fix and left rotated when the batch is closed, the image is displayed rotated in Check Amount Entry.

Below is a sample of check amount entry. The check is shown, the CAR value is cropped and zoomed below the image and the entry is on the bottom right.





Below is a tax return with failed business rules. The fields with the error are highlighted in red. In this case, all the red fields are used in the calculation to validate the total tax due. The red fields enable the user to focus on only the fields in the calculation.

Missouri Department of Revenue  
P.O. Box 3040  
Jefferson City, MO 65105-3040  
Tires and Lead-Acid  
Battery Fee Return  
Amended Return

1A Tires Sold 2 6 1B Adjust, + or - 3 1C Total Tires 2 3  
1 7 2B Adjust, + or - 0 2C Total Batteries 1 7  
3 Total Tires and Batteries Sold  
Line 1C plus Line 2C 4 0

4 Tires and Battery Fee Rate, X \$ 5.0  
5 Tires and Battery Fee  
Line 3 times Line 4 (Rate) \$ 20.00  
6 Collection Deduction  
Line 5 times 8% \$ 1.20  
7 Total Fees Due  
Line 5 minus Line 6 \$ 18.80  
8 Addition to Fees  
(see instructions) \$  
9 Interest for Late Payment  
(see instructions) \$  
10 Approved Credit  
(see instructions) \$  
11 Pay This Amount (Line 8 minus Line 10) \$ 18.80

Business Name: ROUND CIRCLE LLC  
Business Address: [Redacted]  
City, State, and Zip Code: [Redacted]

Instructions for Completing Tires and Lead-Acid Battery Fee Return

Example: Return is due April 30, but it is filed (postmarked) May 15.  
Line 7 is \$400.  
\$400 x 9% = \$36  
\$36 is the Addition to Fees.  
Example: Return is due April 30, but it is filed (postmarked) June 1.  
Line 7 is \$400.  
\$400 x 9% = \$36  
\$36 is the Addition to Fees.

Example: Return is due April 30, but it is not paid by the due date, multiply Line 7 by the daily interest rate. Then multiply the result by the number of days late.  
Note: Number of days late is counted from the due date to the postmark date. For example, if the due date is April 30 and the postmark is May 15, the payment is 15 days late.  
Example: If interest rate is three percent (3%) and Line 7 is \$400:  
(A) Check the annual interest rate by 365 to get a daily rate.  
(3% / 365 = .000822)  
(B) Multiply Line 7 by the daily rate.  
(\$400 x .000822 = .3288)  
(C) Multiply the result by the number of days late.  
(.3288 x 15 days late = \$4.93)  
\$4.93 is interest for late payment.  
Note: Check the annual interest rate by 365 to figure the daily rate.  
\*Use 365 for leap years.  
The annual interest rate is subject to change each year. You can access the current interest rate on the Department's website at: <http://www.dor.mo.gov/forms/700>

Line 10: Approved Credit — Enter any Tires and Lead-Acid Battery Fee credit for which the taxpayer is allowed a credit. An approved credit must be accompanied by the Tires and Lead-Acid Battery Fee Return.

Line 11: Pay This Amount — Line 7 plus (+) Line 8 plus (+) Line 9 minus (-) Line 10. Make payments payable to Missouri Department of Revenue (U.S. Funds Only). Do not send cash or checks.

Sign and Date Return: Sign and date the return. If this is your final return, enter date on line provided.

Mail to: Taxation Division Phone: (573) 751-5850 (Technical questions or registration)  
P.O. Box 3040 Phone: (573) 528-1750 (Financial status of account)  
Jefferson City, MO 65105-3040 TTY: (800) 735-2965  
Fax: (573) 528-8747

FORM 700\_P1\_2014

Tires and Battery

Line 1 A 26  
Line 1 B 3  
Tires Total 23  
Line 2 A 17  
Line 2 B 0  
BATTERIES\_TOTAL\_B 17  
TOTAL\_7 40

Amounts

FEE\_8 2000  
Line 6 120  
Line 8 1800  
Line 9 0  
LINE 10 0  
LINE 11\_13 1800

Postmark

POST\_MARK\_DATE\_14

Amended

Amended N  
MO ID 10755713  
File Period 03312015

Page: 1/1 In: Q-1 Done: Q-0 Prev Image: Ctrl+P Next Image: Ctrl+N First Image: Ctrl+F ErrorMessage: Invalid Line 11 Value

## Section 4, Subsection 4.6

### 4.6. Security / Compliance / Accountability / Audit

*The Department desires to have a secure system with more updated audit process. The system must meet federal and state requirements. Please explain how your solution will accomplish this goal in the following:*

#### 4.6.1. Describe the security levels, features, and functionality of your proposed solution.

The application provides a centralized location for maintaining users and security settings. It controls which modules and which lockboxes that each user may access. When first setting up User Management, the sub functions are used in the order listed below.

#### Authority Level Management

Authority Level Management is used to assign a name to an authority or access level. A set of authority levels is defined for Windows users (users with direct access to bank network). If there are external users, i.e. those signing from outside of bank network, the Department may need to define a second set

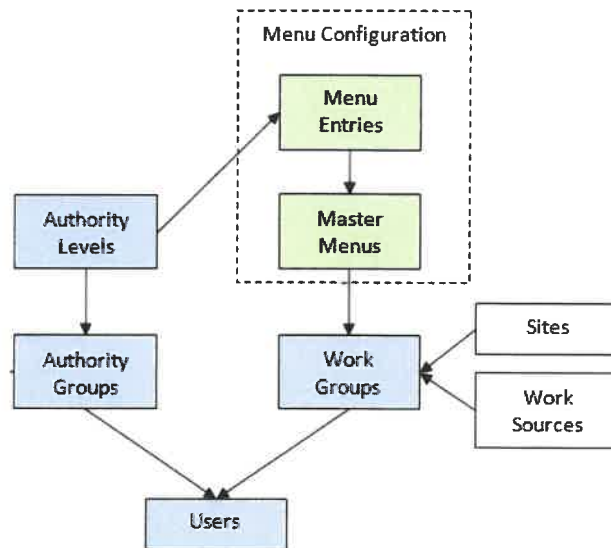
of authority levels for forms users. Authority levels must be defined before authority groups can be defined.

#### *Authority Group Management*

Authority Group Management is used to assign a name to a group of TMS Suite modules and assign an authority level to each module. Authority groups must be defined before users can be defined.

#### *Work Group Management*

Work Group Management is used to create a group of lockboxes to which users may have access. Bank will define one set of work groups per processing site. The available lockboxes for a work group are those assigned to the selected site. Work groups must be defined before users can be defined.



#### *Security Question Management*

Security Question Management is used to maintain the list of security questions that external users may be asked as part of their login process. Security questions may be assigned to individual customers, as well as having a default set of security questions that are applicable across the entire system. This list is used when setting the number and frequency of security questions for individual users.

#### *User Management*

User Management is used to maintain users. There are two types of users:

Internal, referred to as Windows users. In this case TMS accepts the operator's Windows AD credentials.  
 External, referred to as Forms. Forms users are assigned a name and password through the User Management sub function.

Each user is assigned basic information, such as a descriptive name, a status, and an email address. The user is then assigned an authority group, which determines which TMS modules they can access and at what authority level. Lastly they are assigned one or more work groups which determine which client's data they can see.

#### **4.6.2. Describe how and who supports and maintains the system security.**

Security is managed through Windows Domain Security. Users and authority groups defined through Windows may be assigned to TMS\_TAX. When TMS\_TAX is started at a workstation, that current user name is checked against the allowable TMS\_TAX list. Through TMS\_TAX, users are assigned to work groups, which consist of a list of sites and work sources. Then during startup, the operator sees only those sites, work groups and work sources to which they are assigned.

Once the users have been setup as explained in the process above, TMS\_TAX system security will be maintained by the Admin authority level user, who has permissions to create users and assign authority to access specific functionality. Below is a screen shot of the User Management tab that lets authorized personnel manage the access and authority of users.

**User Management**

**Search User**

Environment:  User Code/EmailId:  Description:   
 Authority:  Locked:  Activated:   
 User In Use:  Bank:

**List Of Users**

1 of 6

<input type="checkbox"/>	User Code	Description	Authority Group	Domain Name	Email Id	User In Use	Locked/Out	Activated	TYES	ECS	LE	Netquery	eCapture
<input type="checkbox"/>	37496	SADA	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	53044	vel	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	53088	VABAE	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	53109	EASPA	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	abdulk	ADDA	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	abduln	ADDS	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	Abdulzaher	DELETE	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	aglavathim	DELETE	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	ashwanth	ASDSA	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	ajay	AJAY	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	ajnis	ADAA	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin
<input type="checkbox"/>	ANAdmin	ANAdmin	AdminGroup	JAN087101A		N			Domain Users	Domain Users	FormsAdmin	FormsAdmin	FormsAdmin

#### 4.6.3. What auditing and logging mechanisms are used, including password resets and expiration?

When using Windows integrated authentication the login failures, logouts, password expiration and reset etc. are managed by Windows and available to the Department in this manner.

The TMS\_TAX system supports Windows authentication and forms authentication. In case of Windows authentication passwords are maintained by the active directory, TMS system does not store the AD passwords.

In Forms Authentication, users and password are maintained by the TMS\_TAX system.

- Passwords are hashed and stored in the TMS\_TAX database.
- Passwords will expire in every 30 days (configurable).
- Users cannot use the last five passwords while changing passwords.
- Passwords must contain one uppercase letter, one lower case letter, 0 through 9 , and a special character.
- Password minimum length is eight characters.
- For external users, we use Captcha validation as well if the Department desires.

The TMS\_TAX system stores audit related information in the database. This includes user actions such as log in, password attempts, password reset, accessed programs, changed values, changes done to system by Admin to add/modify any access, and log out. A sample audit report is presented below.

**User Log Report**

Action Time	Action Name	Category Name	Description
6/19/2014		Usercode: Admin	
07:47:44 AM	Login	Login	User Logged in Successfully in NQ
07:47:44 AM	Dashboard	Dashboard	Dashboard Loaded Successfully
07:51:48 AM	ApplicationSettingsLoaded	Application Settings Loaded	Application configuration loaded successfully
07:53:47 AM	EntitySettings	Entitysetting Loaded	Entity settings loaded successfully
07:56:52 AM	DownloadReports	DownloadReports	Download Reports Loaded successfully
07:57:45 AM	Cross reference report	Cross reference report viewed	Cross Reference report viewed
07:58:30 AM	Cross reference report	Cross reference report generated	Cross Reference report generated.
07:59:52 AM	ArMaintenance	ArMaintenance	ArMaintenance page loaded successfully
08:03:35 AM	Logout	Logout	User Logged out from NQ Successfully
08:30:05 AM	Login	Login	User Logged in Successfully in NQ
08:30:06 AM	Dashboard	Dashboard	Dashboard Loaded Successfully
08:30:26 AM	CDSettings	CDSettings Loaded	CD Settings Loaded
08:38:30 AM	Dashboard	Dashboard	Dashboard Loaded Successfully
08:40:42 AM	Cross reference report	Cross reference report viewed	Cross Reference report viewed
08:41:26 AM	Cross reference report	Cross reference report generated	Cross Reference report generated
09:04:47 AM	ApplicationSettingsLoaded	Application Settings Loaded	Application configuration loaded successfully

**4.6.4. What encryption methods are used, if any?**

To ensure Federal Information Processing Standards Compliance, SHA1 (SHA1CryptoServiceProvider) and SHA2 (SHA256CryptoServiceProvider) hashing algorithms are used. We continue to work with various public sector agencies and update the cryptography as needed.

**4.6.5. What types of authentication are supported?**

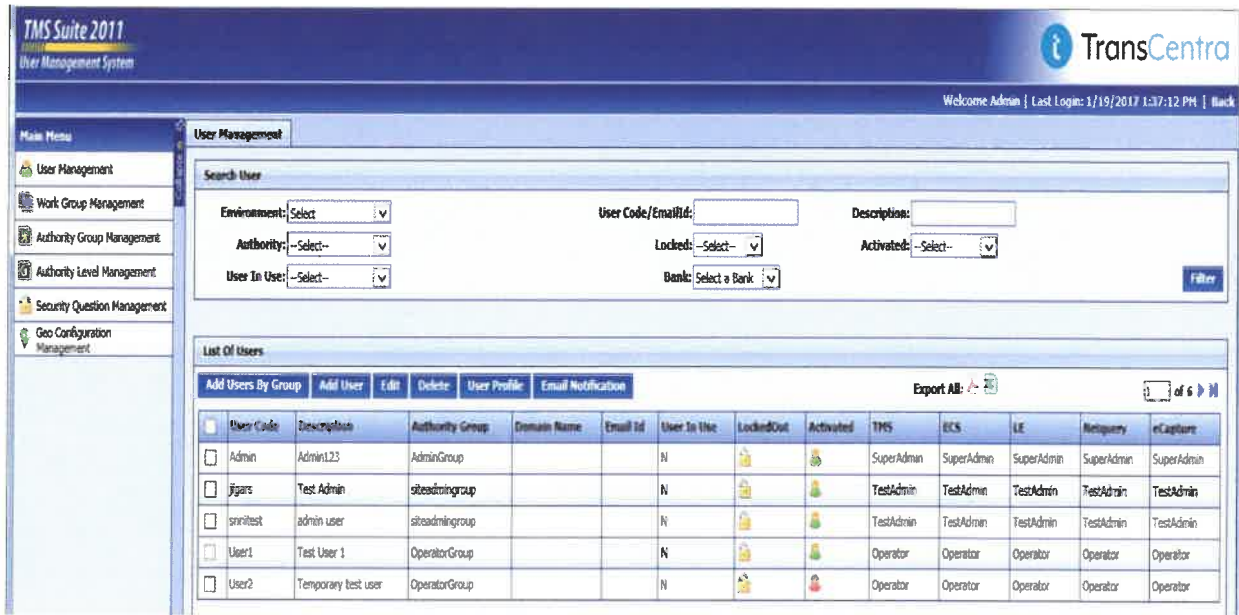
Windows Authentication (Active directory) and Forms Authentication are supported. The system can support single sign on authentication to integrate with various State in-house applications.

**4.6.6. Is there central administration for security? How long does it take to add a new user?**

Yes, TMS\_TAX has a centralized web based module to handle all the security related information which includes user creation, providing access to various modules in the TMS\_TAX system, modifying user permissions, and deactivation of users. Only Admin authority level users defined in the system will have access to this module. For forms authentication users, it is straight forward and can be quickly added. The same applies to Windows authentication user, as long as the user is present in the Windows Groups accessed by TMS\_TAX system.

TMS\_TAX user administration is via the user management screen. The user code and authority group are from the Active Directory. The authority group defines the access level, and ranges from 0 to 99 (highest). Default authority levels are:

Name	Level	Type
SuperAdmin	99	Forms
SiteAdmin	80	Forms
Supervisor	50	Forms
Operator	10	Forms



**4.6.7. Describe your proposed system's compliance with current government and legal standards for protecting information.**

The TMS\_TAX software suite has been PCI PA-DSS certified since 2014. Throughout the system, specified data is encrypted when entered and masked when presented to unauthorized users. All data entry programs and stager functions can encrypt and mask data as well write audit information of any changes made. TMS\_TAX supports PCI compliance from a sensitive data perspective and Microsoft supported FIPS algorithms.

**4.6.8. What audit trails are provided with your proposed solution?**

TMS\_TAX stores audit related information in the database. This includes user actions such as log in, password attempts, password reset, accessed programs, changed values, changes done to system by Admin to add/modify any access, and log out. All the information available can be shown as part of various reports.

Another audit trail capability is to be able to account for every document scanned into the TMS\_TAX system. During the scanning process on any device, a unique tracking number is assigned to each transaction. This unique tracking number is maintained in the TMS database throughout the entire process. Additionally, TMS\_TAX assigns the DLN in a central staging service to allow different tax types to be processed intermixed at the transports, and to ensure that the DLNs are unique. The DLN may also contain Tax Type or other relevant information. The DLN number is cross referenced to the sprayed audit trail number (and vice versa) so that a transaction that may need to be manually pulled can be easily located. On the other hand, with the DLN it is possible to gather information about where and by whom a transaction was scanned.

**4.6.9. Discuss what system and user activities can be monitored and audited with your proposed solution.**

TMS\_TAX has extensive audit trail capabilities in the system. The audit log report displays the log in details for all the users, sorted by program, for a particular work type and time period. It includes information such as transaction number, sequence number (DLN), field name, old value, new value, and log in date and time. All user actions are logged and stored in the TMS\_TAX database for the time period

determined by the Department. In addition, TMS\_TAX logs information into the event log and/or system log detailing system activity. The granularity of the information logged can be configured by the trace level setting in the program configuration.

TMS\_TAX stores audit related information in the database. This includes user actions such as log in, password attempts, password reset, accessed programs, changed values, changes done to system by Admin to add/modify any access, and log out. All the information available can be shown as part of various reports. Below is a sample transaction level report that shows the batch the transactions and the actions of a user at a transaction level.

Processing Date : 03/25/2013 Page No:1 / 1

### User - Transaction Log Report

Site Id	TranNo	DB To Queue	Queue To Client	Client To DB	Log Text
<b>UserCode: swaminathanb</b>					
<b>BatchNo: 0010201103</b>					
<b>Program: Scanline Fx</b>					
1	1		03/25/2013 09:49:02 AM	03/25/2013 09:50:13 AM	DetailFile Lock Released
1	3		03/25/2013 09:49:02 AM	03/25/2013 09:50:13 AM	DetailFile Lock Released
1	4		03/25/2013 09:49:02 AM	03/25/2013 09:50:13 AM	DetailFile Lock Released
1	5		03/25/2013 09:49:02 AM	03/25/2013 09:50:13 AM	DetailFile Lock Released
1	1		03/25/2013 10:17:39 AM	03/25/2013 10:21:13 AM	transaction suspended by user
1	3		03/25/2013 10:17:39 AM	03/25/2013 10:21:24 AM	transaction suspended by user
1	4		03/25/2013 10:17:39 AM	03/25/2013 10:25:47 AM	DetailFile posted by user
1	5		03/25/2013 10:17:39 AM	03/25/2013 10:21:53 AM	transaction suspended by user
<b>Program: Balancing</b>					
1	8		03/25/2013 11:32:27 AM	03/25/2013 11:33:07 AM	DetailFile posted by user
1	9		03/25/2013 11:32:27 AM	03/25/2013 11:33:07 AM	DetailFile posted by user
<b>Program: Stub Amount Entry</b>					
1	8		03/25/2013 11:01:32 AM	03/25/2013 11:04:12 AM	DetailFile Lock Released
1	9		03/25/2013 11:01:32 AM	03/25/2013 11:04:12 AM	DetailFile Lock Released
1	8		03/25/2013 11:04:41 AM	03/25/2013 11:05:00 AM	DetailFile Lock Released
1	9		03/25/2013 11:04:41 AM	03/25/2013 11:05:00 AM	DetailFile Lock Released
1	8		03/25/2013 11:07:09 AM	03/25/2013 11:07:56 AM	DetailFile posted by user

TMS\_TAX also allows for real time monitoring of users in the system as to when they logged in, at what terminal, and what function they have been performing as shown in the screen shot below.

User Summary					
Operator	Machine	Login Time	Last Access Time	Status	Elapsed Time(HH:MM:SS)
MORAMEDR	SERVER58	11:41:32 AM	3/11/2014 11:42:14 AM	TQUA Review	0:03:46

Batch No	Stub Count	Stub Total	Check Count	Check Total
000000003	7	\$0.00	5	\$0.00
000000004	4	\$0.00	5	\$0.00
000000005	4	\$0.00	5	\$0.00
<b>Group Summary</b>	<b>11</b>	<b>\$0.00</b>	<b>15</b>	<b>\$0.00</b>

## Section 4, Subsection 4.7

### 4.7. Implementation, Documentation and Training

*The Department desires to have a vendor implement a system and train employees, plus provide training and implementation documentation that pertains to this system. Please explain how this goal will be met.*

*4.7.1. Provide a list and brief description of all documentation, training materials, classes, instruction and time schedules provided with your proposed solution.*

TransCentra will provide in-depth train-the-trainer sessions to the Department that fully cover the

administration and use of TMS\_TAX. Our approach to client training ensures that Department employees are fully prepared to perform their jobs using TMS\_TAX.

Operations, supervisory, and administrative training sessions are conducted prior to the Department's UAT. Technical training is provided after the system has been delivered and tested. Training dates will be mutually agreed to between the Department and TransCentra during the project's planning phase.

Training consists of class presentations, demonstration, class exercises, and hands-on training.

### **Prerequisites**

The following is a list of recommended prerequisites for class attendees.

#### *All Attendees*

- Familiar with Windows operations

#### *System Administrator*

- Microsoft Certified Windows

#### *System Support Personnel*

- Fluent in Windows operating systems

### **Training Materials**

TransCentra will provide the most current version of the following published user manuals, as well as the help files for the system. The manuals and help files are provided on a CD, for copying to a Department shared drive or other common location. The CD also contains Adobe software that allows the manuals to be viewed and printed.

- TMS\_TAX Data Entry User's Manual \*
- TMS\_TAX System Administration Manual \*
- TMS\_TAX Web Administration Manual
- TMS\_TAX Intelligent Document Recognition (IDR) Form Studio User Manual
- TMS\_TAX IDR Extract Configuration User Manual

\* TMS\_TAX Help is also available on the system.

### **Training Modules**

#### *BancTec Scanner Operations*

This training will be performed onsite and will consist of demonstration and hands-on training. Additionally, each IntelliScan has BancTec's in-depth context sensitive help screens that provide access to all instructional content.

#### *Data Entry Operations*

Course topics for data entry training include:

- TMS\_TAX IDR Data Entry Overview
- Review of Workflows

- Transaction Processing Concepts
- TMS\_TAX IDR Data Entry Processes
  - User Interface
  - Functions
  - Exception Handling
- Unified Status Monitor –IDR Tab

*Supervisor Operations*

Course topics for supervisor training include:

- Review of Workflows
- Transaction Processing Concepts
- New User and Recognition Statistics Reports
- Review of Tax Reports
- Unified Status Monitor –IDR Tab
- IDR Controller – Monitor Work Throughput

*System Administration*

Course topics for system administration training include:

- User Maintenance – Setting Appropriate Authority Levels for Functions
- DLN Assignment/Maintenance for Tax Types
- IDR Enterprise Manager –Managing Automated Services
- Unified Status Monitor –IDR tab, Services in Services Monitor
- Controller –Monitor Throughput and Processing Speeds for Stations
- Configuration Tool – Viewing and Modifying IDR Configurations
- System Troubleshooting
- System Audit Capabilities
- Database Maintenance: Database Tables, Statistics

*TMS\_TAX IDR Technical Training*

This training will enable Department staff to add and modify forms and add new work types to the system. Course topics are presented below.

Day One	<ul style="list-style-type: none"> <li>▪ Architecture Overview</li> <li>▪ Installation Steps for Development Environment</li> <li>▪ Enterprise Manager</li> <li>▪ Form Designer Overview</li> <li>▪ Flow Properties</li> <li>▪ Adding Pages, Field Groups, Fields, Tables &amp; Exceptions Fine Tuning and Recommendations</li> <li>▪ ROI Properties</li> <li>▪ OCR Designer &amp; Virtual Engines</li> <li>▪ Data Entry Completion Layouts</li> <li>▪ Day 1 Exercises</li> </ul>
Day Two	<ul style="list-style-type: none"> <li>▪ Day 1 Quick Review and Quiz Rules</li> <li>▪ Lookup Tables</li> <li>▪ Selecting OCR engines, Routing Rules</li> </ul>



	<ul style="list-style-type: none"> <li>▪ Auto Run Stations</li> <li>▪ Statistics</li> <li>▪ Day 2 Exercises</li> </ul>
Day Three	<ul style="list-style-type: none"> <li>▪ Day 1 &amp; 2 Quick Review &amp; Quiz</li> <li>▪ Custom Coding</li> <li>▪ Functions and Validations</li> <li>▪ Station Events</li> <li>▪ Exercises</li> </ul>
Day Four	<ul style="list-style-type: none"> <li>▪ Explore Custom Station</li> <li>▪ Exercise: Build IDR Application</li> </ul>
Day Five	<ul style="list-style-type: none"> <li>▪ Continuing Custom Application Build</li> <li>▪ Review of Week</li> </ul>

### Assumptions and Considerations

1. The Department is responsible for ensuring that course attendees are present for the duration of all sessions, that the scheduled courses are not interrupted and that the course attendees are not disturbed during training.
2. The Department will make available a conference room and presentation equipment for the duration of the training.
3. The Department will ensure that at least one person knowledgeable in the Department's specific procedures attends each session.
4. The Department will use trained personnel to conduct the User Acceptance Test.
5. The Department will use trained personnel to train the remaining the Department personnel, after UAT.
6. Batches created specifically for practice exercises are used in training. With assistance from the Department, TransCentra will create these batches.
7. During training, TransCentra provides appropriate course materials and administrative and operations manuals in both printed and electronic format.
8. Generally, the number of attendees for each class should not exceed six students.
9. A class day does not exceed six hours. Classes are not conducted on holidays recognized by TransCentra or the Department.

#### 4.7.2. What media format will you use to deliver the documentation that you provide with your solution?

TransCentra provides various types of documentation in multiple formats.

- As part of training, a student guide is provided for each class participant. The guide includes a copy of all presentation material. The TMS\_TAX Image Data Entry User's Guide and TMS\_TAX Image System Administration Manual are provided as references.
- User manuals are provided in PDF format for all TMS\_TAX modules. These manuals can also be provided in Word format, if the Department would like to use some of the information as part of its own training material.
- TransCentra also provides an extensive TMS\_TAX help system which can be stored on a primary server and accessed via a web browser. Alternately the TMS\_TAX help system can be installed

on an individual PC. The TMS\_TAX help system is very interactive and links key functionality to screens and fields within screens so that the help provided is given in the best context possible.

#### **4.7.3. What skill sets are required for technical support of your proposed solution?**

The following skill sets are required: fluent in Windows Operating Systems and TMS\_TAX knowledge.

**4.7.4. Provide a detailed description of the implementation process, including testing and a sample implementation schedule. Identify individual tasks, time requirements, and responsibilities of each party.**

### **Implementation Management Roles and Responsibilities**

#### *TransCentra Project Manager*

The TransCentra Project Manager will serve as the single point of contact for the Department and perform the following tasks:

1. Ensure that all TransCentra-related deliverables are provided as per the mutually agreed-to project schedule
2. Manage all requests for project deliverables, system solution clarifications/changes
3. Accept and deliver requested system solution changes (processed through formal change control management)
4. Organize, coordinate, and manage all aspects of the implementation
5. Participate in all critical meetings discussing business needs, system requirements and implementation
6. Conduct the kickoff meeting where project approach, deliverables, milestones, team member responsibilities, contract commitments and timeframes are thoroughly discussed with the Department
7. Direct all TransCentra efforts on the project and ensure that project obligations are met:
  - Monitor project activities for compliance and quality
  - Prepare and conduct project team and management review sessions
  - Manage change control along with the Department Project Manager
  - Review overall project status including Department deliverables on a periodic basis
  - Monitor performance of members of the project team
  - Monitor the project schedule and make updates to staffing and the schedule as needed
  - Manage project risk

#### *The Department Project Manager*

The Department will assign a Project Manager who, among other responsibilities, will ensure that all Department-related deliverables are provided as per the mutually agreed-to project schedule. This individual will serve as the single point of contact for the TransCentra Project Manager. The Department's Project Manager should possess the authority to formally accept all project deliverables, provide system solution clarifications, request additional information from TransCentra, and request system solution changes.

## Project Plan Development

TransCentra will develop a full project plan that contains major tasks, deliverables, and milestones, along with corresponding target completion dates, for every stage of this project; supplemental tasks and sub-tasks will be added as necessary to completely describe the level and duration of the effort required. This framework will be distributed to all team members and serve as the structure for full implementation. The project plan is updated as tasks are completed, added, or modified. TransCentra understands the impact that issues can have on a smooth flowing implementation, and we spend a significant amount of time determining the sequence of tasks required for implementation and providing a reasonable duration for their completion. In managing the project, we will monitor the project plan to determine the timeliness of milestones and deliverables, and make any adjustments necessary to ensure critical path items are kept on schedule.

The project schedule will be centered on meeting the Department's cost, timetable, and quality needs. Working closely with the Department, both parties agree upon the plan and all of its components before the official kick-off of the implementation activities. The plan below is based upon our current understanding of the Department's, with a Notice to Proceed date of June 30, 2017. Note that this timeline is preliminary in nature and provided for demonstration purposes. It will be refined during the due diligence process.

ID	Name	Duration	Start	Finish
<b>1</b>	<b>West Virginia Department of Revenue</b>	<b>450.5d</b>	<b>6/30/17</b>	<b>3/22/19</b>
<b>2</b>	<b>Processing Platform Enhancement</b>	<b>393.d</b>	<b>6/30/17</b>	<b>1/1/19</b>
<b>3</b>	<b>Project Initiation</b>	<b>6.d</b>	<b>6/30/17</b>	<b>7/7/17</b>
4	Notice to Proceed	1.d	6/30/17	6/30/17
5	Project kick-off	2.d	7/3/17	7/4/17
6	Statement of Work finalized	3.d	7/5/17	7/7/17
7	Creation of initial Project Management Plan	3.d	7/5/17	7/7/17
<b>9</b>	<b>Phase 1 - TMS-Tax Build with Phase 1 taxes</b>	<b>152.5d</b>	<b>7/3/17</b>	<b>1/31/18</b>
<b>10</b>	<b>Business Requirements Document (BRD)</b>	<b>19.d</b>	<b>7/3/17</b>	<b>7/27/17</b>
11	Data Collection in preparation for BRD meeting	2.d	7/3/17	7/4/17
12	Preliminary BRD created	3.d	7/5/17	7/7/17
13	Onsite Requirements meeting, product demo	3.d	7/10/17	7/12/17
14	Provide Operations, System Admin documentation	1.d	7/10/17	7/10/17
15	Updates to Business Requirements Document	5.d	7/13/17	7/19/17
16	Project Schedule created, project plan updated	2.d	7/20/17	7/21/17
17	Requirements review, updates	5.d	7/20/17	7/26/17
18	Phase 1 Requirements Sign-off	1.d	7/27/17	7/27/17
<b>19</b>	<b>Site Planning/Setup</b>	<b>68.d</b>	<b>7/13/17</b>	<b>10/16/17</b>
20	Order BancTec Scanners	2.d	7/13/17	7/14/17
21	Order Servers, System Software, Workstations	10.d	7/17/17	7/28/17
22	Final documentation of system hardware/software	2.d	8/31/17	9/1/17
23	Provide the Department with installation plan	3.d	9/4/17	9/6/17
24	Site Readiness validation	9.d	9/7/17	9/19/17
25	Test BancTec scanners jobs at BancTec scanners headquarters	3.d	9/20/17	9/22/17
26	Install BancTec Scanners	5.d	10/9/17	10/13/17
27	Certify site is ready for deployment	1.d	10/16/17	10/16/17
<b>28</b>	<b>Development/Configuration</b>	<b>44.d</b>	<b>7/28/17</b>	<b>9/27/17</b>

ID	Name	Duration	Start	Finish
29	Requirements Analysis, Solution Design	5.d	7/28/17	8/3/17
30	Design Reviews, design updates	2.d	8/4/17	8/7/17
31	Provide detailed design to the Department	.d	8/7/17	8/7/17
32	Department system setup	2.d	8/8/17	8/9/17
33	Create full page sort pattern with Lockbox Studio	4.d	8/10/17	8/15/17
34	Update design based on the Department feedback	1.d	8/15/17	8/15/17
35	Set up system interfaces (BancTec Scanners, GenTax)	3.d	8/16/17	8/18/17
36	Forms stager: form ID, transaction integrity	3.d	8/21/17	8/23/17
37	Configure new DLN ranges	1.d	8/24/17	8/24/17
38	Forms design & definition for Ph1 forms	15.d	8/16/17	9/5/17
39	Configuration for workflow, business rules	6.d	9/6/17	9/13/17
40	Create tax-specific reports	3.d	8/25/17	8/29/17
41	Image Annotation configuration	1.d	8/30/17	8/30/17
42	Extract/export file creation	10.d	9/14/17	9/27/17
43	Development/Configuration Completion	.d	9/27/17	9/27/17
<b>44</b>	<b>QA Testing for Phase 1</b>	<b>64.d</b>	<b>7/28/17</b>	<b>10/25/17</b>
45	Requirements Study for Test Cases document	5.d	7/28/17	8/3/17
<b>46</b>	<b>Integration Testing</b>	<b>44.d</b>	<b>8/4/17</b>	<b>10/4/17</b>
47	Test Cases preparation	10.d	8/4/17	8/17/17
48	Integration Test: new interfaces, form combo	5.d	9/28/17	10/4/17
<b>49</b>	<b>System Testing</b>	<b>49.d</b>	<b>8/18/17</b>	<b>10/25/17</b>
50	Test Cases Preparation	10.d	8/18/17	8/31/17
51	Test Cases Review, Updates	3.d	9/1/17	9/5/17
52	Test data requirements document	3.d	9/1/17	9/5/17
53	Preparation of Test Decks, data generation	5.d	9/6/17	9/12/17
54	System testing (full page flow, forms, regressi	15.d	10/5/17	10/25/17
55	Pre-install at Blue Bell to test install pkg	5.d	10/19/17	10/25/17
56	WebEx demo of system	2.d	10/20/17	10/23/17
57	Provide Outputs to the Department for Review	1.d	10/24/17	10/24/17
58	Phase 1 Ready for Installation at the Department	.d	10/25/17	10/25/17
<b>59</b>	<b>Installation / Training for Phase 1</b>	<b>9.d</b>	<b>10/26/17</b>	<b>11/7/17</b>
60	On-site Software Installation/Validation	4.d	10/26/17	10/31/17
61	Flow testing	1.d	11/1/17	11/1/17
62	Operator / Supervisor training	2.d	11/3/17	11/6/17
63	System Administration training	1.d	11/7/17	11/7/17
<b>64</b>	<b>User Acceptance Testing for Phase 1</b>	<b>75.d</b>	<b>9/6/17</b>	<b>12/19/17</b>
65	Document UAT Test cases	15.d	9/6/17	9/26/17
66	Send UAT Test Cases to TransCentra	.d	9/26/17	9/26/17
67	User Acceptance Testing for Phase 1	30.d	11/8/17	12/19/17
68	Creation of production migration plan	10.d	12/6/17	12/19/17
69	The Department Certified Phase 1 for Production	.d	12/19/17	12/19/17
<b>70</b>	<b>Production - Phase 1</b>	<b>29.d</b>	<b>12/20/17</b>	<b>1/29/18</b>
71	Cutover to Production	.5d	12/20/17	12/20/17
72	Production Support	28.d	12/21/17	1/29/18
73	Support Transition	5.d	1/23/18	1/29/18
74	System Acceptance	.d	1/31/18	1/31/18

ID	Name	Duration	Start	Finish
<b>76</b>	<b>Technical Training</b>	<b>190.d</b>	<b>4/11/18</b>	<b>1/1/19</b>
77	Forms Studio training for Department analysts	10.d	4/11/18	4/24/18
78	Development Support - 100 hours	180.d	4/25/18	1/1/19
<b>80</b>	<b>Phase 2</b>	<b>136.d</b>	<b>1/31/18</b>	<b>8/9/18</b>
<b>81</b>	<b>Business Requirements Document (BRD)</b>	<b>19.d</b>	<b>1/31/18</b>	<b>2/27/18</b>
82	Data Collection in preparation for BRD meeting	5.d	1/31/18	2/7/18
83	Preliminary BRD created	3.d	2/7/18	2/12/18
84	Requirements meeting: business rules, form sp	1.d	2/12/18	2/13/18
85	Updates to BRD	5.d	2/13/18	2/20/18
86	Phase 2 schedule created, project plan updated	2.d	2/20/18	2/22/18
87	Requirements review, updates	5.d	2/20/18	2/27/18
88	Phase 2 Requirements Signoff	.d	2/27/18	2/27/18
<b>89</b>	<b>Site Planning/Setup</b>	<b>60.d</b>	<b>2/27/18</b>	<b>5/22/18</b>
90	Add any additional Workstations needed for prod	60.d	2/27/18	5/22/18
<b>91</b>	<b>Development/Configuration for Phase 2</b>	<b>34.d</b>	<b>2/27/18</b>	<b>4/16/18</b>
92	Requirements Analysis, Solution Design	3.d	2/27/18	3/2/18
93	Design reviews/updates	2.d	3/2/18	3/6/18
94	Provide detailed design to the Department	.d	3/6/18	3/6/18
95	Review/Update design based on the Department feed	8.d	3/6/18	3/16/18
96	Forms design and definition for each form	10.d	3/6/18	3/20/18
97	Configuration for workflow, business rules	6.d	3/20/18	3/28/18
98	Transaction integrity validation, Form ID	2.d	3/28/18	3/30/18
99	Configure new DLN ranges	1.d	3/30/18	4/2/18
100	Export/Extract file creation	5.d	4/2/18	4/9/18
101	Create any tax-specific reports	5.d	4/9/18	4/16/18
102	Development/Configuration complete	.d	4/16/18	4/16/18
<b>103</b>	<b>QA Testing for Phase 2</b>	<b>57.d</b>	<b>2/27/18</b>	<b>5/17/18</b>
104	Integration Testing	39.d	2/27/18	4/23/18
105	Test cases preparation	5.d	2/27/18	3/6/18
106	Integration Testing	5.d	4/16/18	4/23/18
<b>107</b>	<b>Systems Testing</b>	<b>52.d</b>	<b>3/6/18</b>	<b>5/17/18</b>
108	Test Cases preparation	5.d	3/6/18	3/13/18
109	Test Cases Review, Updates	3.d	3/13/18	3/16/18
110	Test data requirements document	3.d	3/16/18	3/21/18
111	Preparation of Test Decks, data generation	5.d	3/21/18	3/28/18
112	System Testing	15.d	4/23/18	5/14/18
113	WebEx demo of system	1.d	5/2/18	5/3/18
114	Provide Files to the Department for Review	1.d	5/3/18	5/4/18
115	Pre-install at Blue Bell to test install package	3.d	5/14/18	5/17/18
116	Phase 2 ready for installation at the Department	.d	5/17/18	5/17/18
<b>117</b>	<b>Installation/Training for Phase 2</b>	<b>3.d</b>	<b>5/21/18</b>	<b>5/24/18</b>
118	Installation of Phase 2 in Test Environment, Flow Testing	2.d	5/21/18	5/23/18
119	Operations/Admin Training update for Phase 2	1.d	5/23/18	5/24/18
<b>120</b>	<b>User Acceptance Testing for Phase 2</b>	<b>80.d</b>	<b>3/16/18</b>	<b>7/6/18</b>
121	Document UAT Test cases for Phase 2	15.d	3/16/18	4/6/18

ID	Name	Duration	Start	Finish
122	Send UAT Test cases to TransCentra	.d	4/6/18	4/6/18
123	User Acceptance Testing for Phase 2	31.d	5/24/18	7/6/18
124	Update production migration plan for Phase 2	5.d	6/21/18	6/28/18
125	The Department Certified Phase 2 for Production	.d	7/6/18	7/6/18
<b>126</b>	<b>Production - Phase 2</b>	<b>24.d</b>	<b>7/6/18</b>	<b>8/9/18</b>
127	Cutover to Production	1.d	7/6/18	7/9/18
128	Production Support	23.d	7/9/18	8/9/18
129	Support Transition	5.d	8/2/18	8/9/18
<b>131</b>	<b>Phase 3</b>	<b>117.d</b>	<b>7/9/18</b>	<b>12/19/18</b>
<b>132</b>	<b>Business Requirements Document (BRD)</b>	<b>19.d</b>	<b>7/9/18</b>	<b>8/3/18</b>
133	Data Collection in preparation for BRD meeting	5.d	7/9/18	7/16/18
134	Preliminary BRD created	3.d	7/16/18	7/19/18
135	Requirements mtg for business rules, form specs	1.d	7/19/18	7/20/18
136	Updates to BRD	5.d	7/20/18	7/27/18
137	Phase 3 project schedule created, project plan update	2.d	7/27/18	7/31/18
138	Requirements review, updates	5.d	7/27/18	8/3/18
139	Phase 3 Requirements Signoff	.d	8/3/18	8/3/18
<b>140</b>	<b>Site Planning/Setup</b>	<b>60.d</b>	<b>8/3/18</b>	<b>10/26/18</b>
141	Add any additional workstations needed for product	60.d	8/3/18	10/26/18
<b>142</b>	<b>Development/Configuration for Phase 3</b>	<b>25.d</b>	<b>8/3/18</b>	<b>9/7/18</b>
143	Requirements Analysis, Solution Design	3.d	8/3/18	8/8/18
144	Design reviews, updates	2.d	8/8/18	8/10/18
145	Provide detailed design to the Department	.d	8/10/18	8/10/18
146	Review / Update design based on the Department fee	3.d	8/10/18	8/15/18
147	Forms design / definition for each form	8.d	8/10/18	8/22/18
148	Configuration for workflow, business rules	3.d	8/22/18	8/27/18
149	Transaction integrity validation, Form ID	2.d	8/27/18	8/29/18
150	Configure new DLN ranges	1.d	8/29/18	8/30/18
151	Export/extract file creation	3.d	8/30/18	9/4/18
152	Create any tax-specific reports	3.d	9/4/18	9/7/18
153	Development/Configuration complete	.d	9/7/18	9/7/18
<b>154</b>	<b>QA Testing for Phase 3</b>	<b>44.d</b>	<b>8/3/18</b>	<b>10/4/18</b>
<b>155</b>	<b>Integration Testing</b>	<b>32.d</b>	<b>8/3/18</b>	<b>9/18/18</b>
156	Test cases preparation	3.d	8/3/18	8/8/18
157	Integration Testing	7.d	9/7/18	9/18/18
<b>158</b>	<b>Systems Testing</b>	<b>41.d</b>	<b>8/8/18</b>	<b>10/4/18</b>
159	Test Cases preparation	5.d	8/8/18	8/15/18
160	Test Cases Review, Updates	3.d	8/15/18	8/20/18
161	Test data requirements document	2.d	8/20/18	8/22/18
162	Preparation of Test Decks, data generation	5.d	8/22/18	8/29/18
163	System Testing	12.d	9/18/18	10/4/18
164	WebEx demo of system	1.d	9/27/18	9/28/18
165	Provide Files to the Department for Review	1.d	9/28/18	10/1/18
166	Pre-install at Blue Bell to test install package	3.d	10/1/18	10/4/18

ID	Name	Duration	Start	Finish
167	Phase 3 ready for installation at the Department	.d	10/4/18	10/4/18
<b>168</b>	<b>Installation/Training for Phase 3</b>	<b>3.d</b>	<b>10/4/18</b>	<b>10/9/18</b>
169	Install of Phase 3 in Test environment, flow test	2.d	10/4/18	10/8/18
170	Operations / Admin Training Update for Phase 3	1.d	10/8/18	10/9/18
<b>171</b>	<b>User Acceptance Testing for Phase 3</b>	<b>63.d</b>	<b>8/20/18</b>	<b>11/15/18</b>
172	Document UAT Test cases for Phase 3	15.d	8/20/18	9/10/18
173	Send UAT Test cases to TransCentra	.d	9/10/18	9/10/18
174	User Acceptance Testing for Phase 3	27.d	10/9/18	11/15/18
175	Update production migration plan for Phase 3	10.d	11/1/18	11/15/18
176	The Department Phase 3 for Prod	.d	11/15/18	11/15/18
<b>177</b>	<b>Production - Phase 3</b>	<b>24.d</b>	<b>11/15/18</b>	<b>12/19/18</b>
178	Cutover to Production	1.d	11/15/18	11/16/18
179	Production Support	23.d	11/16/18	12/19/18
180	Support Transition	5.d	12/12/18	12/19/18
181	All Forms rolled-out to Production	.d	11/16/18	11/16/18
182	Warranty Period	90.d	11/16/18	3/22/19

## Quality Management

TransCentra employs an iterative testing methodology to ensure that defects are caught early. It allows for incremental modular addition and testing. Testing starts with the base system and requires iterative testing as new modules are added. The objective is to discover as many defects as early as possible. Four separate types of testing are conducted: unit, integration, system and regression.

- Unit testing is done by the developer to verify the technical specifications of the high level and low level designs were implemented correctly.
- Integration testing is performed by the development team as an end to end test of normal scenarios that ensures that the integrated system is solid and has no obvious defects.
- The system test is performed by the independent QA team in an environment controlled by them that is completely separate from the development environment. It encompasses all aspects of the system solution, including the completeness of the release and the installation process.
- Regression testing is conducted at the conclusion of the project to confirm that the changes introduced by the project have not interfered with the pre-existing features and functionalities of the system.

Ideally, the regression scripts and test decks used by the Department and by TransCentra are similar or the same, with mutual sharing of both the test scenarios and test results. Additionally, root-cause analysis is performed by the QA team on issues that are reported during user acceptance testing, to ensure that any missing use cases are added to the regression deck, and any errors or omissions in test scripts or outcome expectations are corrected.

### 4.7.5. What is the average lead-time for implementation?

A typical duration is six to nine months from contract award to implementation. This depends on the scope of the effort based on number of forms and tax types. Typically a multi-phase approach is taken so that all parties can focus on the deployment of a logical group of work as a key milestone/phase.

Upon notification of the contract award, TransCentra assigns an appropriate set of resources to the project team. In particular, we will assign the lead Project Manager who is also a domain expert in our TMS\_TAX solution. The Project Manager will work with the Department to kick off the project as quickly as Department resources can be made available.

#### *4.7.6. What are the critical factors that may affect that lead-time?*

There are many critical factors that affect lead time to implementation. The factors are listed below in order of importance and impact to the overall schedule. We are very familiar with the many challenges that exist in the public sector as it pertains to requirements and client staffing. Requirements are often dependent upon final approval by the legislature, and processing timelines are dictated by the annual tax cycles. Often public sector staff are asked to continue their normal job workload, while they also take on the extra effort required to ensure timely responses and participation in key project and requirements meetings. Shared resources, like IT, have multiple priorities and can't always meet key internal milestones for system deployments.

1. Completing requirements documentation and approval
2. Availability of key Agency personnel to define requirements
3. Form redesign
4. Undocumented or implied requirements
5. Unrealistic expectations
6. Incomplete or undefined UAT test cases
7. Infrastructure changes to OS and/or SQL versions
8. Security and access environments and systems
9. Government changes impacting resources and/or forms
10. Site construction including electrical and network components
11. Equipment deliveries

TransCentra has comprehensive experience in the public sector, and understands the pressures of annual tax cycles. Leveraging this experience, we will work as a partner with the Department to go through, around, or over, any of these critical factors which would impede our mutual success.

#### *4.7.7. What, if any, have been the most common causes for delays or problems with implementations? What steps have you taken to minimize their occurrence?*

The most common causes for delays or problems with implementations have been the critical factors listed in Section 4.7.6., and in the order given. This is why we used a disciplined project management and control process as outlined in Section 4.7.4. We have found that regular meetings with the various stakeholder groups are key to ensuring all parties are in synch and meeting their assigned task milestones, as per the project plan. In particular we have found the project steering committee to be an effective way to ensure priorities are properly assigned and that the resources are available. When challenging issues come up, this has also proven to be an effective way to quickly mitigate the risk of missing key milestones.

#### *4.7.8. What action can WV TAX take to minimize the occurrence?*

- Availability of Key Resources. It is important that the Department has identified and committed the time of key project resources and individuals that are knowledgeable about the work to be processed. It is important that key resources are able to reduce their daily activities to allow them to focus on assigned project tasks.



- Assign an Executive Sponsor. The project steering committee should include the key executive sponsor who is responsible for the success of the implementation, and/or their designated representatives.
- IT Management Involvement. Identify, plan and communicate any infrastructure changes, i.e. Windows OS or SQL updates. TransCentra recognizes that IT priorities are important to ensure the Department's IT infrastructure is compliant and secure. It is important that IT management provides a stable environment for deployment of the solution, and also become aware of setup, settings, etc. of the TMS\_TAX solution in the State IT infrastructure.
- Provide Thorough Test Documents and Scripts. TransCentra follows a disciplined quality process that includes development and execution of our own test scripts for each tax type. It is important that our test scripts and associated documents include a thorough set of transactions to ensure all transaction processing requirements are validated. Given the many tax types, forms, and variations of data that will occur based on the unique processing requirements of the Department, we request that the Department share their test scripts, along with appropriate documentation. We will compare them with our internal test scripts to ensure any gaps are covered. Conversely, we will share our test scripts and decks with the Department to help ensure that the Department has a robust user acceptance test deck, often called a "golden deck."
- Provide the Necessary Meeting Space or Access via Remote Links. In person meetings are most productive when the meeting environment facilitates interaction among the group. We will also request that all documentation is shared electronically.

*4.7.9. Explain how overlooked key requirements and functionality in the R&D phase are addressed by the vendor/supplier.*

Solid and thorough requirements gathering is critical to achieving the desired and committed timelines. Any overlooked key requirements and functionality are handled through the change control management process, wherein modifications and enhancements to the documented system solution are jointly administered by TransCentra and the Department. This ensures that the requirements document is kept up to date and that downstream activities such as testing and subsequent deployment steps have taken the change into consideration.

When a change or addition is required to the system solution, the Department Project Manager would communicate the requirements for the change to the TransCentra Project Manager via a change request form. On receipt, we determine if the information provided is sufficient to estimate the effort. The TransCentra Project Manager then obtains an estimate for the effort, the cost of the change (if applicable), and the impact on the schedule. If the Department agrees to the terms presented by the TransCentra Project Manager, then we schedule the effort and update the project schedule.

Realistically, it is important that we keep the project on schedule and work the change control management process in parallel to the additional effort required to complete the change.

A change to a form layout but with no change to business rules or data content would be an example of a simple change request that would be quickly implemented, with the change control document completed as a follow up. Multiple changes may be defined and completed before it would make sense to produce a change control document.

For significant changes, it is important that the new requirements are reviewed, approved, and agreed to before any additional effort is expended. A requirement change to an extract file which is fed to the core TMS\_TAX system is an example of a change that should be managed deliberately as it has the potential for multiple impacts both upstream and downstream to actual creation of the extract file.

*4.7.10. Address how your organization avoids/minimizes missed key functionality in the design phase. If this problem occurs, explain how the situation is rectified?*

The requirements definition and design (RDD) documents are critical to the success of the project. It is important to involve all stakeholders in the RDD discussions and the review of these documents. Also, there is tremendous pressure on a project with such timelines to rush through the requirements definition step, but this can lead to missing or inaccurate specifications. It is important to review the RDD to confirm that all the acceptance criteria for the system are specified. Second, we will create these detailed form specifications onsite with the Department's assistance. The forms development specialist will work closely with the Department's subject matter experts for each tax type to understand and document the requirements and then configure the forms and the associated rules in the system.

Change control management is the process by which modifications and enhancements to the documented TMS\_TAX solution are administered by TransCentra and the Department jointly. When a circumstance occurs for which a change or addition is required to the solution, the Department's Project Manager communicates the requirements for the change to the TransCentra Project Manager via a change request form. On receipt, the TransCentra Project Manager determines if the information provided is sufficient to estimate the effort. When sufficient information is available, the TransCentra Project Manager estimates the effort and the cost of the change, if a cost is warranted. If the Department agrees to the terms presented by the TransCentra Project Manager, then TransCentra schedules the effort. TransCentra will maintain a log of change requests for the Department for the duration of the project. This log and the accepted change request act as documentation of the changes made.

*4.7.11. List some of the bottlenecks you have encountered during system implementations. What recommendations can you provide to minimize or avoid these bottlenecks?*

There are many bottlenecks that may occur during implementation. The below list are examples, and is not inclusive of all factors:

1. Completing requirements documentation and approval
2. Phase by tax type or all tax types at once.
3. Managing the business rule documentation and versioning
4. Availability of key personnel
5. Incomplete or undefined UAT test cases
6. Infrastructure changes to OS and/or SQL versions
7. Security & access environments and systems

Based on our experience with multiple state tax processing deployments, the steering committee has been one of the best tools to mitigate the above mentioned bottlenecks.

**Project Steering Committee**

Behind TransCentra's visible management structure resides the firm commitment of our corporate executive management to ensure that the means and mechanisms are in place for the successful

execution of the TMS\_TAX solution. Given the importance we place upon this partnership with the Department, TransCentra will assemble a project steering committee to serve as the official governing body of this contract. This committee will direct attention to the project at a strategic level and ensure that our relationship receives the corporate visibility required to ensure project success.

The project steering committee members will consist of project managers, account managers, Department and TransCentra executive staff and senior managers. This team will meet at regular intervals during the project implementation.

Further, TransCentra uses scope, time and quality deviations as the Key Performance Indicators (KPI) to measure and monitor the project. Risks are rated and monitored throughout the project cycle. The KPIs, risk assessment and action plans to minimize the risks are tracked, recorded and shared with all the stakeholders as part of both the Project Status report and the Steering Committee dashboard published by the TransCentra Project Manager. The objective is to manage these important KPIs proactively.

#### *4.7.12. Describe the project planning methodology used for new system implementations.*

Business requirements and application design sessions will be conducted during the planning phase. Emphasis will be placed on a high-level assessment of the project's strategic business objectives, critical business requirements, priorities, broad project scope and timelines, potential risks, and key customization requirements. It will entail extensive and detailed discussions with the Department's stakeholders. The resulting documentation from those sessions is the requirements definition and design (RDD) document, completed by TransCentra. The RDD document defines the scope of the project and serves as the foundation for all development. During the meeting with assistance from the Department, TransCentra will:

- Refine the proposed system solution
- Detail each processing workflow
- Define data entry requirements
- Document all business rules and edits
- Finalize data extract requirements
- Define image export requirements
- Define reporting requirements
- Identify all interfaces
- Identify special considerations
- Document Items outside the scope of the project

Acceptance of the RDD document constitutes the complete statement of the functional and system specifications to be implemented and supersedes all previous descriptions or statements of requirements.

## Requirements

- Scope of Work
- Requirements
- Definition

Pre-Sales

Go Live

Trans. Sprt.

## Deployment

- User Environment Testing
- Installation Training
- User Acceptance Testing
- Go Live
- Support Transition

## Project Design

- Architecture Design
- Development Design
- Test Design

Test Plan

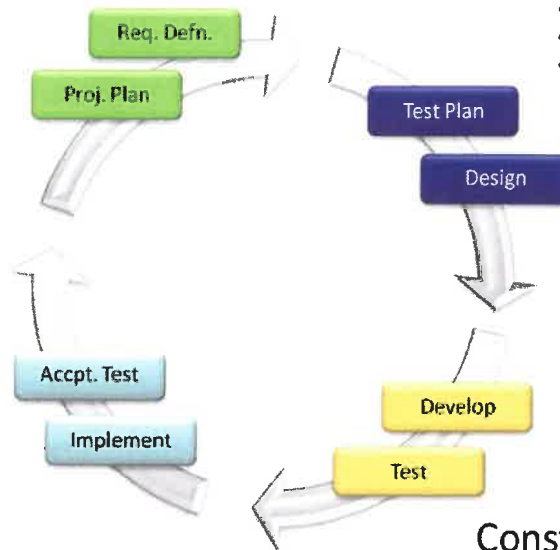
Design

Develop

Test

## Construction

- Application Configuration
- Application Customization
- Report Generation
- Extracts Development



## Section 4, Subsection 4.8

### 4.8. Scanning

*The Department desires to have upgraded IBML or equal scanners that have current operating system, and faster scanning and recognition features. Please describe how your solution will meet the following needs:*

*4.8.1. Provide a list and quantity of document scanning hardware I transports you propose with your processing solution.*

Two ultra-high speed IntelliScan XDS scanners are proposed. The scanners are configured with a base unit, auto feeder, document aligner, four wheel friction doubles detection, triple ultrasonic doubles detection, automated alternative document feeder for exceptions, true E13B MICR, OCR A, OCR B, 1D barcode, 2D barcode reader, three universal pocket modules which can handle either check sized or page sized documents, and an exception document run out tray. The base system includes a quad core Windows 7 scanner controller with optional disk mirroring and full disk encryption.

*4.8.2. Provide the performance specifications, including rated capacity, for the selected scanning hardware I transports.*

The ultra-high speed IntelliScan XDS will capture images at a rated speed of 485 PPM at 200 DPI and 325 PPM at 300 DPI for full sized 8.5 x 11 inch pages. Check (6") rated speeds while reading E-13B MICR will capture at six hundred ten (610) checks per minute at 200 DPI or at four hundred ten (410) per minute at 300 DPI. The duty cycle is unlimited. The scanner will handle a wide range of paper sizes and weights from "onion skin" to "card stock" and sizes from 2.5" by 2.5" up to 12" X 30."

*4.8.3. Provide a brief explanation of your choice in scanning hardware I transports. What are the benefits of your proposed scanning equipment over that incurrent use by WV TAX?*

The choice was simple; the IntelliScan XDS is the fastest available and a cost effective ultra-high speed scanner designed for 7x24 hour duty cycle in the mission critical tax processing environment. The State will be able to process more returns with less labor.

Rated Speed	ImageTrac 6400 with High Speed Options	BancTec IntelliScan XDS (200/300)	BancTec XDS 200 only	BancTec Advantage
200 DPI capture 8.5 x 11"	429 PPM (landscape)	485 PPM (landscape)	640 PPM (landscape)	113 to 148% faster
300 DPI capture 8.5 x 11"	286 PPM (landscape)	325 PPM (landscape)	Not available	113% faster (true 300 DPI capture)

The proposed scanners are in use by various federal and state tax authorities with a proven track record of productivity and uptime and availability. Considering price and performance, the proposed IntelliScan scanners are cost effective when considering the total cost of ownership which takes into account price, speed, effective throughput, and the ongoing cost of maintenance compared to alternatives. Benefits include:

- ✓ The proposed scanners are ultra-high speed IntelliScan XDS models which will enable the Department to reduce their hardware footprint, supplies costs and maintenance costs. The proposed solution will reduce the scanner hardware count from three to two and totally eliminate three NCR encoding transports generating overall saving on maintenance costs.
- ✓ The proposed scanners are Windows 7 enabled and there is an upgrade path to Windows 10.
- ✓ The scanners are designed for unlimited duty cycle and maximum uptime and availability. This is important considering that down time on one unit would result in a reduction in overall capacity.
- ✓ Our service technicians are badged direct employees of the company and we have direct control over the personnel supporting the system.
- ✓ The current scanners are no longer marketed or manufactured.
- ✓ The proposed solution includes all scanning hardware and an integrated software solution from a single vendor which eliminates any question of accountability in supporting the solution. **We are the only company that designs, builds, and maintains ultra-high speed scanning hardware and tax processing software and directly provides ongoing software and hardware support without engaging other third party entities.**

*4.8.4. Provide specifications on the proposed scanning equipment's ability to handle variations in forms and documents. Discussion should include, but not be limited to, document size, paper weight, color, inks, etc.*

The ultra-high speed IntelliScan scanner is designed to handle a variety of forms of various sizes and weights including envelopes of various thicknesses. The proposed configuration will support:

- Document sizes minimum 2.50" x 2.50" (63.5 mm x 63.5 mm) to maximum 12" x 30" (304.8 mm x 762 mm)
- Document weights accepted include 12 pound bond to 122 pound tag (45 g/m<sup>2</sup> - 200 g/m<sup>2</sup>)
- Asian rice paper to cardstock

For documents outside of the standard range of sizes and weights above there are other small and large document feeder and pocketing options available for additional cost making the IntelliScan XDS scanner one of the most vesicle document scanners on the market today.

*4.8.5. Discuss what, if any, additional software, hardware, or procedures you employ to improve image quality and data recognition.*

Image quality starts with precision optics and state of the art imaging processing technology and excellent document handling. The scanning subsystem is a result of generations of improvements resulting in perfect pixel alignment. This means the same pixel alignment is maintained for bitonal, grayscale, and color images.

A physical document aligner assists to insure that there is a common leading edge, if any remaining skew is detected the scanner will automatically de skew the image. Adaptive thresholding is used to adjust the image output to a better image quality where the backgrounds are more inconsistent. Image enhancement features include:

- Electronic skew removal
- Adaptive thresholding
- Image rotation
- Black and white speckle removal
- Border detection and auto-cropping
- Border padding
- Scan-time IQA monitoring
- Other advanced features

While the document is being scanned, an image quality analysis is optionally performed on the captured image and optionally action can be taken or tag bits can be set based on user defined criteria (like excessive skew, bent corner, missing corner, image too light, image too dark, and other user defined image criteria and severities) to insure that the captured image is the best it can be.

*4.8.6. Provide a list of the recognition technologies included with your proposed scanning equipment.*

At scan time the recognition technologies include:

- OCR A and OCR B reading
- 1D barcode reading
- 2D barcode reading
- Patch code reading
- E13B MICR and OCR optimized reading

The system automatically “crunches” magnetic and optically read information to deliver a high recognition rate balanced by a low substitution rate. Upgrades available for additional cost include multi font and handprint based on industry best integrated OCR technologies.

*4.8.7. Discuss the automated functions and manual tasks that optimize scanner performance.*

In terms of automated functions the IntelliScan XDS seeks to correct issues without human intervention. Where intervention is required the operator is guided through recovery steps to minimize operator

induced errors. Stop/Start buttons are ergonomically located at the feed station, mid-section, and pocket sections. Automatic restart is engaged where possible and single button reactivation where a prior intervention is required.

With respect to document preparation, the scanner is tolerant to skew with automatic physical and electronic de skew capability. Proper jogging is always recommended. A jogger is included with the purchase price.

Each scanner operator will develop their own techniques to optimize performance, however upon installation we will provide best practices which is a set of instructions based on industry experiences gained over decades of providing high speed document scanners that have resulted in optimized performance.

*4.8.8. Discuss the method of detection and identification of document scanning problems. For example: doubles detection, skew, poor image quality, blank pages, cropping, etc.*

Doubles detection and prevention is accomplished by one or a combination of methodologies.

- Doubles Prevention. An opposing feed wheel is enabled to singulate and feed a single document. Underneath the feed wheel is a reverse belt which is designed to pull back or retard the next document. At a transition point the single document is pulled from the stack and accelerates creating a gap between documents. This is typically used to detect overlapped “tip to tale” type multi feeds.
- Length Detection. If a document length in excess of a specific parameter is detected, action consisting of a transport stop and refeed through the alternative feeder is enabled. Restart buttons are located at the feeder and pocket modules to enable easy access on restarts. This is typically used to detect overlapped “tip to tale” type multi feeds. Since there are multiple sized longer and shorter documents, length is only one method of detection.
- Friction Four Wheel Detection. Opposing rollers measure the resistance and movement of documents through the doubles detection station. On a single document there should be no measurable slippage. On a multi document, slippage is detected. Action is taken as described above, documents can be refeed from the auxiliary feed station.
- Ultrasonic Detection. An ultrasonic sound wave is sent from an emitter to a receiver at the doubles detection station. In the case when no document is present, up to 100% of the sound wave is transmitted. In the case of a multiple document feed the amount of the sound wave is reduced. If multiple documents are fed the sound wave and the air gap in between is reduced even more. Advanced electronics will sense and monitor documents as they pass through the ultrasonic station. The advanced triple ultrasonic detection monitors sound waves in three locations across the transport path.
- Image Quality. Other image related issues like skew and poor image quality can be identified and or acted on by enabling real time image quality analysis. IntelliScan XDS transports include the ability to perform in-line Image Quality Assurance (IQA) testing for various document and image flaws including folded or torn corners, irregular or flawed edges, too dark or too light images, excessively skew, or undersized or oversized documents. By automatically analyzing

images against a baseline of user-defined quality metrics, users are able to detect and repair defects, and resolve issues early in the scanning process.

***4.8.9. Discuss the need, frequency, and procedures necessary for rescanning of documents.***

Based on our experience, rescanning needs and frequencies will vary by customer and application. Almost every system will employ some form of rescanning. Some systems will use an alternative “branch scanner” or a table top to separately rescan items. Others will use an image workstation to enable correction so that physical rescanning is limited. Others will rescan under specialized parameters and settings on the proposed high speed scanners.

Now that check deposits will be made electronically there is more to consider. Image Cash Letters generated by the system will be sent to bank(s) of deposit. While quality standards exist in banking, in our experience the application of the standards may vary by institution. The goal is to minimize returns. In tax applications the most common rescan is due to a money order. Money order print varies by issuing institution and there is little quality control in the field. Also the use of non-magnetic ink on locally printed checks is becoming more popular and some institutions still prefer to outsort checks with non-magnetic ink for security reasons.

As in the case of money orders, the document is designed to be image “unfriendly” as a security feature. So in some exceptional infrequent cases it does take human intervention to scan an optimized image for ICL purposes.

The reasons for rescanning are many and our proposed solutions will optimize the process.

***4.8.10. If you are proposing new scanners what trade-in value will you offer WV TAX on the existing scanners?***

The proposed price includes a hardware allowance and discount.

***4.8.11. Discuss where checks are separated from documents in your proposed system.***

Scanned checks can be identified and immediately sorted to any one of three universal output pockets under application control. The application will separate check images and prepare an Image Cash Letter extract for transmission to the bank(s) of deposit.

***4.8.12. Discuss how your solution limits or eliminates work in preparation of scanning.***

Mail is opened and prepared for scanning. Work is jogged prior to loading the input feeder. Checks and Tax return forms are scanned as transaction which eliminates any need to separate checks from forms either prior to, or post scanning. ICL eliminates the need for post scan encoding and document preparation. The scanning system will recognize batch headers, checks, and forms and outsort the documents based on application selectable parameters within the job profiles.

The solution has the capability to create virtual batches based on the transaction content. This reduces the work associated with pre-sorting during preparation.

***4.8.12. Discuss how your solution limits or eliminates work in preparation of scanning.***

Mail is opened and prepared for scanning. Work is jogged prior to loading the input feeder. Checks and Tax return forms are scanned as transaction which eliminates any need to separate checks from forms either prior to, or post scanning. ICL eliminates the need for post scan encoding and document



preparation. The scanning system will recognize batch headers, checks, and forms and outsort the documents based on application selectable parameters within the job profiles.

The solution has the capability to create virtual batches based on the transaction content. This reduces the work associated with pre-sorting during preparation.

## Section 4, Subsection 4.9

### 4.9. Remittance Processing

*The Department desires to have upgraded remittance processing software to the QModules we currently use. Upgraded features in regard to balancing and check 21 electronic deposit. Improved check recognition in regard to CAR and LAR portions of check. Please explain how your solution will achieve this goal.*

*4.9.1. Provide a diagram and accompanying narrative of the proposed remittance workflow. Begin with scanning and end with generation of posting file and bank deposit. Include the processing workflow and procedures for the mix of remittance payments.*

The green items in the diagram represent the remittance processing functions. The red items represent the IDR functions and the blue items represent the Electronic Clearing Suite ECS where the ICL data is collected and the deposit output created.

Returns are scanned on the Intelliscan. These may be intermixed (commingled) or pre-sorted into batches of the same types of transactions (money, no/money, tax type, multi returns, splits, etc.). The Intelliscan creates a scanner batch, which is ingested by TMS\_TAX. The automated stager processes will perform multiple functions including:

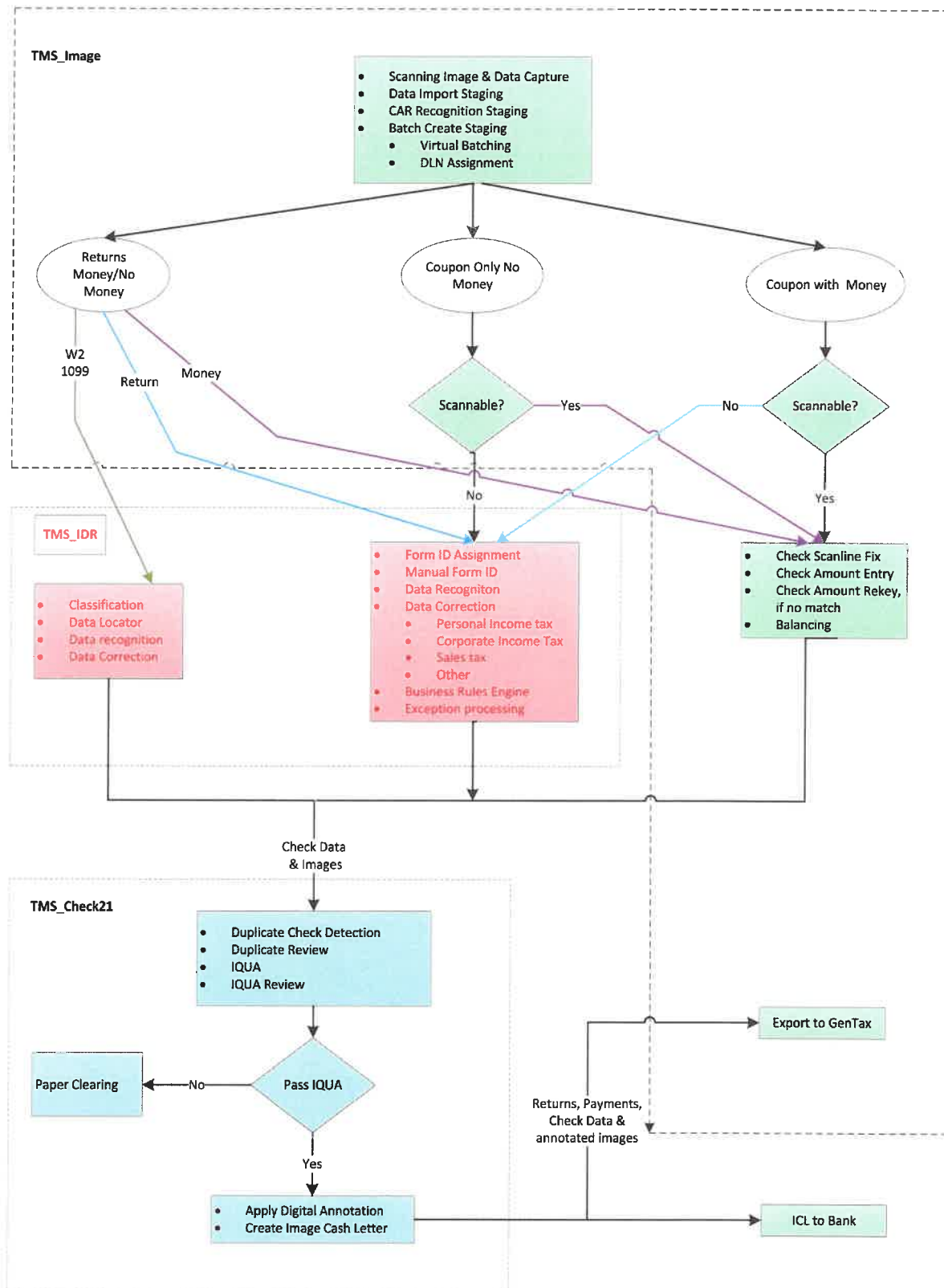
- Form identification
- Car/LAR recognition
- Virtual batching
- DLN Assignment

Virtual batches are then routed based on the batch characteristics.

- Returns with money are first processed to capture the necessary check information for deposit. These then go to the TMS\_TAX IDR process for recognition, business rules validation, and data perfection.
- Returns without money are sent to TMS\_TAX IDR for recognition, business rule validation and data perfection.
- Scannable or voucher returns are processed through the remittance flow to capture the voucher and check data.

Once the batches have been perfected, money batches are routed to the ESC modules to prepare for the ICL creation. ICL deposit files can be created automatically, based on cut-off times or operator initiated.

Data and images can be sent to GenTax real time as each batch is completed, based on cut-off times or user initiated.



#### ***4.9.2. Discuss the workflow for each for the following transaction types:***

##### ***4.9.2.1. Single Transaction***

A single transaction is one return or coupon with one check. Once scanned, they are virtually batched for processing. The check amount is recognized using CAR/LAR. The return or coupon is processed using ICR and business rules are applied. The amount due is compared to the Check CAR/LAR value. If the check and return amount are unequal the transaction is sent to balancing for reconciliation. The system includes an amount due and an amount paid field, to handle cases of under or over payment. After balancing the check is ready for ICL deposit and the return is ready for extract, posting and archive.

##### ***4.9.2.2. Multiple Transaction***

A multiple transaction is one or more returns of the same tax type with one or more checks. The check amount(s) is recognized using CAR/LAR. The return(s) or coupon(s) is processed using ICR and business rules are applied. The amount due is compared to the Check CAR/LAR value. If sum of the checks and the sum of the amount due of the returns are unequal the transaction is sent to balancing for reconciliation. The system includes an amount due and an amount paid field, to handle cases of under or over payment. After balancing the check(s) is ready for ICL deposit and the return(s) is ready for extract, posting and archive.

##### ***4.9.2.3. Matched Transactions***

TMS\_TAX does not require the use or identification of match and unmatched transactions. They are processed as singles or multiples. Each transaction is balanced, i.e. the payment amount equals the return amount paid, and the balance due may be other than the amount paid. However, if the host requires these to be identified, we can accommodate the host requirements.

##### ***4.9.2.4. Unmatched Transactions***

TMS\_TAX does not require the use or identification of match and unmatched transactions. They are processed as singles or multiples. Each transaction is balanced, i.e. the payment amount equals the return amount paid, and the balance due may be other than the amount paid. However, if the host requires these to be identified, we can accommodate the host requirements.

##### ***4.9.2.5. Splits Transactions***

A split transaction is a transaction with more than one return of different tax types, and a single check or checks that are unequal to the individual returns. These transactions are processed as multiples, and deposited to a clearing account for subsequent allocation.

#### ***4.9.3. Describe your Check21/ Image Cash Letter solution and processing flow.***

The Electronic Clearing Suite (ECS) consists of ARC and Check 21 features. It allows for electronic (and paper) clearing of checks via ACH and Image Exchange. The Electronic Clearing Engine or ECE is an intelligent decision engine used to determine the most efficient (fastest and cheapest) clearing mechanism for each check.

Features include:

- Support for other SEC codes
  - Back Office Conversion (BOC)
  - Point of Purchase (POP)
  - Web payments (WEB)
  - Tele payments (TEL)
- Money order identification
- Pass 1 out-sort for ARC items
- Holiday calendar for clearing file generation
- Automated data purging
- XML import and export interface to non-TMS\_TAX systems
- Deposit reporting for proof balancing by endpoint
- Endpoint analyzing using parameters such as time of day, check amount, clearing cost, and RT
- Unattended export and returns processing
- Support for financial institution ARC databases: Checkfree, EPICWARE, JPMC, Wachovia, and Wells Fargo
- Administrative review processing through ACH roles
- Administrative review history
- Paper Returns Processing
- Automated Clearing File Generation
- Clearing file format as required by the Federal Reserve, SvpCo, Endpoint Exchange or Bank of America
- Single database for all clearing methods
- Operator statistics and audit information
- Image quality and usability assurance

In the workflow, the ECS output is usually configured to occur after the batch has completed the necessary amount validations and balancing steps of the workflow. The ICL may be configured for automated or manual creation.

*4.9.4. Describe your ability to perform edits on remittance payments and associated dollar amounts. Are these edits user configurable? If yes, describe the process for editing. If not, please describe how the edits are modified.*

The TMS\_TAX Suite Lockbox Studio with Rules Engine is used to maintain lockbox information across multiple TMS\_TAX products. Lockboxes belong to customers and multiple lockboxes can be associated with a single customer. Lockbox information includes a basic definition, data entry formats, payee verification names, process flow, and configuration options. Customer, site, ECS, LE, NetQuery

(Customer Delivery) and eCapture configuration information can also be entered through the Rules Engine.

Rules may be used to modify the batch flow, validate fields during data entry, define amount limits, and set variance. Rules may be assigned to database fields to be validated by stagers or data entry programs.

**4.9.5. Does the solution include a MICR-line database? If so, what applications within the proposed solution use this database?**

Yes, the system uses a MICR database to detect duplicate transactions and prevent clearing the same check more than once in an image cash letter.

**4.9.6. Describe the ability of the proposed solution to identify and re-prioritize large dollar amount transactions. Can users define large dollar amounts edits?**

The TMS\_TAX Suite Lockbox Studio with Rules Engine can be used to assign priority using multiple data base fields including the amount. The system also provides the capability to modify the batch priority during real time processing using the Batch Maintenance Utility.

**4.9.7. Describe the solution's ability to identify and reject or accept foreign (non- U.S.) items.**

Foreign checks are identified by the absence of a US Routing & Transit number. These items are detected and sent to scanline fix where the operator may either enter the correct US RT, or a configured substitute RT or reject the check. Currently non-US checks are not eligible for clearing via ICL. These checks if accepted must be cleared in a physical cash letter.

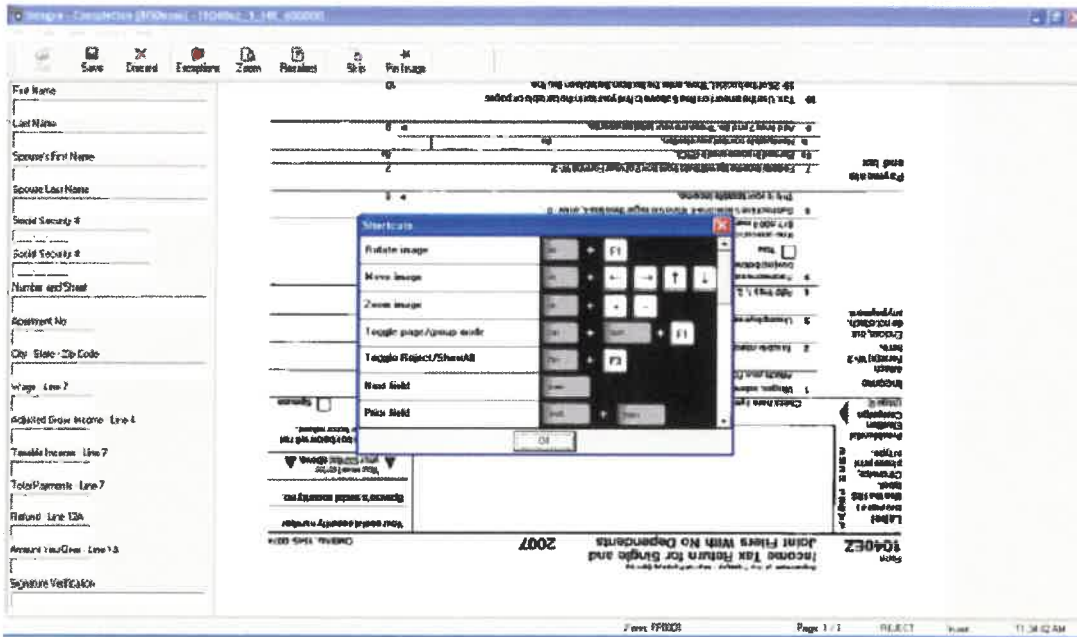
**4.9.8. Describe the proposed solution's ability to allow for data entry corrections.**

*Describe the proposed solution's ability to allow for data entry corrections.*

- Sophisticated data recognition and integrated business rules including these unique features: multiple recognition engines, voting, structured, semi-structured and unstructured form formats and form/data layout “learning” technology. TMS\_TAX IDR is the most advanced and complete application for semi-structured documents available today. It can identify and read the same data elements across different W2 forms, without requiring the cumbersome and labor intensive approach of template based recognition. Data validation can include validation against external databases or imported data files for further data perfection.
- TMS\_TAX IDR auto learning process continuously improves system recognition without having to actually change the original template that was created. If the data that should be specified in a field can be found on the form page, it is possible to highlight it and eliminate the need for keying. This action has two results:
  - a. It populates the field, and
  - b. Creates an ROI (rectangular region of interest) that is now associated with the field, to be used to improve future processing.
- Another unique feature of data keying is the ability to align pages within a transaction in a certain sequential order. With the Page Organizer application as shown below, the images can be reshuffled to put them in the correct order or rescanned from a desktop with a scanner attached to it. As shown in the screen below the designated operator can insert pages, delete pages and rescan an image. This simple but helpful functionality helps in minimizing rejection of

transactions due to doc-prep or scanner issues. Instead the transaction can be corrected without having to re-run the full transaction.

### Using short cuts to flip an image if an image is scanned upside down



- The platform's usage of .NET technology enables rapid and seamless integration with most backend systems. Also the maintenance of the system becomes easy for the Department to use for future additions and business rules development. In TMS\_TAX IDR, runtime data – data captured and recognized from a set of Forms during the various Module processes (for example: Input, Recognition, Exception, or Export modules) – is made available to the modules through the Dynamic Data Layer objects.

#### 4.9.9. Describe what audit trails are provided in the proposed solution.

TMS\_TAX has extensive audit trail capability in the system. The Audit Log report displays the login details for the all the users, sorted by program, for a particular work type and time period. It includes information such as transaction number, sequence number (DLN), field name, old value, new value, and login date and time. All the actions of the users are logged and will be stored in the solution database for a time determined by the Department.

From Date : 12/01/2011 To Date : 05/24/2012 Page No : 1 / 4

### Audit Log Report

Tran No	SeqNo	SubSeqNo	Field Name	Old Value	New Value	Log Date/Time
<b>Site ID: 1</b>						
			<b>Worksource: 0000090201</b>	<b>Batch No: 0060901200</b>		
<b>Process Date: 02/17/2012</b>						
			<b>Usercode: John</b>			
1	2	0	ODANumber	0	23455568	3/1/2012 12:35:16 PM
1	2	0	WhiskScanDone	0	1	3/1/2012 12:35:16 PM
<b>Site ID: 1</b>						
			<b>Worksource: 0000010201</b>	<b>Batch No: 0050201461</b>		
<b>Process Date: 12/01/2011</b>						
			<b>Usercode: bill</b>			
1	1	0	Amount	\$0.00	\$1,034.00	12/1/2011 9:47:12 AM
1	2	0	ODANumber	0	23455568	12/1/2011 9:54:13 AM
1	1	0	TranStatus	402	403	12/1/2011 9:55:10 AM
1	1	0	RejectReason	104	0	12/1/2011 9:55:10 AM
1	1	0	RejectPgm	27	0	12/1/2011 9:55:10 AM
1	2	0	TranStatus	402	403	12/1/2011 9:55:10 AM
1	2	0	RejectReason	104	0	12/1/2011 9:55:10 AM

In addition, TMS\_TAX also logs information into the event log and/or system log detailing system activity. The granularity of the information logged can be configured by the trace level setting in the program configuration.

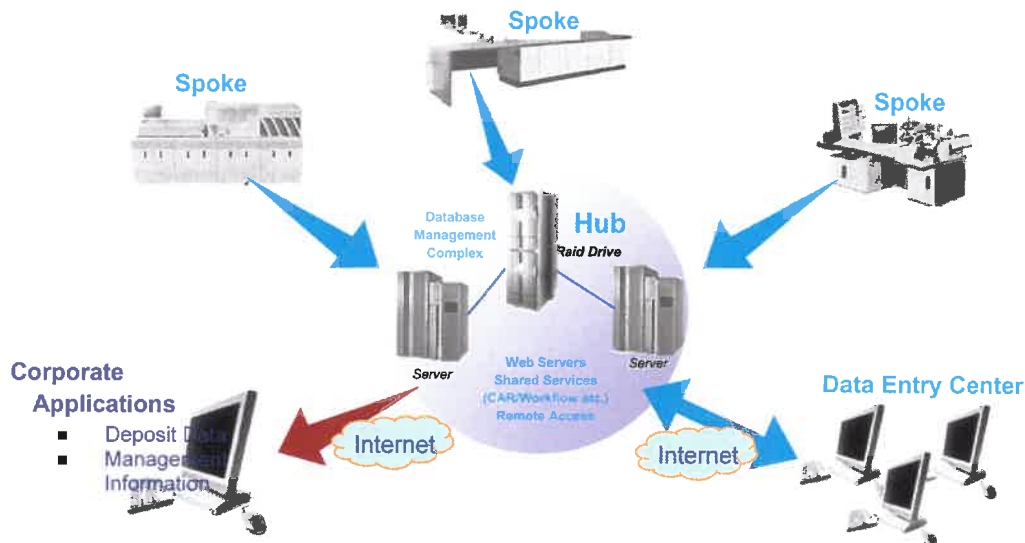
The screenshot shows the 'Log Viewer' application window with the 'Log Entries' tab selected. The window title is 'Log Viewer' and it includes a menu bar with 'File', 'Event Logs', and 'Info'. Below the menu bar are several buttons: 'Load All F2', 'Load Ctrl F2', 'Display F5', 'Open F8', 'Send F10', 'Edit F11', and 'Exit F12'. The 'TransCentra' logo is visible in the top right corner. The main area displays a table of log entries with columns for Date/Time, Log Entry, System, User, and Source Log. The entries show a sequence of events related to the installation and configuration of TMS2011, including starting the installer, loading and reading configuration files, and installing patches.

Date/Time	Log Entry	System	User	Source Log
04/19/2012 06:09:32 AM	Installer started	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started loading the file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished loading the file C:\TMS2011_Build	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started reading Configuration file C:\TMS201	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Read Configuration file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished reading Configuration file C:\TMS20	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	InstallPatchesMain LoadConfiguration C	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	InstallPatchesMain LoadConfiguration in	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Installer started	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started loading the file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished loading the file C:\TMS2011_Build	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started reading Configuration file C:\TMS201	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Read Configuration file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished reading Configuration file C:\TMS20	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started reading Configuration file C:\TMS201	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Read Configuration file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished reading Configuration file C:\TMS20	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started reading Configuration file C:\TMS201	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Read Configuration file C:\TMS2011_Build\	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Finished reading Configuration file C:\TMS20	JBDEM004		\\Ubdemo04\TMSBase_Bu
04/19/2012 06:09:32 AM	Started reading Configuration file C:\TMS201	JBDEM004		\\Ubdemo04\TMSBase_Bu

Log Files: 5    Event Logs: 7    Log Entries: 12,512    Parameters: \\TMSBase\_Build\TMSAdmin\Baset\LogViews\PSGLogViewer\Parameters.txt

**4.9.10. Describe the system interface capabilities with external files (e.g. Remote Data Capture).**

TMS\_TAX provides for distributed processing. The system is implemented using Hub and Spoke architecture and innovative .Net Anywhere Item Data Entry. The following is a graphical representation of the distributed processing capability provided by the Hub and Spoke architecture.



As the above diagram indicates, the Hub acts as the receiver and collator of all the data and images captured and corrected at one or more remote locations. Although shown as one location data entry can take place at multiple locations at the Hub or at a Spoke. This architecture provides for the incoming work to be distributed across multiple locations and the data entry also to be spread across multiple locations. By design, this approach not only allows balancing the workload, but also provides redundancy in case one or more capture and/or data entry locations are unavailable because of unforeseen situations. The solution is highly scalable both vertically and horizontally. Since Spokes, data entry and/or capture, have minimum hardware and software requirements, they can be added with minimal effort and investment. Similarly at the Hub, processing capacity can be added by either adding more instances of software components and if necessary additional hardware.

## Section 4, Subsection 4.10

### 4.10. Data and Document Recognition

*The Department desires to have improved document recognition in regard to tax returns and limited user intervention resulting in less keying issues along with improved data extraction to backend system. Please explain how your proposed solution will achieve this goal.*

*Describe the automated data recognition technologies available with your proposed solution.*

The solution uses multiple engines for recognition of a data field with voting to reduce the manual data entry. Currently available are Abby, Cuneiform/Puma, Omnipage, Parascript, Tesseract, etc.

The solution uses a combination of commercially available recognition engines together with proprietary logic to identify the relevant data to be captured. Form identification using a 1D barcode provides the best identification results. However, not all forms have a barcode, so we have developed a process of



complex image analysis combined with keywords and anchors to improve the identification of the form that is superior to form templating to reduce manual form identification.

Similarly, we use the keyword and anchoring process to define the location of the area to be read. Then we use multiple engines to read the same location and a voting algorithm to increase the read rate. We apply business rules to the result to ensure the data meets the business requirements. This increases the recognition rate and reduces the amount of incorrect data captured.

**4.10.1. Provide a discussion of the features, functions, and limitations of each recognition technology discussed in the previous question.**

TMS\_TAX IDR uses advanced OCR technologies that achieve unprecedented recognition accuracy. Its multi-engine processing architecture enables quick and easy creation of powerful “super engines” from basic recognition engines. Coupled with “code-free” definition of validation rules, human intervention is reduced to a minimum, immediately yielding reduced labor costs and higher data quality.

Capitalizing on our significant experience in providing software for mid- to high-volume data capture and delivery projects, TMS\_TAX IDR was designed to answer the three primary objectives: throughput, flexibility and simplicity of use.

Using TMS\_TAX IDR enables users to achieve a greater level of automation, achieving superior data quality via the use of the best recognition engines available on the market. And the system’s scalable architecture enables its users to add additional documents as well as applications. Form ID can be accomplished in multiple ways. One of the ways to identify the form is listed below.

- Barcode is the primary identifier, if bar code is not present, it uses the following process:
  - TMS\_TAX provides the functionality to automatically identify forms by comparing the scanned form with the base templates defined in the system.
  - First uses complex image analysis based on templates.
  - Second it uses keywords and anchors to identify the form and page

The data can be captured using fixed location or keyword/anchors. It uses multiple engines for each field and application of voting algorithm to derive the final result for the fields. This can be compared to multiple operators keying the same field. If multiple operators concur then the result is accepted; however, this is completed in an automated fashion by means of staging functions. The confidence level of the recognition engines can be adjusted to make sure the accuracy of the data is maintained.










**4.10.2. Describe how document identification occurs within your proposed workflow.**

TMS\_TAX IDR eliminates the need to sort tax returns or segregate them into physical groupings at the time of opening of envelopes. As a result, the returns are taken out from the envelope with the check, if present, and prepped for scanning without any additional sorting or batching. As the documents are scanned, a unique audit trail number is sprayed on the documents. This helps to locate any document in the event the physical document needs to be pulled for whatever reason.








Each image is analyzed and identified using the previously described techniques. Business rules are applied to ensure return integrity is maintained. Any items that fail the business rules are sent for manual verification.

**4.10.3. In validating a tax return with data, discuss how your system identifies suspected fields/data in error, particularly sub-total and total fields where the math as described on the form does not compute accurately.**

The IDR Form Studio enables users to define any mathematical operations to be performed on a business rule for a field, which will be used to validate the field in the TMS\_TAX IDR system during the recognition process. The Form Studio allows error messages to be defined and associated with each business rule. The operation keys list algebraic and logical operations.

- |  |  |
|--|--|
|  Addition                                 |  Used at the end for calculations |
|  Subtraction                              |  Less than                        |
|  Multiplication                           |  Greater than                     |
|  Division                                 |  Equals                           |
|  Used at the start for calculations |  |

The function keys list logical operations.

- |   |   |
|---|---|
|  Along with the values                     |  Lowest value in the expression                  |
|  Or else                                   |  Highest value in the expression                 |
|  Not any of these values in the expression |  Average of the values in the numeric expression |
|  Round up the value                        |   |

**4.10.4. Describe the data entry function for data completion, on a document where a portion of the data has been recognized by an automated recognition function.**

There are two steps to the data perfection process. First all fields with invalid characters or mandatory fields are corrected, i.e. fields where the recognized characters are incorrect such as low confidence or alpha characters in a numeric field. The image is displayed and all fields in the field group with the error field, the error field will be red and the hint will contain the field specific error. After correcting the errors, the business rules are applied via an automated process. If any business rules fail, then the form is displayed in TMS\_TAX IDR rekey to correct the business rule errors.

*4.10.5. Describe how your system minimizes misreads, low confidence levels, field errors, character substitution and other problems normally associated with automated recognition.*

TMS\_TAX IDR is a powerful, comprehensive and easy-to-use automated data capture product, which is based on advanced imaging techniques and unique form processing technologies. These advanced technologies dramatically improve recognition and significantly speed up the data entry and cash flow cycles as well as improve staff productivity. TMS\_TAX IDR contains a form processing application generator that solves the most significant problems associated with paper return recognition and processing.

TMS\_TAX IDR has the ability to process multiple document types. They are:

- Structured forms such as Individual Tax forms where a template-based approach may be applied. All fields to be captured are in a predefined location.
- Semi-structured forms such as the W2, 1099, marriage or death certificates, where the data elements remain constant, but are located anywhere on the document.
- Unstructured forms such as correspondence where the identification of the document is predicated upon key words enabling the classification of the document.

TMS\_TAX IDR comes with multiple recognition engines packaged with the toolkit to capture machine print, handprint, OCR, ICR, OMR, 1D barcode, 2D barcode, patch sheets, US Postal System Smart Code, CAR, LAR, and MICR. The Department can make use of any of these engines after the initial deployment as deemed fit. A2iA and Mitek are used for CAR, LAR, while engines such as Abbyy, Nestor, OCE, Kadmos, TiS, Expervision, Parascript, JustICR, Clear Image and other processing engines designed for reading OCR, ICR, OMR, 1D barcode, patch sheets, US Postal System Smart Code, 2D barcode, 3-of-9 barcode formats including special characters are also available.

*4.10.6. Discuss the level of data verification/validation that can be performed against individual fields, documents, and returns by your proposed solution.*

TMS\_TAX fully addresses the required scope of work for the Department including the setup of all forms, with the appropriate edits, business rules, validation, and calculations necessary to ensure an improved, efficient process. TMS\_TAX provides complete workflow functionality from mail extraction to scanning, data capture, data correction, remittance processing, balancing, electronic clearing of checks, and export of data and images to GenTax. Business rules can include:

- Form and page validations
- Field level validations
  - Calculations(i.e. line 10 = line 5 +line 6-line 7) same and across pages
  - Date validations
  - Address lookup validations
  - Check digit routines

*4.10.7. Can you apply courtesy amount recognition and legal amount recognition to the check process?*

Yes, TMS\_TAX uses a CAR/LAR recognition engine to capture the check amount.

## Section 4, Subsection 4.11

### 4.11. New Application Setup Process

*The Department desires the selected vendor to perform all new application setup initially and to provide training with designated employees during all new application setups. In addition, vendor is expected to provide training material as it relates to our Departments setup. Please explain how this goal will be met.*

*4.11.1. Describe the methodology/technology employed for forms/document recognition. Do you employ templates, free form, etc.?*

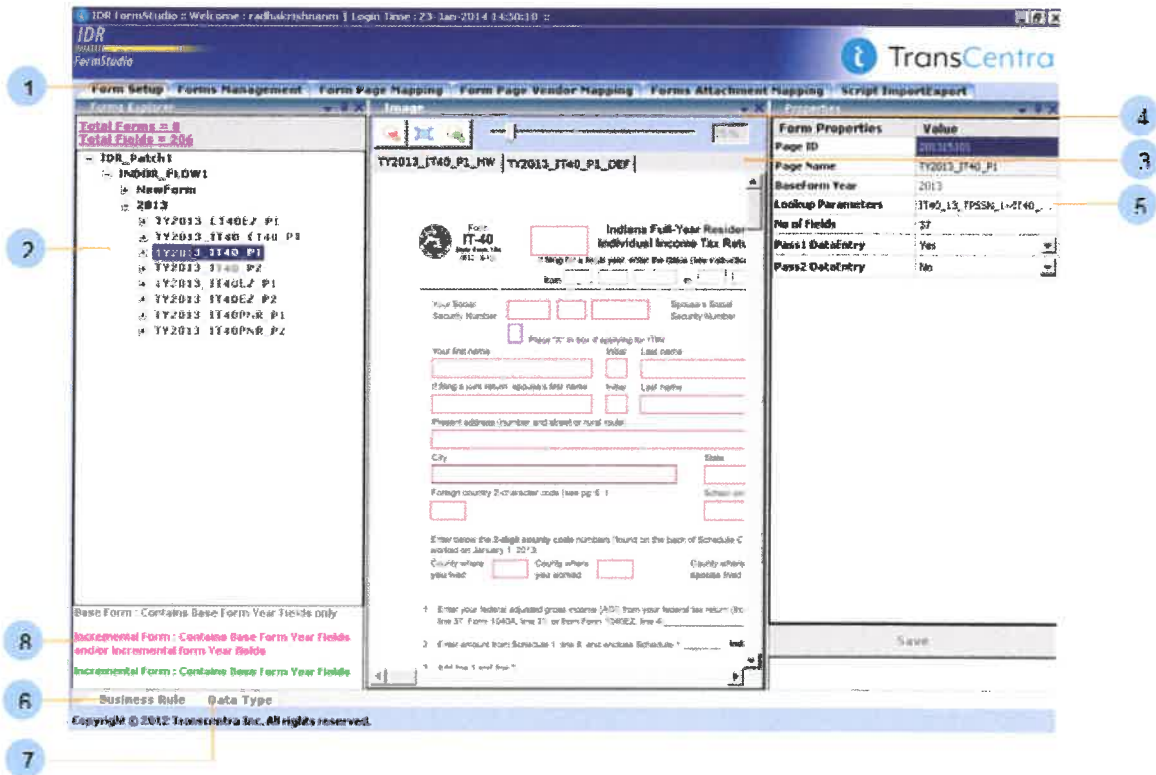
The system can use templates to identify the form. The system also can use key words/anchors to identify the form. The preferred method is a 1D barcode identifier on the form.

*4.11.2. Describe the process for setup of a new tax application. Include in your description what features and functionality are included in the base delivered system and what types of application setup require development effort.*

Form Studio is a tool used by TransCentra during the initial setup of forms and then subsequently by Agency personnel to make changes and additions to the forms inventory.

Form Studio is used to:

- Define the field properties such as data type (numeric, alpha, alpha numeric, date, custom data type using regular expression, etc.) length, minimum and maximum values, database lookup and other characteristics.
- Allows user to define business rules for the fields being captured, for example, the user will be able to configure a rule saying Line 9 + line 10 = Line 11. And if not, present line 9, 10 and 11 for verification.
- Allows users to define the data entry layout for a return. For example if the Department decides that they want to capture only five fields from all the Personal Tax returns received on Day 1 and defer data capture for the balance of the fields until a later date, the tool provides the flexibility to define this Essential and Deferred Data Entry process.
- Allows for a visual way to perform the 2D mapping between the 2D output and the fields defined for the return.
- Allows the Department to migrate work from development environment to test environment and from test to production.



1. Form Processing Tabs
2. Forms Explorer pane (Summary of fields and form for the available tax year, Form Year and Form Fields details).
3. Template Area (each tab on top of the image view shows an available template of a form)
4. Image Manipulate Icons
5. Properties Pane (used to assign the field property values)
6. Business Rule Pane (provides business rule definition and validations)
7. Data Type Pane (provides data type definition and configuration)
8. Each field color represents:
  - Gray** Indicates the base form year fields.
  - Pink** Indicates an incremental year field group that contains new and modified fields.
  - Green** Indicates an incremental contains base year form fields.

Output for GenTax can be easily mapped using the TMS\_TAX IDR Extract Configuration tool included in Form Studio. The TMS\_TAX IDR Extract Configuration tool enables the Agency users to create a new or modify the existing extract mapping field, calculate the IDR fields (optional) and evaluate barcode data.

Form Studio is included in the system pricing and also in our training plan.

**4.11.3. Describe the skill level and experience required to modify a tax I application.**

The skills required are compatible with a business analyst role. They should have the ability to use Excel. New forms and fields are defined in excel, and imported into the form studio tool. In forms studio the field properties, engine and business rules are defined.

TransCentra’s onsite technical resource will provide the Department’s technical staff continuous development support and mentoring as they work on forms and other changes to solidify their TMS\_TAX Remittance, C21 and IDR knowledge gained through the formal training.

After the completion of the project, the Department’s developers continue to have access to TransCentra technical staff whenever they have difficulty or encounter a new requirement. Development support ranges from providing tips and reminders, to researching the problem encountered and giving a solution, to conducting a live meeting or WebEx to look at the code or application together.

Our phased approach to implementation means that our staff will have a long on-site presence with both production and acceptance testing work occurring in parallel, providing many opportunities for knowledge transfer between the teams.

**4.11.4. What development language tools are used to make changes to the application programs and system reports?**

TMS\_TAX is written in .Net C# and uses MSSQL as the database. The reports are created using SQL Server Reporting Services.

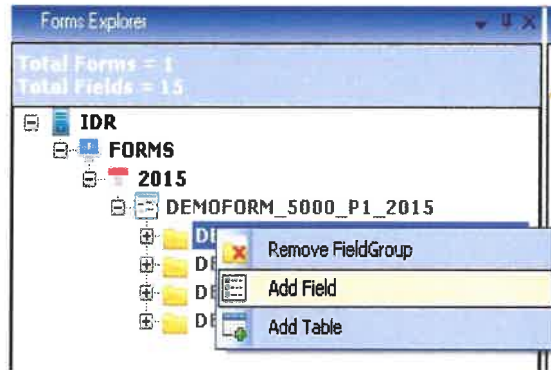
**4.11.5. Describe the process, skill level, and experience required to create and/or modify WV TAX specific reports.**

The reports are created using Microsoft SQL Server Reporting Services. Using SQL Server Reporting Services (SSRS), the Department can design or modify the reports as needed. SSRS is a Microsoft reporting tool released with SQL server 2012, SQL 2014 and SQL 2016. A person is required to have a working knowledge of Microsoft SSRS to modify and create new reports.

#### 4.11.6. Is the data entry screens pre-developed or do they have to be built from scratch?

The data entry screens are pre-developed. The form studio is used to add fields to a form and to the IDR screen as shown below:

To add a field to a field group right-click on the field group to which the user wants to add a new field and select *Add Field* from the context menu.



The user is prompted to enter new the field name. After entering a new field name click Ok.

The image shows a 'Field Name' dialog box. It has a title bar 'Field Name'. Below the title bar, there is a label 'New Field Name:' followed by a text input field. To the right of the input field are two buttons: 'Ok' and 'Cancel'.

#### 4.11.7. If your product offers development templates, describe what the template provides? Please provide sample templates.

TMS\_TAX is a packaged solution that particularly addresses the needs in a state revenue operation providing significant reductions in cost and a rapid return on investment. TMS\_TAX Form and Correspondence Management is a comprehensive Intelligent Document Recognition (IDR) platform to address general market requirements for forms development, scanning, data capture, data completion and extract needs. During implementation TransCentra will provide templates for the current year forms. These can be used as the template for any future year form changes. This is included in the training plan.

#### 4.11.8. What development tools are required? Are they purchased and licensed separately?

Form Studio, the development tool for form setup and extract mapping, is included in the system pricing; related training is also included.

#### 4.11.9. What types of system customization are typically required?

The system has many standard available options to handle client unique requirements using custom hooks available in the standard product. However, these are areas where agencies may require customization:

- Business rules
- Batch number assignment or ranges

- Document Locator Numbers (DLN)
- Posting file formats
- Archive file formats

**4.11.10. For each type of customization:**

**4.11.10.1. Please explain what level of expertise is required in order to make customization?**

Experience in C# and Microsoft SQL

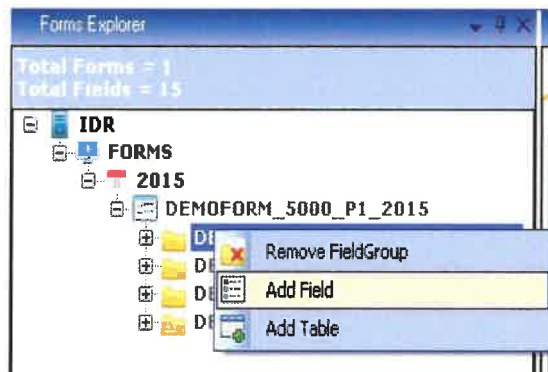
**4.11.10.2. Who typically performs the customization (you vs. customer)?**

Typically these changes are performed by TransCentra. Optionally, we have developer training for clients wishing to perform their own customizations.

**4.11.11. Discuss the procedures for adding additional data entry fields.**

Additional data entry fields may be added to a form as follows:

To add a field to a field group, right-click on the field group to the new field will be added, and select Add Field from the context menu.



A prompt appears to enter new the field name. After entering a new field name click Ok.



## Section 4, Subsection 4.12

### 4.12. System Operation and Maintenance

*The Department desires a system operation that requires minimal user intervention. We desire support and maintenance that allows immediate response should there be an issue. Please explain how this goal will be met.*

**4.12.1. Discuss your hotline / technical support. Include hours of operation and level of support available.**

If customers have questions or problems, the first step is to contact the TransCentra Support Call Center Hotline (hours of operation are 8 am to 8 pm EST). A TransCentra Customer Support Professional will answer the call and record each problem or question, diagnosis, and resolution.



The Support Call Center works with customers to correctly identify the specific system and product in question. Support Call Center personnel create an electronic log entry called a Support Request in our defect tracking system. The request contains a brief description of the issue, the type of issue and the priority classification. The analyst may ask for additional information about the issue and enter that into the tracking system as a journal entry. The analyst will provide customers with a call identification number.

Most calls are resolved by the Support Call Center. Often, an immediate solution is available because the problem has been reported by another client, and a fix already exists. Other responses may be an answer to a technical question, a workaround, status information on a resolution, a fix, or the authorization to officially report a problem. The Support Call Center may pass the log information to engineering for their expertise.

In the next step of support (problem resolution), engineers are alerted to potentially new problems with their products. Engineers receive information identifying the system, product, and level, as well as the symptoms and severity of the problem. They may also receive supporting material such as dumps, listings, tapes, diskettes, or pages from a document. The Customer Support Professional will analyze the issue and request data or files from the customer by email, secure FTP Site, CD media, or other means. Engineering is responsible for:

1. Thoroughly documenting the problem
2. Developing and testing the resolution
3. Providing up-to-date information on the progress towards that resolution's availability

The final step is getting problem responses back to the customer. The problem resolution is transferred to TransCentra Support Call Center where it can be distributed to the customer. The resolution can be in the form of a scheduled release, a workaround configuration or recommendation, product code update or replacement.

#### *Call Sequence Description*

1. Customer Support Hotline
2. Customer Service Operations Manager
3. Director of Customer Support and Services

The customer should contact the TransCentra Support Hotline for all issues. The Support Call Center will take necessary information and contact personnel in the following order:

1. Call Sequence One shall address all Severity 1 and 2 issues.
2. If no response within 30 minutes contact Call Sequence 2.
3. If no response from Call Sequence One or Call Sequence Two within 15 minutes contact Call Sequence 3.

#### *4.12.2. Describe any external system's access for remote diagnostics.*

Many tools are used where appropriate for remote access to better provide customer support. TransCentra support teams will use VPN access, Microsoft Live Meeting or similar computer shared video and audio sessions. Further the support teams will hold frequent customer touch point calls, provide issue worksheets, and provide team lead individual communication where appropriate.

**4.12.3. Discuss your proposed maintenance coverage, including response times, hours of coverage, and services covered.**

TransCentra offers three major Service Level Agreement programs which can to some degree be tailored to meet the customer’s Production Support requirements. Those Service Levels Agreements are:

- Standard support - 8 am to 8 pm EST
- 5x24 support
- 7x24 support

Standard technical support is available Monday through Friday, 8:00 am to 8:00 pm EST, except during TransCentra’s normally scheduled holidays and closures due to inclement weather. There are three main phases in supporting a product or system included in TransCentra’s service agreement.

The system software will operate constantly and accurately 98% of every work week (to be defined). “System Software” is defined as all software delivered as part of the project implementation. Software failure is defined as any occurrence where production results are not achieved as expected by the client’s normal business demands and is directly attributable to software. Production cycles that run to normal conclusion albeit with minor anomalies are not defined as failures.

TransCentra will document all system problems and resolutions, correct program errors, and/or replace defective software (or software found to be unacceptable) that is attributable to TransCentra, within a timeframe agreed upon between the Department and TransCentra.

Software upgrades to the system software will be applied as they become available. TransCentra classifies support issues as Priority A, B, C according to severity. The response times for these priority issues are as follows:

Priority Level	Service Level Response Time	Resolution Time	Expected Service Level Commitment
Priority A Issue	Within one hour	Four hours day for a workaround and two days for a fully tested correction	95% measured annually
Priority B Issue	Within one hour during contracted support hours	Eight hours for a workaround and five days for a fully tested permanent correction	95% measured annually
Priority C Issue	Within eight hours	Five days for a workaround, if required; a fully tested correction will be provided as part of the next regularly scheduled release or update	90% measured annually
Priority D Issue	N/A	N/A	N/A

**4.12.4. Provide a copy of your problem escalation matrix identifying escalation levels, actions and contact individuals and/or titles. Address design, implementation, hardware, and software maintenance issues.**

All issues reported by clients are logged into our in-house tracking system. When an issue's status is updated, reports and emails are generated automatically to facilitate tracking and adhering to response time commitments.

When an issue's age nears specified timeframes, warnings are generated and managers are alerted appropriately. Customer reports indicate to managers how customer support is performing with respect to issue resolution timeframes. Senior management is automatically notified by the system if performance requirements are not met and will step in to address the situation. If the issue is an emergency and the customer would like to escalate the situation, the customer can contact the assigned Team lead of TransCentra Support Services, the Operation Manager of TransCentra Support Services, or the Director (Engagement Manager) of TransCentra's Customer Support. The supervisor or manager contacted will follow up and take the necessary action to resolve the issue.

To ensure that the Department receives senior management attention on unresolved issues, TransCentra operates a problem escalation procedure in order that any unresolved problems are reported to TransCentra's operational and management personnel on a priority basis dependent upon the severity of the problem. There are three priority levels of problems and three levels of escalation, as shown in the following table:

Call Sequence	Description
1	Customer Support Hotline
2	Support Service Operations Manager
3	Director (Engagement Manager) of Customer Service

The Department should contact the TransCentra Support Hotline for all issues. The Support Call Center will take necessary information and contact personnel in the following order:

- Call sequence 1 shall address all priority A and B issues.
- If no response within 30 minutes, contact call sequence 2.
- If no response from call sequences 1 or 2 within 15 minutes, contact call sequence 3.

**4.12.5. Are replacement parts included in yearly maintenance costs?**

Yes. All replacement parts, labor, and travel expenses are included in the yearly maintenance costs during the contracted hours of coverage. The user is responsible for purchasing scanner consumables sold at an additional cost. Consumables include feed tires and ink and operator cleaning supplies.

**4.12.6. What are the maximum limits to increases to annual maintenance charges?**

We typically cap maintenance increases at 3% per year based in price increase are based on a cost of living adjustment index.

**4.12.7. What is the average lead-time required for delivery of software enhancements/ modifications?**

Enhancements/modifications after the installation and acceptance are handled by the Change Request group. The lead time to start a change is approximately three weeks after receiving the approved CR

document, and the delivery is determined by the complexity of the change. Note that timeframe relates to enhancements and not fixes, issues, or emergencies.

**4.12.8. Discuss the network and connectivity standards for your proposed system.**

TransCentra recommends that all of the servers, transports, data entry PCs and miscellaneous network peripherals connect to redundant switches for the network backbone. Each switch has a redundant power supply to protect switches from a power failure. The switches are up-linked together via a high speed 1Gbps connection. Each clustered node housing the TMS\_TAX and IDR server are connected to a different switch.

**4.12.9. Discuss the environments delivered with your proposed system (development, testing, and production).**

TMS\_TAX is implemented with separate production, development, and test environments which are installed at the time of system implementation. The test environment contains the TMS\_TAX products needed to test the solution prior to migrating changes/additions to production. The development environment provides the tools required for form definition, system and workflow setup and any user-defined exits required for the system. We will work with the Department based on its IT standards and environments.

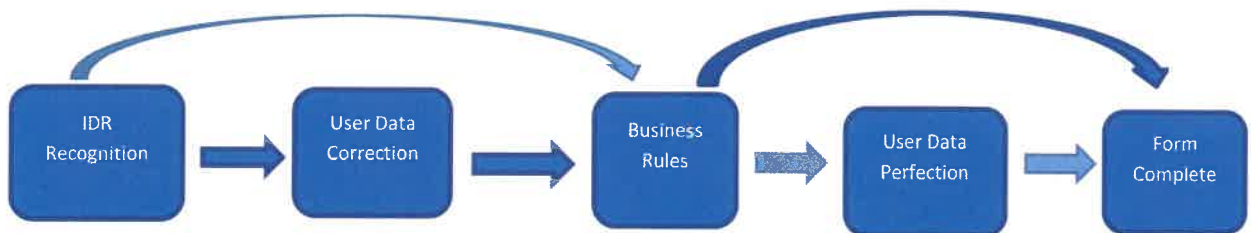
**4.12.10. What is your preferred server operating system for application/database servers? What are the common ones that have been installed?**

TMS\_TAX functions on Windows Server 2012 and 2014, and SQL 2012 and SQL 2014.

**4.12.11. Discuss how WV TAX rules, validations, and edits are incorporated into the processing workflow.**

The TMS\_TAX Suite Lockbox Studio with Rules Engine is used to maintain lockbox information across multiple TMS\_TAX products. Lockboxes belong to customers and multiple lockboxes can be associated with a single customer. Lockbox information includes a basic definition, data entry formats, payee verification names, process flow, and configuration options. Customer, site, ECS, LE, NetQuery (Customer Delivery) and eCapture configuration information can also be entered through the rules engine.

Rules may be used to modify the batch flow, validate fields during data entry, define amount limits, and set variance. They may be assigned to database fields to be validated by stagers or data entry programs.



IDR recognition reads the data from the return using the engines defined for the field. Any field that contains incorrect characters is sent to User Data Correction, examples are numeric fields with alpha characters or date fields with invalid dates. If there are no fields requiring user data correction, or all fields have been corrected, then the business rules are applied. Any returns failing a business rule are sent to User Data Perfection where the user may correct or accept the data based on the rule definition. For example: line 8 + line 9 -line 10 = line 11

**4.12.12. Discuss the ability of your proposed solution to outsource all or part of the data entry function. Include a high-level discussion of the technical interface required.**

Our TMS\_TAX solution allows the Department the largest options around remote activities. As noted earlier, TransCentra is a SourceHOV company. TransCentra is the largest processor of paper tax returns for state Departments of Revenue and lockbox provider for the IRS, through their service providers. We currently process paper tax returns for six Departments of Revenue.

**SourceHOV Traditional BPO Services**

	KY	AR	SC	AL	AZ	NYC	NJ
Contract Inception	1998	2000	2008	2000	1998	2013	2014
Departments of Revenue Services Provided							
Taxpayer Table Lookups	✓	✓	✓	✓		✓	
Fraud/Abuse Detection	✓	✓	✓				
Mailroom	✓	✓	✓	✓		✓	✓
Scanning	✓	✓	✓	✓		✓	
Return Coding	✓	✓	✓	✓		✓	✓
OCR/ICR	✓	✓	✓	✓		✓	
Return Entry	✓	✓	✓	✓		✓	
Return Validation	✓	✓	✓	✓		✓	✓
Image Hosting/Repository	✓	✓	✓	✓			
Lockbox/Remittance Processing/Check 21			✓	✓			
Document Destruction		✓	✓	✓		✓	✓
Warehousing (temporary)	✓	✓	✓	✓		✓	✓
Warehousing (long-term)	✓	✓					
Web Portals / E-file Solutions	✓			✓		✓	✓
Outbound Correspondence					✓		
Invoicing					✓		

The types of returns processed via data capture include:

	KY	AR	SC	AL	AZ	NYC	NJ
Refund Checks					✓		
Types Of Forms Processed							
Individual Income Tax	✓	✓	✓	✓			✓
Corporate Tax	✓	✓	✓	✓		✓	✓
Withholding Tax	✓	✓	✓	✓			✓
Sales and Use Tax	✓	✓		✓			✓
Motor Vehicle				✓			✓
Motor Vehicle Title Registration				✓			✓
Crash Records/Accident Reports		✓					
Lockbox Services	✓		✓	✓		✓	

Our TMS\_TAX system will allow the Department to perform remote capture, data entry, retrieval, and monitoring from any location that the Department allows. This means that if the Department wanted to load balance all data capture, TransCentra (SourceHOV) could log in and perform remote capture services/data entry services. Additionally, the Department could use remote offices or field operations to perform capture, data entry, retrieval, and monitoring. All of these remote services are available while still controlling the confidentiality and security of all data and images. The remote user would access the system via sVPN or IP restricted access and the Department would control all access.

**4.12.13. Discuss your proposed system's ability to show an operator what fields may be in error if a subtotal or total does not compute.**

Fields that are in error are shown in red with an exclamation symbol to the right side. Hovering on the exclamation displays the error message. If a calculation involves multiple fields, all of the fields will be shown in red. In the screen shot below the calculation is line 5 – line 6 + line 8 + line 9 - line 10 = line 11.

TMS - Pass I DR Data ReKey Program User Name: sathreshkuseelan PC Name: DRTRP54 EFlow

Options View Settings Help

Process Date: 11/01/15 Batch No: 0002717918 Tran No: 6 Seq. No: 6 Form Year: 2014 Form Code: 700 DLN No:

FORM\_700\_P1\_2014

Musson Department of Revenue P.O. Box 3040 Jefferson City, MO 65105-3040	1A Tire Sold	2 6	1B Adjust. + or -	3	1C Total Tires	2 3
Tire and Lead-Acid Battery Fee Return	2A Beginning Sold	1 7	2B Adjust. + or -	0	2C Total Batteries	1 7
Attached Return	3 Total Tires and Batteries Sold Line 1C plus Line 2C					4 0
Musson Tax Identification Number 1 0 7 5 5 7 1 3	4 Tire and Battery Fee Rate .X					5 0
File Name (See One (ONE) COPY) 201503	5 Tire and Battery Fee Line 3 times Line 4 (Rate)					20.00
Business Name ROUND CIRCLE LLC	6 Collection Deduction					1.20
Street Address	7 Total Fees Due Line 5 minus Line 6					18.80
City, State, and Zip Code	8 Addition to Fees (See Instructions)					
	9 Interest for Late Payment (See Instructions)					
	10 Approved Credit (See Instructions)					
	11 Pay This Amount (11 is Final) Total of Lines 7-6 minus Line 10 =					18.80

14700010001

Instructions for Completing Tire and Lead-Acid Battery Fee Return

If you have questions that are not covered in these instructions, you may contact the Department of Revenue at the address, e-mail address, and phone number listed at the bottom of this page. You may also refer to our website at <http://www.dor.mo.gov/individuals/individuals/>.

Line 1A: Tires Sold — Enter the total number of tires sold for this reporting period. Enter zero "0" if you have nothing to report for this reporting period.

Line 1B: Adjustments — Add or subtract any qualifying adjustments. Include a plus (+) or minus (-) sign for the adjustments. Enter zero "0" if you have nothing to report for this reporting period.

Line 1C: Total Tires — Enter the total of line 1A (Tires Sold, plus (+) or minus (-) line 1B adjustments). Enter zero "0" if you have nothing to report for this reporting period.

Lines 2A, 2B and 2C: Lead-Acid Batteries — Enter the appropriate Batteries Sold, Adjustments, and Total Batteries. Refer to instructions for Lines 1A, 1B, and 1C on amount of collection. Enter zero "0" if you have nothing to report for this reporting period.

Line 3: Total Tires and Lead-Acid Batteries Sold — Enter the total of Line 1C plus Line 2C.

Line 4: Tire and Lead-Acid Battery Fee Rate — The amount established on fee law represents the Tire and Lead-Acid Battery Fee rate.

Line 5: Tire and Lead-Acid Battery Fee — Line 3 (Total Tires and Lead-Acid Batteries Sold) multiplied by Line 4 (Rate) = Line 5 (Tire and Lead-Acid Battery Fee).

Line 6: Collection Deduction — Enter six percent (6%) of the amount shown on Line 5.

Line 7: Total Fees Due — Line 5 (Tire and Lead-Acid Battery Fee) minus (-) Line 6 (Collection Deduction) = Line 7 (Total Fees Due).

Line 8: Addition to Fees — For failure to pay Tire and Lead-Acid Battery Fee Return on or before the due date, a late fee percent (1%) of Line 7. For failure to file a Tire and Lead-Acid Battery Fee Return on or before the due date, a late fee percent (2%) of Line 7 for each month late up to a maximum of twenty-five percent (25%) (5 months late is 12.5%).

Note: If additions to fees for failure to file applies, do not enter additions to fees for return to pay.

For example, if return due April 30 is filed any time between May 1 and May 31, the rate would be five percent (5%); if filed between June 1 and June 30, the rate would be ten percent (10%); and so on, up to a maximum of twenty-five percent (25%).

Line 9: Interest for Late Payment — For failure to pay the amount established on fee law represents the Tire and Lead-Acid Battery Fee rate.

Line 10: Approved Credit — Enter any Tire and Lead-Acid Battery Fee credit for which the Department waived you an approved credit. An approved credit notice must accompany the Tire and Lead-Acid Battery Fee Return.

Line 11: Pay This Amount — Line 7 plus (+) Line 8 minus (-) Line 10. Make payments payable to Missouri Director of Revenue (U.S. Funds Only). Do not send cash or stamps.

Sign and Date Return: Sign and date the return. If this is your final return, enter date date in box provided.

Form 700 (Revised 03/2014)

Mail to: Taxation Division  
P.O. Box 3040  
Jefferson City, MO 65105-3040

Phone: (573) 751-5850 (Technical questions or registration)  
Phone: (573) 526-1780 (Financial status of account)  
TTY: (800) 735-2955  
Fax: (573) 526-8747

Page: 1/1 In: 0-1 Done: 0-0 Prev Image: Ctrl+P Next Image: Ctrl+N First Image: Ctrl+F

Error Message: Invalid Line 1 Value

Tires and Battery

Line 1 A	26
Line 1 B	3
Tires Total	23
Line 2 A	17
Line 2 B	0
BATTERIES_TOTAL_6	17
TOTAL_7	40

Amounts

FEE_8	2000
Line 6	120
Line 8	180
Line 9	0
LINE 10	0
LINE 11_13	180

Postmark

POST\_MARK\_DATE\_14

Amended

Amended: N

MO ID: 10755713

File Period: 03312015

## Section 4, Subsection 4.13

### 4.13. Application Database

*The Department desires SQL database. Please explain how this goal will be met.*

The solution is built upon Microsoft SQL server. Current supported versions are SQL 2008, SQL 2012 and SQL 2014.

#### 4.13.1. Describe the database standards for your proposed system.

Microsoft SQL 2012 standard edition (minimum).

#### 4.13.2. Describe the database used to support your application software.

The solution is built upon Microsoft SQL server. Current supported versions are SQL 2012 and SQL 2014.

#### 4.13.3. Describe the security features of the database and the user's ability to modify/maintain the database.

SQL Security is managed through Windows Domain Security, using impersonated functional IDs. Operational users do not have direct access to the database. Modification of the database schema is done as part of controlled releases provided by TransCentra.

4.13.4. Describe the access and level of control the user has to the database.

The user does not have direct access to the database. Updates to the transaction data only occurs using the TMS\_TAX application user interface.

4.13.5. Identify any proprietary software your system requires to support data management including the database engine, data access method(s), data development tool(s) and data management (tools)?

The system does not require any proprietary software. The solution is built using standard Microsoft SQL tools.

4.13.6. How is data history and data purge handled?

The data retention time is a configurable parameter. An automated utility is set up to purge data older than the configured date range. A manual purge can also be performed to allow the user to delete data as needed, but safeguarded to delete data only older than configured date range. The screen shot below depicts the configuration screen used to set up data retention for various modules in the TMS\_TAX environment. For long-term storage relevant data and images are stored and accessed via TMS Netquery. The Department would decide how many years' worth of data and images need to be stored in TMS Netquery.

Select	Data Del'd	Product Name	Description	Directory Specification	Select Stored Procedure	Delete Stored Procedure	File Spc
<input type="checkbox"/>	1	TMS	TMS Image Date Folder Deletion	<-\{M#dd\}	PSGTMS.uspSelectAdminFile		
<input type="checkbox"/>	2	TMS	TMS Transaction Deletion	DBDATE	PSGTMS.uspSelectAdminFile	[PSGTMS].[uspDataDelPurgeTransactionItems]	
<input type="checkbox"/>	102	TMS	AIDeARCHIVE Deletion	AIDeARCHIVE	PSGTMS.uspSelectArchiveDates	PSGTMS.uspDataDelForArchiveTables	
<input type="checkbox"/>	103	TMS	TMS Date Folder Deletion	<-\{M#dd\}	PSGTMS.uspSelectAdminFile		
<input type="checkbox"/>	104	TMS	DUPDeTABLEPURGE Deletion	DUPDeTABLEPURGE	PSGDUP.uspSelectDupDetectDates	PSGDUP.uspDataDelForDupDeTables	
<input type="checkbox"/>	105	TMS	MICRODeTABLEPURGE Deletion	MICRODeTABLEPURGE	PSGMICR.uspSelectMICRODates	PSGMICR.uspDataDelForMICRODeTables	
<input type="checkbox"/>	106	TMS	BILLINGSTATTABLEPURGE Deletion	BILLINGSTATTABLEPURGE	[PSGTMS].[uspSelectBillingStatDates]	[PSGTMS].[uspDataDelForBillingTables]	
<input type="checkbox"/>	107	TMS	RMICRODeTABLEPURGE Deletion	RMICRODeTABLEPURGE	PSGTMS.uspSelectRMICRODeDates	PSGTMS.uspDataDelForRMICRODeTables	
<input type="checkbox"/>	108	TMS	ReconciliationDeletion	ReconciliationDeletion	[PSGTMS].[uspSelectReconciliationDates]	[PSGTMS].[uspDataDelReconciliation]	
<input type="checkbox"/>	401	TMS	ReIndexing TMS Database	ReIndexing TMS Database	[PSU]TMS.[uspTMSReIndexing]		
<input type="checkbox"/>	402	TMS	ReIndexing MICR Database	ReIndexing MICR Database	[PSGMICR].[uspMICRReIndexing]		
<input type="checkbox"/>	403	TMS	ReIndexing DupDetect Database	ReIndexing DupDetect Database	[PSGDUP].[uspDUPReIndexing]		
<input type="checkbox"/>	404	TMS	ReIndexing Reconciliation Tables	ReIndexing Reconciliation Tables	[PSGTMS].[uspReconciliationReIndexing]		
<input type="checkbox"/>	405	TMS	ReIndexing Billing Tables	ReIndexing Billing Tables	[PSGTMS].[uspBillingReIndexing]		

Stored Procedure	File Specification	Purge Action	Purge Days	Data Retention Period	Purge Reference	Directory Removal	Action Type	Active	Edit	Delete
[uspDataDelPurgeTransactionItems]		Purge unconditionally	Sunday	30	Processing Date	True	Date Folder Deletion	True		
uspDataDelForArchiveTables		Purge unconditionally	Sunday	90	Processing Date	True	DB Deletion	True		
uspDataDelForDupDeTables		Purge unconditionally	Sunday	90	Processing Date	True	Date Folder Deletion	True		
uspDataDelForMICRODeTables		Purge unconditionally	Sunday	90	Processing Date	True	DB Deletion	True		
[uspDataDelForBillingTables]		Purge unconditionally	Sunday	90	Processing Date	True	DB Deletion	True		
uspDataDelForRMICRODeTables		Purge unconditionally	Sunday	90	Processing Date	True	DB Deletion	True		
[uspDataDelReconciliation]		Purge unconditionally	Sunday	30	Processing Date	True	DB Deletion	True		
			Sunday	0			Re-Indexing	True		
			Sunday	0			Re-Indexing	True		
			Sunday	0			Re-Indexing	True		
			Sunday	0			Re-Indexing	True		
			Sunday	0			Re-Indexing	True		



#### **4.13.7. What are the database and file management maintenance requirements?**

There is an automated service to purge and re-index. It is anticipated the re-index will be a weekly process. Maintenance includes nightly backup of application data, periodic purges of the older database information and re-indexing of the databases, monitoring of the hard disk utilization on the file servers. The system provides a purge utility for removing database records older than a specified number of days; this function can be started manually and then left unattended until it completes or it can be scheduled to run automatically at a specified time. The nightly backup and periodic re-indexing are normal system maintenance functions; the time required should be minimal, as these tasks typically can be scheduled to occur automatically during an outage window.

## **Section 4, Subsection 4.14**

### **4.14. Interface and Transmissions**

*The Department desires a system that will interface with our host system WVOASIS and will allow for implementation of Check21. Please explain how your proposed solution will accomplish this goal.*

#### **4.14.1. How will the proposed solution integrate with WV TAX's host system?**

TMS\_TAX can create the posting file to the Department's tax host system in the format required. The file will be created in a shared location for pickup by the host system. The file can be created multiple times per day as needed by the host system.

#### **4.14.2. What types of file formats are created from your application? What type of format is needed for import into your application?**

The solution has the capability to generate extract files in multiple formats, flat file, CSV, XML etc. Similarly, import files can be various formats: flat file, CSV, XML etc. as required.

For Check 21-qualified transactions, the Extract component generates the extracts in X9.37 format. An X9.37 file or Image Cash Letter (ICL) is created based upon the requirements of the Department's clearing bank.

#### **4.14.3. How well can the application interface with third-party vendors? Do you have relationships with any third-party vendors? Any "off the shelf APPs that integrate with common third party application?**

The TMS\_TAX application interfaces with multiple third party vendors, including GenTax, RSI, Virtual Solutions, OnBase, etc. We have also provide a standard API for external service vendors to integrate with TMS.

#### **4.14.4. Can more than one transmission method be supported within the system? List the methods that can co-exist.**

By default the platform allows for generating the extract file and images to be transmitted to the Department's backend/host accounting system (GenTax).

- The solution can drop the file in a network path that has been configured in the system.
- TMS\_TAX is integrated with MOVEit a third-party SFTP tool optionally used to send and receive files. If enabled, this tool provides a secure way to transfer files using end to end encryption.

- In the past we have integrated with other customers third party transmission tools such as Connect:Direct.

The Department can decide to use any or all of the above methods for transmission. The Department may also decide that some of the tax returns or application forms need to be transmitted one way and some of them in another way which can be handled in TMS\_TAX.

**4.14.5. What management / monitoring tools does the transmission facility provide? Can transmissions be scheduled? If they can be scheduled is there a maximum amount of transmission that the system will support? At what level are transmissions scheduled - account, lockbox?**

The operator may view the transmission status of downloaded files and reports by clicking the Dashboard menu option. The possible statuses include:

- Success
- In Progress
- Error
- Not Initiated

The dashboard screen has three views – **Cutoff Summary**, **Batch Archive List** and **ICL Status**, which are accessed by selecting the appropriate choice from the drop-down list. Each of these views displays the transmission status of differing types of files, and has its own set of filters. All views are available as a list only.

The Cutoff Summary is the default dashboard status screen that is the first to be presented. It lists the transmission status of files for each cutoff time.

Each row represents one cutoff time (24 hour clock). Each cutoff time can be drilled-down to show the transmission status of each entity with files to be transmitted at that cutoff time, and each entity can be further drilled-down to show the transmission status of the individual files to be transmitted for that entity at that cutoff time.

Cutoff Time	Status	Remarks
10:00	Not Initiated	
13:00	Not Initiated	
14:00	Success	
16:00	Success	
17:00	Error	Fax message sending failure.

Customer/Bank Name	Status	Remarks
TransCentraCustomer1	Error	Fax message sending failure.

Description	Comments	Archived	Enabled	Failed	Transmitted	Completed Time
Batch Detail Report	Successfully notified. Report created and available in the path: \\server57\steno\batch_Detail_Report.pdf	NA	NA	NA	✓	06/06/2014 13:53:47
Cutoff Notification from BankCustomer1	Successfully notified. Successfully email has been sent from customer1@bank.com	NA	✓	NA	NA	06/06/2014 13:53:05
Fax Notification	Fax message sending failure.	NA	NA	✗	NA	

Customer/Bank Name	Status	Remarks
TransCentraCustomer2	Error	Invalid phone number

Cutoff Time	Status	Remarks
18:00	Not Initiated	
18:30	Not Initiated	
19:00	Not Initiated	

## Section 4, Subsection 4.15

### 4.15. Workflow

*The Department desires a solution that will provide workflow that could differ from current. Please explain how your solution will meet this goal.*

*4.15.1. Describe the workflow process of your proposed solution from mail receipt through posting to host system and bank deposit, data & image extract to back end system.*

TMS\_TAX is highly customizable through configuration options. The setup process defines the expected documents, data to capture, business rules validation and output files. It is used to define multiple workflows for different types of documents, including exception conditions. It establishes the processing completed in each workflow step. The below workflow includes all of the components of the solution. It provides scanning, virtual batching, data recognition and extraction, ICL deposit and posting file to GenTax. This general workflow can be modified based on the Department's processing requirements. Some options are:

- Two step data completion. This allows the minimum data to captured from a return to allow the check to be deposited, and the remainder to be completed on a subsequent day(s).
- Real-time updates to GenTax, once per day, or at specific cut-off times.
- Multiple or once daily ICL deposit.
- The order of deposit, host posting and archive configurable

As documents are extracted, they are prepared for scanning by:

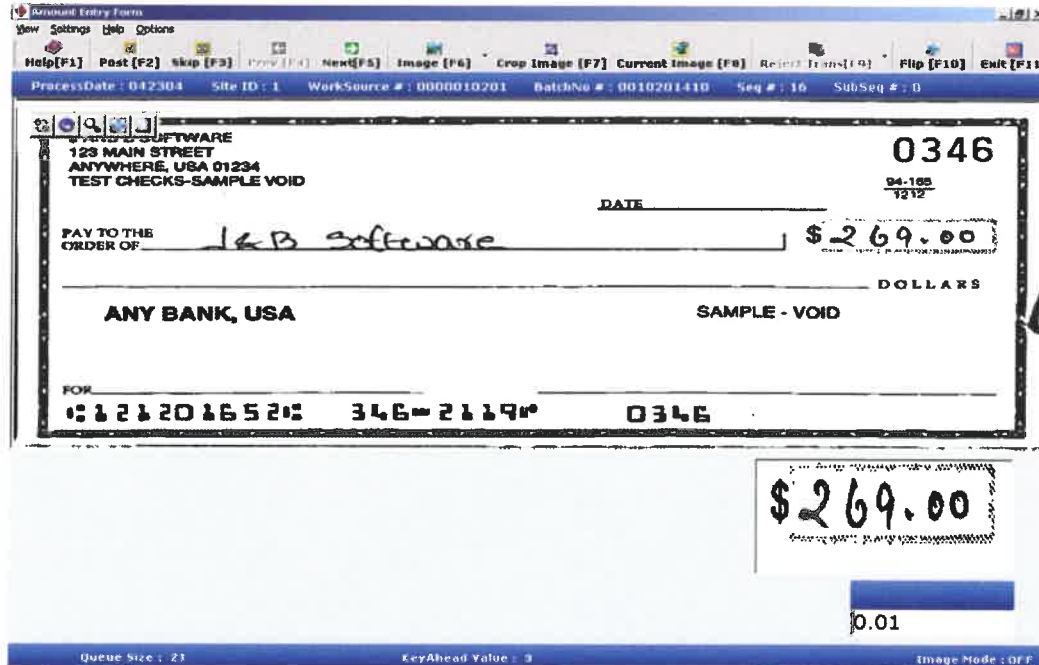
- Removing any foreign material from the items to be fed in the scanner. These items include staples, paper clips, rubber bands, etc.
- Ensure that the items are in the proper sequence: example: Return, Schedules, Attachments including envelopes and correspondence, W-2/1099s (if applicable to tax type) and check if included.
- Repairing tears or other imperfections within the forms that may cause the system to jam. Original documents will be fed through the scanner.
- Prior to feeding the document into the high speed scanners (IntelliScan), the documents must be mechanically jogged to help ensure that the top edges of the documents are together. This occurs just prior to scanning.

TMS\_TAX eliminates the need to sort tax returns or segregate them into physical groupings at the time of opening of envelopes. As a result, the returns are taken out from the envelope with the check, if present, and prepped for scanning without any additional sorting or batching. As the documents are scanned, a unique audit trail number is sprayed on the documents. This helps to locate any document in the event the physical document must be pulled for any reason.

The tax returns and corresponding schedules are identified from the images. Documents must be identified before they can be virtually batched. Document identification is an automated process, but if the item cannot be identified, it is sent to a manual form identification process.

Once they are virtually batched, the application's workflow component routes the appropriate documents to the correct processing queue in an automated fashion.

For example, vouchers and checks are proceed through the remittance flow for balancing and check clearing. This includes the automated stager CAR/LAR process to read the check amount. Checks that are not read are sent to amount entry. Below is a screen shot of amount entry:



Returns are processed through the IDR components, data is extracted by applying image analysis, multiple engines and voting algorithms. Business rules are applied to the recognition results. Items that fail validation are presented to a knowledge worker in a separate queue. To help prioritize items, special queues may be created for specific tax, return or form types based upon processing deadlines, return disposition (refund/money due), or related exceptions. Below is a screen shot of a return where the business rules failed.

TMS - Pass I DR Data ReKey Program - User Name: satheshkuseelan - PC Name: DRTRPS4 - EFlow

Process Date : 110115 Batch No. 000271918 Tran No : 6 Seq. No : 6 Form Year : 2014 Form Code : 700 DLN No :

Options View Settings Help

FORM\_700\_P1\_2014

Massachusetts Department of Revenue P.O. Box 3040 Jefferson City, MO 65105-3040	LA Tires Sold	2	6	1B Adjul. + or -	3	1C. Total Tires	2	3
	2A Batteries Sold	1	7	2E Adjul. + or -	0	2C. Total Batteries	1	7
	Tire and Lead-Acid Battery Fee Return	Amended Return		3	Total Tires and Batteries Sold Line 1C plus Line 2C		4	0
Massachusetts Identification Number 1 0 7 5 5 7 1 3	4. Tire and Battery Fee Rate - X				\$		5	0
File Name 201503	5. Tire and Battery Fee, Line 3 times Line 4 (Rate)				\$		20	00
Business Name ROUND CIRCLE LLC	6. Collection Deduction				\$		1	20
Street Address	7. Total Fees Due Line 5 minus Line 6				\$		18	80
City, State, and Zip Code	8. Addition to Fees (See Instructions)				\$			
	9. Interest for Late Payment (See Instructions)				\$			
	10. Approved Credit (See Instructions)				\$			
	11. Pay This Amount (U.S. Dollars) Total of Lines 7-9 minus Line 10				\$		18	80

14700010001

Instructions for Completing Tire and Lead-Acid Battery Fee Return

If you have questions that are not covered in these instructions, you may contact the Department of Revenue at the addresses, e-mail addresses, and phone numbers listed at the bottom of this page. You may also refer to our website at <http://dmr.state.ma.us/taad/taad.html>.

Line 1A. Tires Sold — Enter the total number of tires sold for this reporting period. Enter zero "0" if you have nothing to report for the reporting period.

Line 1B. Adjustments — Add or subtract any qualifying adjustments. Indicate a plus (+) or minus (-) sign for the adjustments. Enter zero "0" if you have nothing to report for the reporting period.

Line 1C. Total Tires — Enter the total of Line 1A (Tires Sold) plus (+) or minus (-) Line 1B (Adjustments). Enter zero "0" if you have nothing to report for the reporting period.

Lines 2A, 2B and 2C. Lead-Acid Batteries — Enter the appropriate Batteries Sold, Adjustments, and Total Batteries. Refer to instructions for Line 1A, 1B, and 1C on method of calculation. Enter zero "0" if you have nothing to report for the reporting period.

Line 3. Total Tires and Lead-Acid Batteries Sold — Enter the total of Line 1C plus Line 2C.

Line 4. Tire and Lead-Acid Battery Fee Rate — The amount indicated on this line represents the Tire and Lead-Acid Battery Fee rate.

Line 5. Tire and Lead-Acid Battery Fee — Line 3 (Total Tires and Lead-Acid Batteries Sold) times Line 4 (Rate) = Line 5 (Tire and Lead-Acid Battery Fee).

Line 6. Collection Deduction — Enter as percent (8%) of the amount shown on Line 5.

Line 7. Total Fees Due — Line 5 (Tire and Lead-Acid Battery Fee) minus (-) Line 6 (Collection Deduction) = Line 7 (Total Fees Due).

Line 8. Addition to Fees — For failure to pay Tire and Lead-Acid Battery Fee Return on or before the due date, enter the percent (2%) of Line 7. For failure to file a Tire and Lead-Acid Battery Fee Return on or before the due date, enter the percent (8%) of Line 7 (the amount due) up to a maximum of twenty-five percent (25%) (3 months late in filing = 25%).

Note: If Addition to Fees for failure to file applies, do not pay additions to fees for failure to pay.

For example, 1. Enter on line 8: 2% for any tires between May 1 and May 31; the rate would be two percent (2%) of fees between June 1 and June 30; the rate would be ten percent (10%) and so on, up to a maximum of twenty-five percent (25%).

Line 9. Interest for Late Payment — Enter any interest for late payment.

Line 10. Approved Credit — Enter any approved credit. An approved credit notice must accompany the Tire and Lead-Acid Battery Fee Return.

Line 11. Pay This Amount — Line 7 plus (+) Line 9 plus (+) Line 8 minus (-) Line 10. Make payments payable to Treasurer/ Director of Revenue (U.S. Funds Only). Do not send cash or stamps.

Sign and Date Return: Sign and date the return. If this is your final return, enter close date if less provided.

Example: Return is due April 30, but is filed postmarked May 15.  
Line 7 is \$400.  
\$400 x 8% = \$32  
\$32 is the Addition to Fees.  
Example: Return is due April 30, but is filed postmarked June 1.  
Line 7 is \$400.  
\$400 x 10% = \$40  
\$40 is the Addition to Fees.  
Line 9. Interest for Late Payment — If fees are not paid by the due date, multiply Line 7 by the daily interest rate. Then multiply the amount by number of days late.  
Note: Number of days late is counted from the due date to the postmark date. For example if the due date is April 30 and a return is postmarked on May 15, the payment is 15 days late.  
Example: If interest rate is three percent (3%) and Line 7 is \$400.  
(A) Divide the annual interest rate by 365 to get a daily rate.  
(\$3 / 365 = .008219178)  
(B) Multiply Line 7 by the daily rate.  
(\$400 x .008219178 = \$3.287671271)  
(C) Multiply the result by the number of days late.  
(\$3.287671271 x 15 days late = \$49.315069065)

Note: Double the annual interest rate by 365 to figure the daily rate.  
\*Use 200 for leap years.  
The annual interest rate is subject to change each year. You can access the annual interest rate on the Department's website at <http://dmr.state.ma.us/taad/taad.html>.

Mail to: Taxation Division  
P.O. Box 3040  
Jefferson City, MO 65105-3040

Phone: (573) 751-5800 (Technical questions or registration)  
Phone: (573) 526-1700 (Financial status of account)  
TTY: (800) 735-2966  
Fax: (573) 526-8747

Page : 1/1 In. Q-1 Done Q-0 Prev Image-Ctrl-P Next Image-Ctrl-N First Image-Ctrl-F

Error Message: Invalid Line 11 Value

Tires and Battery

Line 1 A 26

Line 1 B 3

Tires Total 23

Line 2 A 17

Line 2 B 0

BATTERIES\_TOTAL\_6 17

TOTAL\_7 40

Amounts

FEE\_8 2000

Line 6 120

Line 8 1800

Line 9 0

LINE 10 0

LINE\_11\_13 1880

Postmark

POST\_MARK\_DATE\_14

Amended

Amended N

MO ID 10755713

File Period 03312015

Once each virtual batch is data is perfected, the check data and images are exported to the TMS\_TAX Electronic Clearing Suite (ECS). An ICL deposit file is created for the bank. The file can be created multiple times or once per day based on the Department's banking relationship, deposit costs, and fund availability.

The following are examples of the extensive reporting capabilities of the TMS\_TAX ECS module:

Extract Detail

Page 1 of 1

Branch	WorkSource	Transaction No	Trace No	RT No	Account No	Aux On/Us No	Check No	Amount	
Job Date : 10/01/2008									
Job No:	1072	CutOff Time :	12:35	Clearing Channel	CHECK21	End Point :	BOFA	File Name	20081001-12-2-0-001.D AT
26985	0000000001	0010000026	898		111000614	7654321897	9495	1,938.00	
26985	0000000001	0010000026	899		031304050	746-746123	1160	1,000.00	
26985	0000000001	0010000026	900		111000614	7654321897	9495	1,938.00	
26985	0000000001	0010000026	901		031304050	746-746123	1160	1,000.00	
<b>Branch Total</b>				<b>Items :</b>	<b>4</b>	<b>Amount :</b>		<b>5,876.00</b>	
<b>File Total</b>				<b>Items :</b>	<b>4</b>	<b>Amount :</b>		<b>5,876.00</b>	
Job No: 1073 CutOff Time : 12:35 Clearing Channel CHECK21 End Point : WELLS File Name 20081001-12-7-0-001.D AT									
23445	0000000002	0010000027	902		065302303	1234567	7367	364.00	
23445	0000000002	0010000027	903		081914856	0234567893	4341	500.00	
23445	0000000002	0010000027	904		091302788	123-456	1328	100.00	
23445	0000000002	0010000027	905		081017342	390-199-1	156	100.00	
23445	0000000002	0010000027	906		065302303	1234567	7367	364.00	
23445	0000000002	0010000027	907		081914856	0234567893	4341	500.00	
23445	0000000002	0010000027	908		091302788	123-456	1328	100.00	
23445	0000000002	0010000027	909		081017342	390-199-1	156	100.00	
<b>Branch Total</b>				<b>Items :</b>	<b>8</b>	<b>Amount :</b>		<b>2,128.00</b>	
<b>File Total</b>				<b>Items :</b>	<b>8</b>	<b>Amount :</b>		<b>2,128.00</b>	

Extract Summary

Page 1 of 1

Branch ID	Work Source	Transaction Number	Total Checks	Amount			
Job Date : 10/01/2008							
Job Number	1072	CutOff :	12:35	End Point :	BOFA	FileName :	20081001-12-2-0-001.DAT
26985	0000000001	0010000026	4	5,876.00			
<b>Branch Total :</b>			<b>4</b>	<b>5,876.00</b>			
<b>File Total :</b>			<b>4</b>	<b>5,876.00</b>			
Job Number	1076	CutOff :	13:18	End Point :	BOFA	FileName :	20081001-13-2-0-003.DAT
26985	0000000001	0010000026	2	2,938.00			
<b>Branch Total :</b>			<b>2</b>	<b>2,938.00</b>			
<b>File Total :</b>			<b>2</b>	<b>2,938.00</b>			
<b>Grand Total</b>			<b>6</b>	<b>8,814.00</b>			

Extract Grand Summary

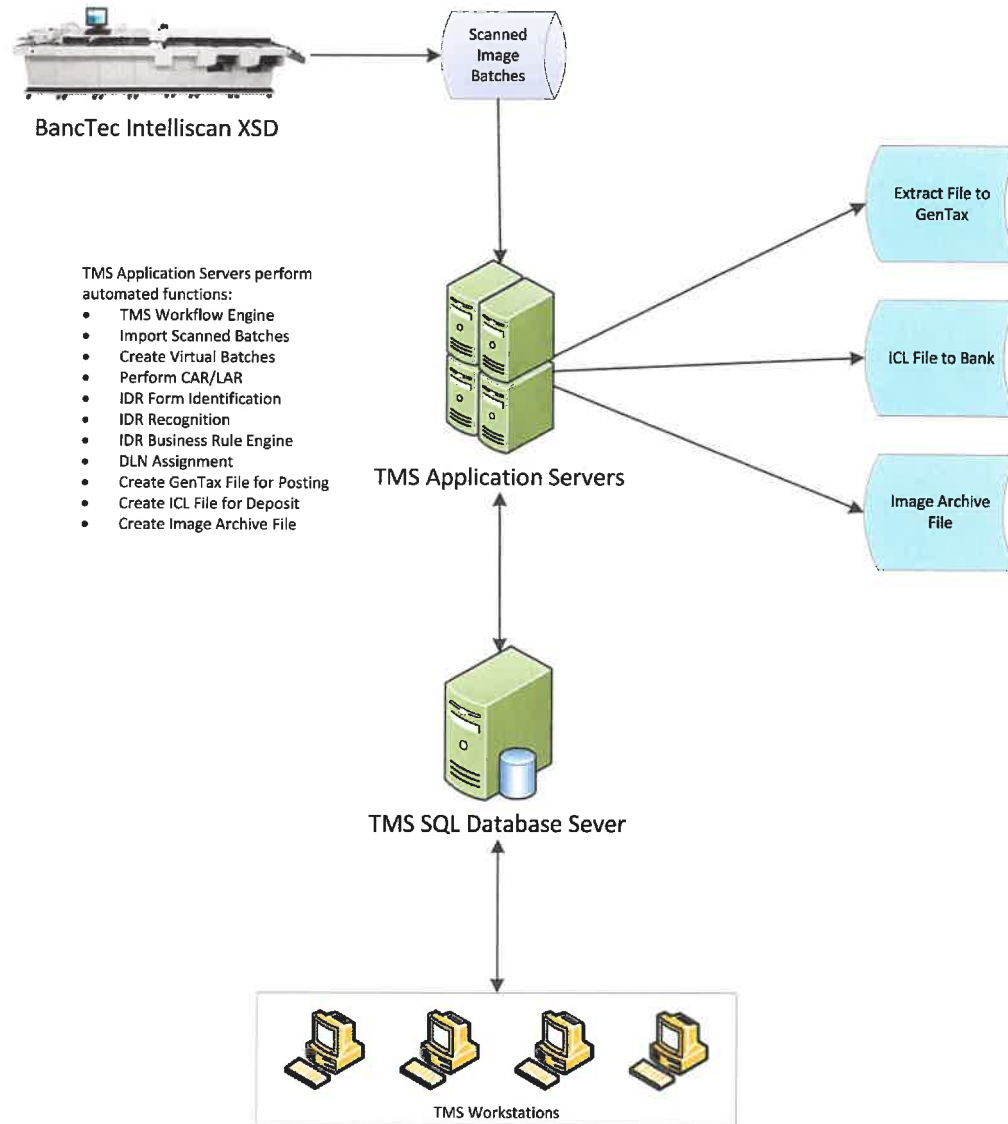
Page 1 of 1

Job No	CutOff	Clearing Channel	Work Source	Count	End Point	File Name	Amount
1072	12:35	CHECK21	0000000001	4	BOFA	20081001-12-2-0-001.DAT	5,876.00
1073	12:35	CHECK21	0000000002	8	WELLS	20081001-12-7-0-001.DAT	2,128.00
1076	13:18	CHECK21	0000000001	2	BOFA	20081001-13-2-0-003.DAT	2,938.00
1077	15:46	CHECK21	0000000002	4	WELLS	20081001-15-7-0-002.DAT	1,064.00
<b>Grand Total</b>				<b>18</b>			<b>12,006.00</b>

In order to accommodate the small percentage of checks that may not be cleared electronically though Check 21, TMS\_TAX ECS produces a separate cash letter for paper deposits. Daily deposit reports are created for both the paper and electronic clearings as shown previously.

After a batch has been exported to TMS\_TAX ECS, or if the batch does not contain checks, it is ready for extract processing to create the host (GenTax) posting file. This may be automatically created as each batch is completed real-time or once at the end of the day. Once the posting file is created, the batches are sent to the Archive export process to send data and images to the archive repository.

4.15.2. Provide a workflow diagram identifying hardware, software, and interfaces to external systems.



- TMS Application Servers perform automated functions:
- TMS Workflow Engine
  - Import Scanned Batches
  - Create Virtual Batches
  - Perform CAR/LAR
  - IDR Form Identification
  - IDR Recognition
  - IDR Business Rule Engine
  - DLN Assignment
  - Create GenTax File for Posting
  - Create ICL File for Deposit
  - Create Image Archive File

- TMS workstations and Users perform the following as needed:
- Scanline Fix
  - Amount Entry
  - Balancing
  - Manual Form ID
  - IDR Data correction
  - ECS Duplicate Review
  - ECS IQUA Review

4.15.3. What do you propose to be the most economical method for processing prior year tax forms?

Correspondence and prior year returns go through a manual key-from-image data entry queue. This helps get applications into production faster for the ones that do not need a lot of development and maintenance.

#### ***4.15.4. Describe the process and procedures for handling exceptions (i.e. Business Registration Applications).***

TMS\_TAX has the capability to process these to a separate queue. Each document processed must be assigned a document type. Using the document type we can route the form to a separate queue. The document type will define the fields, if any to be captured. TMS\_TAX can assign a DLN for reference, and export the document image and any data to the archive system. We can also extract the DLN and data and send to GenTax or other system as required. In another state, we have included white mail in a similar process. The mail is scanned in a white mail batch with a separator page. The separator page data and the image are exported to the archive system, and the DLN and separator data are sent to the host for tracking.

#### ***4.15.5. Discuss your solutions capability to process intermixed tax forms rather than batching work by type.***

As batches are completed on the scanner, they are ingested into TMS\_TAX. The scanned batches are processed first by the automated form ID stager, manual form id if required and then virtually batched by an automated stager process. A virtual batch contains transactions with the same properties, i.e. same tax year, tax type, money or no-money, multiple or splits. Additional batching requirements may also be defined. The virtual batches will flow through the system as if they were scanned as a batch. A unique audit tracking number is assigned by the scanner and may be used to physically identify items during research.

#### ***4.15.6. How does your solution identify the transaction boundaries between returns? Between taxes?***

The 1D barcode identifies the tax and form type. Business rules are defined to specify which forms may begin a transaction, and which forms may accompany a form. Forms without a barcode will require a separator page to identify transaction boundaries.

#### ***4.15.7. How does your solution maintain transaction integrity?***

Transaction boundaries are identified at the scanner, and verified by the form validation process. Form validation uses the business rules which define the return forms and pages to validate the transaction. Transactions that are not complete are sent to form ID review for user verification and correction/rejection. Within a virtual batch, transactions are assigned an incremental transaction number.

#### ***4.15.8. Describe your processing procedures for processing each payment type you will encounter. Including:***

##### ***4.15.8.1. Single page tax form***

A single page return, submitted without a payment will be scanned on the transport. The transport scanning work will be ingested into TMS\_TAX. The form ID will be used to create virtual batches of the same tax type. Batches will be processed by the ICR engines, and the data updated to the SQL database. Business rules are applied to the data and presented to IDR users for correction (if needed). Upon IDR correction, the batches are ready for extract to the host, and image export to the archive system.

##### ***4.15.8.2. Multiple page tax form***

A multiple page return, submitted without a payment will be scanned on the transport. The transport scanning work will be ingested into TMS\_TAX. The form id will be used validate the return has the correct pages, and create virtual batches of the same tax type. Batches will be processed by the ICR engines, and the data updated to the SQL database. Business rules are



applied to the data and returns presented to IDR users for correction (if needed). In IDR correction, the system will display each page of the return to the same operator, this enables cross page business rule validation. A batch of returns may be spread across multiple IDR users. Upon IDR correction completion, the batches are ready for extract to the host, and image export to the archive system.

#### *4.15.8.3. Single page tax form with check or checks*

A single page return, submitted with a payment will be scanned on the transport. The transport scanning work will be ingested into TMS\_TAX. The form ID will be used to create virtual batches of the same tax type. Checks are processed by the CAR/LAR engine, and the amount updated to the data base. If the CAR/LAR amount is below the confidence threshold, it is sent to Amount Entry. The check scanlines are validated, and if in error sent to Scanline Fix to correct. Batches will be processed by the ICR engines, and the data updated to the SQL database. Business rules are applied to the data and presented to IDR users for correction (if needed). Upon IDR correction, the return amount due is compared to the check(s) and if not equal sent to balancing, where the amounts can be verified. The system will retain the amount due and the amount paid as separate values to handle under/overpayment. At this point the check data and images are sent to ECS for ICL deposit processing. The batches are ready for extract to the host, and image export to the archive system.

If the host system can accept multiple files containing the same return, we can provide an alternate workflow. In this workflow, the return is presented for IDR data correction with a minimum number of fields to post the payment to the host system and deposit the check(s). The remainder of the IDR correction of the return can occur after the ICL, and the completed return can be extracted for posting later in the day or subsequent day.

#### *4.15.8.4. Multiple page tax form with check or checks*

A multiple page return, submitted with a payment will be scanned on the transport. The transport scanning work will be ingested into TMS\_TAX. The form id will be used to create virtual batches of the same tax type. Checks are processed by the CAR/LAR engine, and the amount updated to the data base. If the CAR/LAR result is below the confidence threshold, the check is sent to Amount Entry. The check scan lines are validated, and if in error sent to Scanline Fix to correct. Batches will be processed by the ICR engines, and the data updated to the SQL database. Business rules are applied to the data and presented to IDR users for correction (if needed). Upon IDR correction, the return amount due is compared to the check(s) and if not equal sent to balancing, where the amounts can be verified. The system retains the amount due and the amount paid as separate values to handle under/overpayment. At this point the check data and images are sent to ECS for ICL deposit processing. The batches are ready for extract to the host, and image export to the archive system.

If the host system can accept multiple files containing the same return, we can provide an alternate workflow. In this workflow, the return is presented for IDR data correction with a minimum number of fields to post the payment to the host system and deposit the check(s). The remainder of the IDR correction of the return can occur after the ICL, and the completed return can be extracted for posting later in the day or subsequent day.

**4.15.9. Describe any automated reject repair functionality within the system. For example, OCT, MICR, date, etc.**

TMS\_TAX provides automated repair for coupon and check scanlines. Scanlines that have errors are processed through an ICR engine to read the scanline and avoid operator intervention. If scanline is not read automatically (because of a shift for example) the operator can rubber band the scanline and the system will attempt to read and parse the scanline. In ICR recognition, data is read using multiple engines with voting algorithms to improve the recognition rate and reduce manual correction.

**4.15.10. Discuss your system's ability to share data entry workload between multiple operators at a transaction, batch, application/publication, and functional level.**

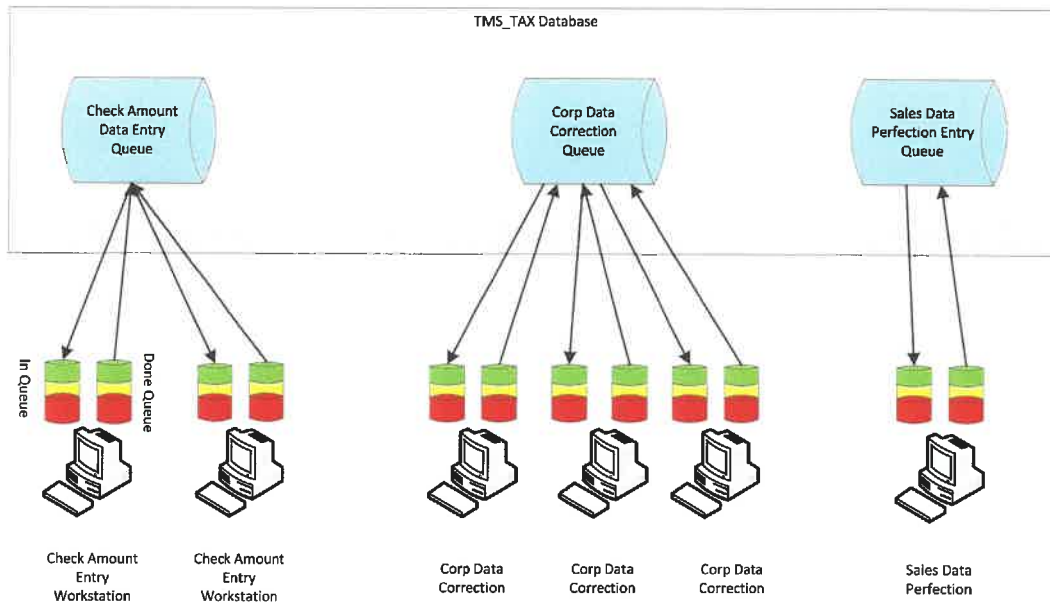
The system provides the ability to distribute the work to users at the batch, transaction or page level within a data entry function. The default is the transaction. For example, if check MICR scanlines contain errors, only the checks with errors are presented to the users. These are generally distributed to all of the users performing the scanline fix function. However for returns with multiple pages, it is generally better to have the entire return presented to a single user and allow cross page business rule validations.

**4.15.11. How does your proposed system solution distribute (allocate) work to operators?**

The system uses a queuing mechanism to distribute work to the individual operator workstations. A user may select any data entry function corresponding to their authority level. Each workstation has an in queue and a done queue. When the user selects a data entry function, the system will choose the next available transactions for the data entry function and fill the workstation in queue. Batches and transactions in the SQL are selected using priority and FIFO for equal priority batches.

As the user completes the transactions they are written to the done queue. The system has a configuration for the maximum and minimum number of items in the queues. When the in queue reaches the minimum, the queue is filled via a background process. Similarly, the done queue has a maximum, at which point the done queue is updated back to the data base.

The diagram below depicts six workstations, two workstations amount entry, three corporate tax data correction, and one completing sales tax data perfection. The blue cylinders on the left represent the batches and transaction in the SQL database. The green, yellow, red cylinders represent the workstation in and done queues, and the color indicates the refill and update levels respectively. The batches and transactions in the blue data base queues are ordered in terms of priority and if equal priority then FIFO order.



**4.15.12. Does your proposed solution provide for individual data entry operator selection of specific batches of work? If yes, describe the security and workflow limitations of the system.**

The user does not have the capability to select a specific batch. The transactions are allocated to the users queue automatically.

**4.15.13. Does your proposed solution provide for work time out at the key entry station?**

Yes, if the user is not active for a period of time, the items in the queue are retrieved and added back to the pool of pending transactions.

**4.15.14. Does your proposed solution include a training mode? If yes, discuss which processing steps in the workflow the training mode is provided.**

A training mode is not available.

**4.15.15. Does your proposed solution provide user defined reason codes for rejected transactions?**

The reject reasons are defined during the Requirements Definition process and are configurable during installation. Each data entry queue may have unique reject reasons. The user may select from the configured reasons.

**4.15.11. How does your proposed system solution distribute (allocate) work to operators?**

The system uses a queuing mechanism, where the first user that logs in to the function is given the first available items or transactions to fill the respective user queue. The next user that logs in is given the pending items until the queue is filled. As each users queue is reduced, it automatically replenishes. As a result transactions or items can be distributed to all of the available users.

**4.15.12. Does your proposed solution provide for individual data entry operator selection of specific batches of work? If yes, describe the security and workflow limitations of the system.**

To ensure security, the user does not have the capability to select a specific batch. The transactions are allocated to the users queue automatically.

**4.15.13. Does your proposed solution provide for work time out at the key entry station?**

Yes, if the user is not active for a period of time, the items in the queue are retrieved and added back to the pool of pending transactions.

**4.15.14. Does your proposed solution include a training mode? If yes, discuss which processing steps in the workflow the training mode is provided.**

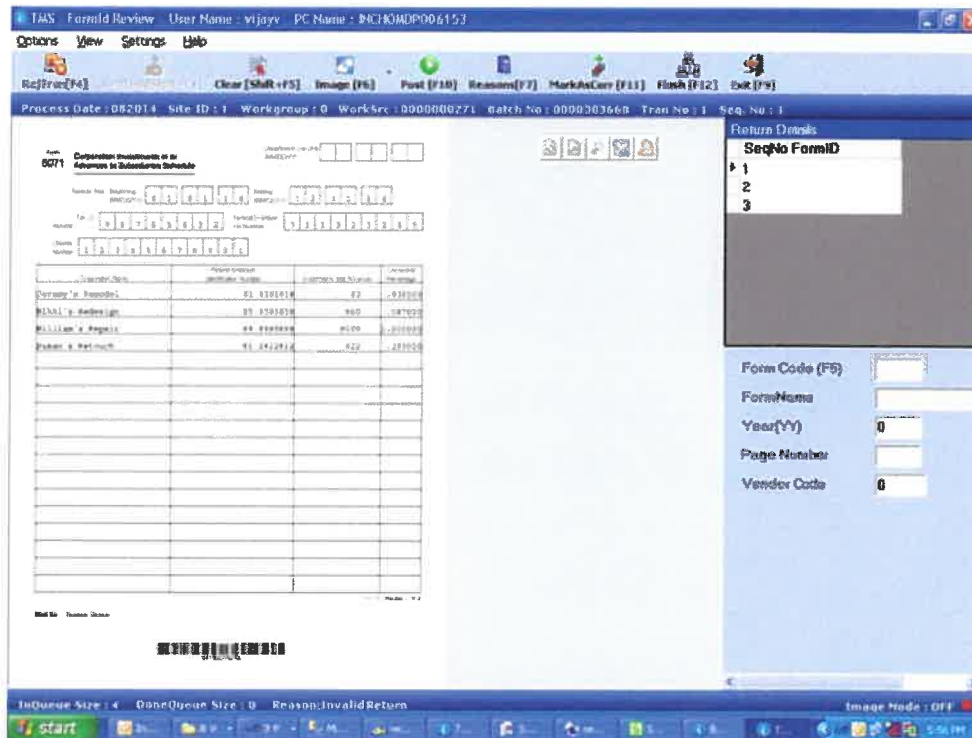
Although a training mode is not available, TransCentra will set up a test environment to support client training needs.

**4.15.15. Does your proposed solution provide user defined reason codes for rejected transactions?**

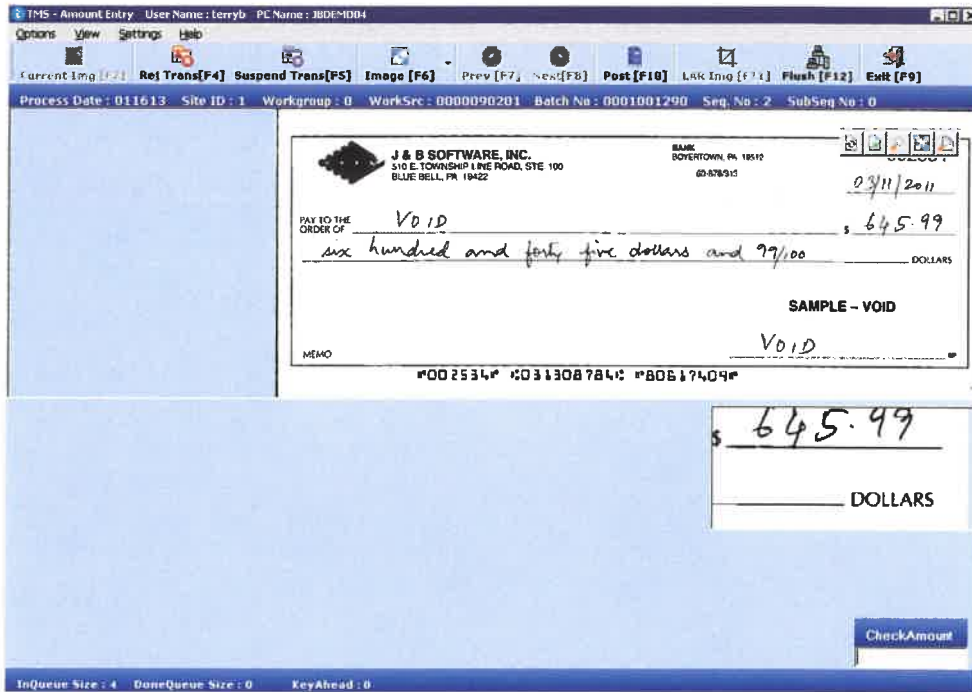
The reject reasons are configurable during installation. The user may select from the configured reasons.

**4.15.16. Describe the format by which images are displayed for each of the image data entry functions.**

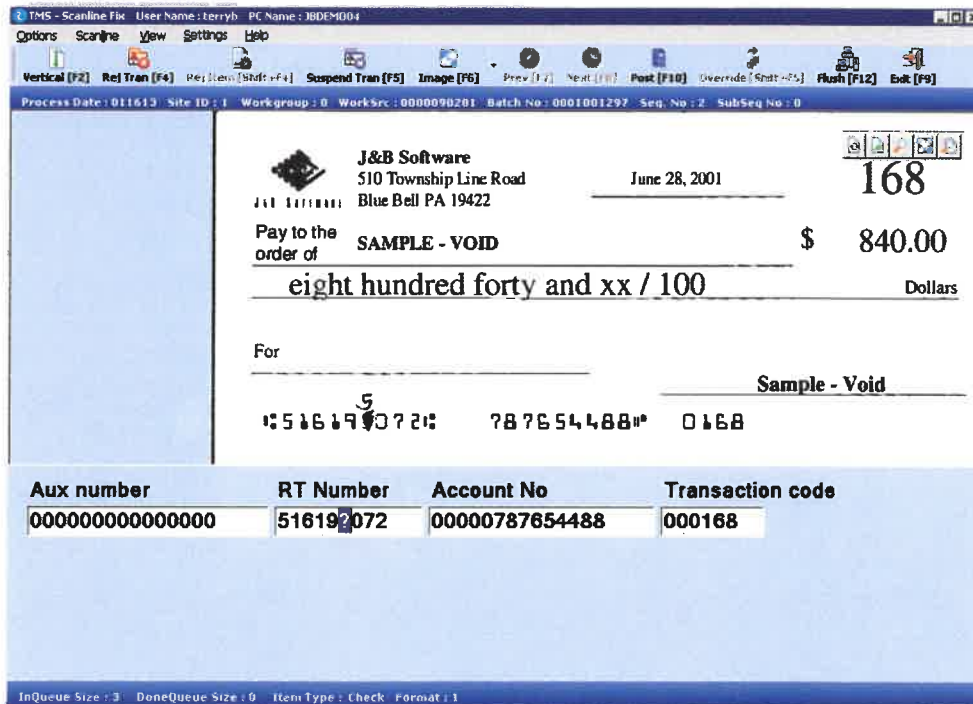
In Form Code Data entry/correction, the image is displayed on the left with the entry field on the right.



In amount entry, the check is displayed on the top with the zoomed snippet immediately below the right corner of the check, and the entry box on the bottom.



In scanline fix the image is displayed on the top, and the entry fields below the image.



In IDR the error fields are highlighted in red, and the error is displayed at the bottom right of the screen.

TMS - Post 200 State Software Programs User Name: jrdem004 PC Name: jrdem004

Process Date: 110115 Batch No: 0002717910 Tran No: 6 Seq No: 6 Form Year: 2014 Form Code: 208 JCS No:

FORM\_006\_P1\_2014

Line	Description	Amount
1	Tire and Lead-Acid Battery Fee Return	4.50
2	Tire and Battery Fee Return	5.00
3	Tire and Battery Fee Return	20.00
4	Tire and Battery Fee Return	4.20
5	Tire and Battery Fee Return	10.00
6	Tire and Battery Fee Return	10.00
7	Tire and Battery Fee Return	10.00
8	Tire and Battery Fee Return	10.00
9	Tire and Battery Fee Return	10.00
10	Tire and Battery Fee Return	10.00
11	Tire and Battery Fee Return	10.00
12	Tire and Battery Fee Return	10.00
13	Tire and Battery Fee Return	10.00
14	Tire and Battery Fee Return	10.00
15	Tire and Battery Fee Return	10.00
16	Tire and Battery Fee Return	10.00
17	Tire and Battery Fee Return	10.00
18	Tire and Battery Fee Return	10.00
19	Tire and Battery Fee Return	10.00
20	Tire and Battery Fee Return	10.00
21	Tire and Battery Fee Return	10.00
22	Tire and Battery Fee Return	10.00
23	Tire and Battery Fee Return	10.00
24	Tire and Battery Fee Return	10.00
25	Tire and Battery Fee Return	10.00
26	Tire and Battery Fee Return	10.00
27	Tire and Battery Fee Return	10.00
28	Tire and Battery Fee Return	10.00
29	Tire and Battery Fee Return	10.00
30	Tire and Battery Fee Return	10.00
31	Tire and Battery Fee Return	10.00
32	Tire and Battery Fee Return	10.00
33	Tire and Battery Fee Return	10.00
34	Tire and Battery Fee Return	10.00
35	Tire and Battery Fee Return	10.00
36	Tire and Battery Fee Return	10.00
37	Tire and Battery Fee Return	10.00
38	Tire and Battery Fee Return	10.00
39	Tire and Battery Fee Return	10.00
40	Tire and Battery Fee Return	10.00
41	Tire and Battery Fee Return	10.00
42	Tire and Battery Fee Return	10.00
43	Tire and Battery Fee Return	10.00
44	Tire and Battery Fee Return	10.00
45	Tire and Battery Fee Return	10.00
46	Tire and Battery Fee Return	10.00
47	Tire and Battery Fee Return	10.00
48	Tire and Battery Fee Return	10.00
49	Tire and Battery Fee Return	10.00
50	Tire and Battery Fee Return	10.00
51	Tire and Battery Fee Return	10.00
52	Tire and Battery Fee Return	10.00
53	Tire and Battery Fee Return	10.00
54	Tire and Battery Fee Return	10.00
55	Tire and Battery Fee Return	10.00
56	Tire and Battery Fee Return	10.00
57	Tire and Battery Fee Return	10.00
58	Tire and Battery Fee Return	10.00
59	Tire and Battery Fee Return	10.00
60	Tire and Battery Fee Return	10.00
61	Tire and Battery Fee Return	10.00
62	Tire and Battery Fee Return	10.00
63	Tire and Battery Fee Return	10.00
64	Tire and Battery Fee Return	10.00
65	Tire and Battery Fee Return	10.00
66	Tire and Battery Fee Return	10.00
67	Tire and Battery Fee Return	10.00
68	Tire and Battery Fee Return	10.00
69	Tire and Battery Fee Return	10.00
70	Tire and Battery Fee Return	10.00
71	Tire and Battery Fee Return	10.00
72	Tire and Battery Fee Return	10.00
73	Tire and Battery Fee Return	10.00
74	Tire and Battery Fee Return	10.00
75	Tire and Battery Fee Return	10.00
76	Tire and Battery Fee Return	10.00
77	Tire and Battery Fee Return	10.00
78	Tire and Battery Fee Return	10.00
79	Tire and Battery Fee Return	10.00
80	Tire and Battery Fee Return	10.00
81	Tire and Battery Fee Return	10.00
82	Tire and Battery Fee Return	10.00
83	Tire and Battery Fee Return	10.00
84	Tire and Battery Fee Return	10.00
85	Tire and Battery Fee Return	10.00
86	Tire and Battery Fee Return	10.00
87	Tire and Battery Fee Return	10.00
88	Tire and Battery Fee Return	10.00
89	Tire and Battery Fee Return	10.00
90	Tire and Battery Fee Return	10.00
91	Tire and Battery Fee Return	10.00
92	Tire and Battery Fee Return	10.00
93	Tire and Battery Fee Return	10.00
94	Tire and Battery Fee Return	10.00
95	Tire and Battery Fee Return	10.00
96	Tire and Battery Fee Return	10.00
97	Tire and Battery Fee Return	10.00
98	Tire and Battery Fee Return	10.00
99	Tire and Battery Fee Return	10.00
100	Tire and Battery Fee Return	10.00

Instructions for Completing Tire and Lead-Acid Battery Fee Return

Postmark: POST\_MARK\_DATE\_14

Amount: 1075

File Printed: 03/11/2015

In balancing the return or coupon is displayed on the top, with the check on the bottom, and the amounts to the right.

TMS - Balancing User Name: terryb PC Name: jrdem004

Process Date: 121212 Site ID: 1 Workgroup: 0 WorkSrc: 0000010262 Batch No: 0010202100 Tran No: 1

J&B SOFTWARE  
J&B Software Credit Card Plan  
P.O. Box 1800  
Dunc. Hill, PA 15509

STATEMENT  
DATE: 04/03/12  
AMOUNT DUE  
\$271.00

Stub|SeqNo 1:0 | \$:0.00 | \$:0.00 | \$:0.00 | A/C No: | Stub 1 of 1

Stub|SeqNo 1:0 | \$:0.00 | \$:0.00 | \$:0.00 | A/C No: | Stub 1 of 1

Stub|SeqNo 2:0 | \$:271.00 | \$:271.00 | \$:271.00 | A/C No: | Stub 1 of 1

Stub|SeqNo 2:0 | \$:271.00 | \$:271.00 | \$:271.00 | A/C No: | Stub 1 of 1

INQueue Size: 5 DoneQueue Size: 0 ZeroStubs: 1 ZeroChecks: 0 Balance: \$271.00 BalDispCode: Undefined

## Section 4, Subsection 4.16

### 4.16. Remote Capabilities

*The Department desires remote capabilities in regard to balancing, keying, deposit, and System Administrator. Please explain how your solution will meet this goal.*

*4.16.1. Does your proposed solution provide or allow for any remote activities such as capture, data entry, retrieval, and monitoring? If so, describe the capabilities.*

Yes, the solution has the capability of remote capture, data entry and monitoring of the same activities. With the hub and spoke architecture the Hub acts as the receiver and collator of all the data and images captured and corrected at one or more remote locations. Data entry can take place at multiple locations at the Hub or at a Spoke. This architecture provides for the incoming work to be distributed across multiple locations and the data entry also to be spread across multiple locations. By design, this approach not only allows balancing the workload, but also provides redundancy in case one or more capture and/or data entry locations are unavailable because of unforeseen situations. ICL at the host provides a consolidated deposit for all sites.

The solution is highly scalable both vertically and horizontally. Since Spokes, data entry and/or capture, have minimum hardware and software requirements, they can be added with minimal effort and investment. Similarly at the Hub, processing capacity can be added by either adding more instances of software components and if necessary additional hardware. We have existing TMS\_TAX implementations with remote capture at field offices.

## Section 4, Subsection 4.17

### 4.17. Management Tools

*The Department desires all management tools necessary to administer the system daily and make necessary changes, stats, reports, etc. Please explain how your solution will meet this goal.*

*4.17.1. Describe the management tools and reports that are provided with your proposed solution. Address productivity, accuracy/quality, recognition, and activity logs for both hardware and operators.*

TMS\_TAX offers a comprehensive set of tools to assist the Department in the daily management of the TMS Image System and enables a historical view for future staffing and system requirements.

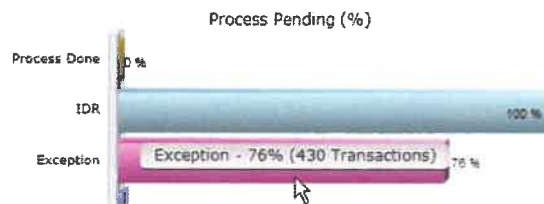
The Unified Status Monitor (USM) provides the capability to monitor work volumes and batch statuses for a specified processing date. It may be run locally or as a web application. It also allows the user to follow the status of local batches and jobs submitted from spokes or remote sites or being processed in remote sites and the Department spoke.

The view displays the status of all batches or jobs or a subset by type, status or work source. An additional panel can show exceptions, such as batches in use too long or jobs that have been waiting to start for too long.

System monitoring is provided through the TMS\_TAX Unified Status Monitor with real-time reporting of system functions and workflow queues. The graphical tools provide a quick snapshot for constant monitoring to quickly identify and address bottlenecks in either operator or unattended (background) processes. In this manner the Department is able to monitor and proactively manage the TMS\_TAX Image System for maximum performance and throughput.

The screen is made up of the following components:

- A series of tabs at the top of the screen that are used to navigate among the status screens.
- The current processing date (which may be changed at any time).
- A button in the top right corner that is used to update the status at any time.
- A flow chart with speed buttons that correspond to the status screens that the operator may view.
- A horizontal bar chart at the bottom shows the percentage of batches that have not yet been processed at each status category. When the mouse pointer is rolled over a bar in the bar chart, it displays the percentage of batches waiting processing in that status category and the number of transactions waiting to be processed.



Supervisors can view the status of TMS\_TAX batches waiting for the various data entry functions by clicking the Data Entry tab, or the corresponding speed button or bar from the Home screen.

Processing Stage	Batch Count	Stub Count	Check Count	Items Waiting DE	Operators
CAR IDR Waiting	20	8000	8000	0	2
Scan Fix Waiting	36	10800	10800	720	2
Balance Stage Waiting	16	4800	4800	0	1
Amount Entry Waiting	120	36000	36000	18000	3
Rekey Waiting	20	8000	8000	800	1
Essential Data Entry	8	1400	1408	174	0
Balance Waiting	11	3300	3300	165	1
Account Totals Waiting	12	4500	4500	0	1
Extract Waiting	1	300	300	0	0
ECS XML Input Waiting	200	60000	60000	0	0
IDUA Review Waiting	4	1200	1200	300	0
<b>Group Summary</b>	<b>451</b>	<b>134300</b>	<b>134308</b>	<b>20708</b>	

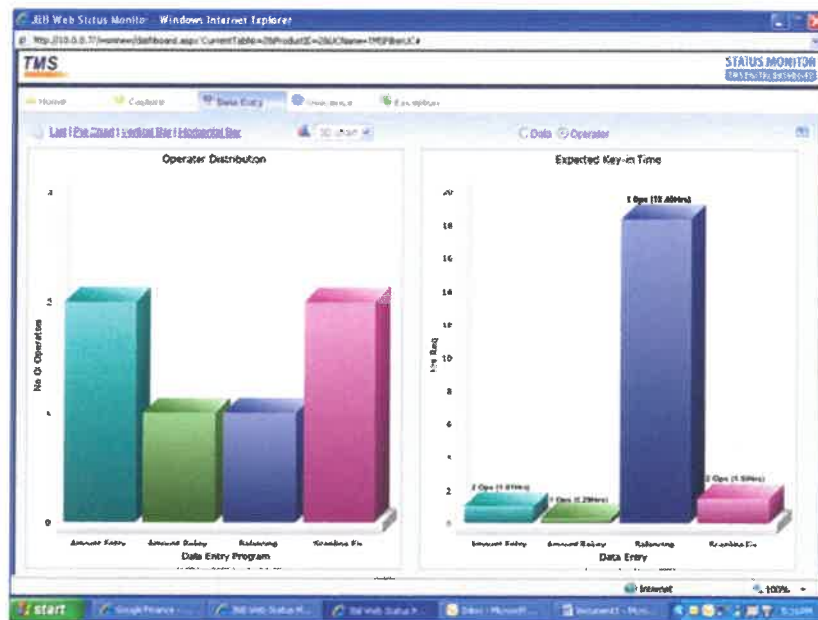
The Unified Status Monitor identifies the various users who touch a particular item/transaction within the workflow. It reports all of the auditing requirements such as:

- Identity of user/associate
- Time log of activity
- Action performed
- Number of keystrokes

Alerts are displayed graphically. The following screenshot demonstrates how the system alerts a supervisor to the fact that at the current keying rate and number of personnel assigned to the balancing task, that there is a bottleneck that needs to be addressed.



Another view provides a different view of the same information that allows a supervisor to quickly review the system for problems.



In addition to real-time monitoring and reporting, the TMS\_TAX Image System provides historical end-of-day reporting. The TMS Reporting Subsystem offers dozens of standard reports. Additionally, using SQL Server Reporting Services (SSRS), the Department is able to design the reports needed to provide the reporting required by the Department, or other agencies for whom processing is provided.

The following is an example of the types of included reports:

- Deposit detail (electronic and paper Items), summary and grand totals, deposit
- Reconciliation, IQA failures
- Extract detail, extract summary
- Operator statistics
- Recognition statistics
- Audit and control

### Document Tracking and Reconciliation

During the scanning process on any device, a unique tracking number is assigned to each transaction. This unique tracking number is maintained in the TMS database throughout the entire process. Additionally, TMS\_TAX assigns the DLN in a central staging service to allow different tax types to be processed intermixed at the transports, and to ensure that the DLNs are unique. The DLN may also contain Tax Type or other relevant information. The DLN number is cross referenced to the sprayed Audit Trail number (and vice versa) so that a particular transaction that may need to be manually pulled can be easily located. On the other hand, with the DLN it is possible to gather information about where and by whom a transaction was scanned.

To validate that all items processed in the TMS\_TAX Image System are extracted to GenTax, an acknowledgement process may be used for the GenTax interface. GenTax has the ability to send acknowledgement files after it processes a set of data and image files sent from TMS IDR. One file is returned for each data file and a second file is returned for each image index file. The files are placed in a specific directory location accessible to the TMS\_TAX IDR application. The acknowledgement files list each batch processed and the batch status. The batch status includes values indicating Good, Duplicate Batch, Batch Count doesn't match header, or Missing Images. The GenTax errors are logged in the TMS\_TAX IDR system.

Furthermore, TMS\_TAX has extensive audit trail capabilities in the system. The Audit Log Report displays the login details for all the users, sorted by program, for a particular work type and time period. It includes information such as transaction number, sequence number (DLN), field name, old value, new value, and login date and time. All user actions are logged and stored in the TMS database for the time period determined by the Department. In addition, TMS\_TAX logs information into the event log and/or system log detailing system activity. The granularity of the information logged can be configured by the trace level setting in the program configuration.

**4.17.2. Provide a sample of your standard system reports.**

The Form Recognition Summary report displays a summary of the recognition results for each form type for all the selected collections. For each form, it shows the name of the form, the vendor code, how many total forms of that type were processed, and the number and percentage of forms that were recognized and unrecognized.

From Date : 10/7/2013 To Date : 11/4/2013 Page No: 1 / 1

**Form Recognition Summary**

Form Name	Vendor Code	Forms Processed	Recog Count	Recog %	UnRecog Count	UnRecog %
<b>FORM_5060_P1_2013</b>						
	99	3	3	100.00%	0	0.00%
	<b>Total</b>	3	3	100.00%	0	0.00%
	<b>Grand Total</b>	3	3	100.00%	0	0.00%

Print Date : 11/4/2013 2:37:09 PM

The Recognition Detail Report displays the recognition results for each field within a form. It shows the type of data defined for each field, how many fields were processed, and the number and percentage of fields that were recognized and unrecognized.

### Field Recognition Detail

Field Name	Data Type	Processed Count	Recog Count	Recog %	UnRecog Count	UnRecog %
<b>Form Name</b>	<b>FORM_5068_P1_2013 Tax Year</b>	<b>2013</b>				
Add (Line 8)		2	2	100.00%	0	0.00%
Ammended Form Indicator		2	2	100.00%	0	0.00%
Approved Credit (Line 10)		2	1	50.00%	1	50.00%
Batteries Adj (Line 2B)		2	2	100.00%	0	0.00%
Batteries Sold (Line 2A)		2	2	100.00%	0	0.00%
Batteries Total(Line 2C)		2	2	100.00%	0	0.00%
Comp (Line 6)		2	2	100.00%	0	0.00%
Fee (Line 5)		2	2	100.00%	0	0.00%
Interest (Line 9)		2	2	100.00%	0	0.00%
Post Mark Date		2	2	100.00%	0	0.00%
Tire Adj (Line 1B)		2	2	100.00%	0	0.00%
Tires Sold (Line 1A)		2	2	100.00%	0	0.00%
Tires Total (Line 1C)		2	2	100.00%	0	0.00%
Total Due (Line 11)		2	2	100.00%	0	0.00%
Total(Line 3)		2	2	100.00%	0	0.00%
	<b>Total</b>	<b>30</b>	<b>29</b>	<b>96.67%</b>	<b>1</b>	<b>3.33%</b>
	<b>Grand Total</b>	<b>30</b>	<b>29</b>	<b>96.67%</b>	<b>1</b>	<b>3.33%</b>

Print Date : 11/4/2013 2:18:23 PM

The Operator Summary Report is an operator-by-operator list of their data entry work. For each data entry function performed, the report displays a summary line listing the number of batches processed, the elapsed time, how many items were processed, number of keystrokes, and a computation of the number of items per hour and the number of keystrokes per hour.

### Operator Summary Report

Program	No. Of Batches	Items	Elapsed Time	Items/Hour	KeyStrokes	Key Strokes/Hour
<b>User Code: swaminathanb</b>						
Amount Entry	7	13	00:00:51	918	0	0
Amount Rekey	5	11	00:00:38	1,042	5	468
Balancing	6	61	00:01:04	3,431	20	1,128
Checks-With	5	56	00:08:52	379	377	2,553
Item Data Entry	15	168	00:06:33	1,539	0	0
Scan Line Fixing	12	105	00:32:41	193	232	426
Stub Amt Entry	10	39	00:01:42	1,376	8	281
<b>User Total (swaminathanb)</b>		<b>453</b>			<b>642</b>	
<b>Average</b>				<b>1,268</b>		<b>694</b>
<b>User Code: terryb</b>						
Batch Edit	1	1	00:00:54	67	6	400
<b>User Total (terryb)</b>		<b>1</b>			<b>6</b>	
<b>Average</b>				<b>67</b>		<b>400</b>

06/18/2013 01:34:09 PM

The User Log is used to record normal system events such as "batch opened," "file carried over," or "batch deleted." The batch fixing and batch retrieval programs also write entries to the user log. The log is an audit trail of the day's events.

## User Log Report

Audit Date	Time	Operator	Program	Batch	Action	Description
05/03/2013	09:35:52	Beth	AIDE	0001001297	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001297	Close	Data Flushed. BV Set=2
05/03/2013	09:35:52	Beth	AIDE	0001001298	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001298	Close	Data Flushed. BV Set=2
05/03/2013	09:35:52	Beth	AIDE	0001001299	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001299	Close	Data Flushed. BV Set=2
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001290	Open	PPBV=0 BV=0 Collector
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001290	Close	PPBV=0 BV=0 Collector
01/16/2013	16:26:13	STAGER	Build2_CommonService	0001001290	Open	PPBV=0 BV=16 Pass 1 Batch Collect
01/16/2013	16:26:13	STAGER	Build2_CommonService	0001001290	Close	PPBV=0 BV=16
01/16/2013	16:26:15	STAGER	Build2_RecognitionSe	0001001290	Open	PPBV=0 BV=21 A2IA Stager
01/16/2013	16:26:21	STAGER	Build2_RecognitionSe	0001001290	Close	PPBV=0 BV=21
01/16/2013	16:26:26	STAGER	Build2_CommonService	0001001290	Open	PPBV=21 BV=1 Pass 1 Staging
01/16/2013	16:26:29	STAGER	Build2_CommonService	0001001290	Close	PPBV=21 BV=1
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001291	Open	PPBV=0 BV=0 Collector
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001291	Close	PPBV=0 BV=0 Collector
01/16/2013	16:26:14	STAGER	Build2_CommonService	0001001291	Open	PPBV=0 BV=16 Pass 1 Batch Collect
01/16/2013	16:26:14	STAGER	Build2_CommonService	0001001291	Close	PPBV=0 BV=16
01/16/2013	16:26:21	STAGER	Build2_RecognitionSe	0001001291	Open	PPBV=0 BV=21 A2IA Stager
01/16/2013	16:26:22	STAGER	Build2_RecognitionSe	0001001291	Close	PPBV=0 BV=21

#### 4.17.3. What administration tools are provided to monitor batch and workflow status? Is the data presented real-time?

The Unified Status Monitor (USM) provides the capability to monitor real-time work volumes and batch statuses for a specified processing date. It may be run locally or as a web application. It also allows the user to follow the status of local batches and jobs submitted from spokes or remote sites or being processed in remote sites and the Department spoke.

The view displays the status of all batches or jobs or a subset by type, status or work source. An additional panel can show exceptions, such as batches in use too long or jobs that have been waiting to start for too long.

System monitoring is provided through the TMS\_TAX USM with real-time reporting of system functions and workflow queues. The graphical tools provide a quick snapshot for constant monitoring to quickly identify and address bottlenecks in either operator or unattended (background) processes. In this manner, the Department is able to monitor and proactively manage the TMS\_TAX Image System for maximum performance and throughput.

The supervisor(s) can view the status of TMS\_TAX batches waiting for the various data entry functions by clicking the Data Entry tab, or the corresponding speed button or bar from the Home screen.

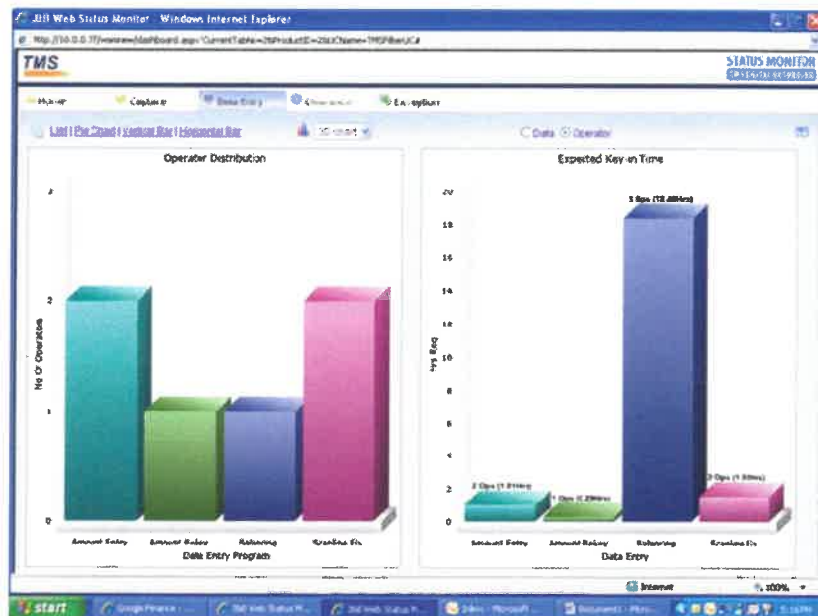
TMS Data Entry						
Processing Stage	Batch Count	Stub Count	Check Count	Items Waiting DE	Operators	
CAR ICR Waiting	20	6000	6000	0		
Bean Frt Waiting	26	10800	10800	720	2	
Balance Stage Waiting	16	4800	4800	0		
Amount Entry Waiting	100	56000	56000	18000	3	
Rekey Waiting	20	6000	6000	900	1	
Essential Data Entry	8	1400	1400	174	6	
Balance Waiting	11	3300	3300	166	1	
Accum Totals Waiting	12	4500	4500	0		
Extract Waiting	1	300	300	0		
ECS 30% Input Waiting	200	60000	60000	0		
IGUA Review Waiting	4	1200	1200	300	0	
<b>Group Summary</b>	<b>451</b>	<b>134300</b>	<b>134300</b>	<b>20759</b>		

The Unified Status Monitor identifies the various users who touch a particular item/transaction within the workflow. It reports all of the auditing requirements such as:

- Identity of user/associate
- Time log of activity
- Action performed
- Number of keystrokes

Alerts are displayed graphically. The following screenshot demonstrates how the system alerts a supervisor to the fact that at the current keying rate and number of personnel assigned to the balancing task, that there is a bottleneck that needs to be addressed.

Another view provides a different view of the same information that allows a supervisor to quickly review the system for problems.



**4.17.4. Does the proposed solution allow multiple operators to work on the same batch at the same time?**

Multiple operators may work on the same batch at the same time. The batches flow through the system as a batch. At any stage of the workflow, it is possible to have multiple users access the batch concurrently. This may happen during any of the data entry functions. Transactions of batches in a specific data entry queue are assigned to the available operators. Each operator will have a queue of transactions, and as the queue is depleted, it is automatically filled with next set of transactions. The queue size is configurable. For example if there are 100 transactions waiting, and 5 users, and the queue size is 10. Each user will get ten transactions to start, and their queues will be refilled as they complete the transactions. The transactions will be selected in batch order.

**4.17.5. Describe how the proposed solution routes exceptions that require supervisor review/ decision.**

The IDR business rules engine can send transactions to the supervisor review queue based on specific rules. In addition an IDR user has the ability to mark any transaction for review. Once in IDR review, the reviewer may update or accept the transaction.

**4.17.6. Describe how the proposed solution tracks work from scanning until completion.**

The batches are tracked in the user log table for auditing purposes. The User Log is used to record normal system events such as "batch opened," "file carried over," or "batch deleted." The batch fixing and batch retrieval programs also write entries to the user log. The log is an audit trail of the day's events. A sample is shown below.

Processing Date: 01/16/2013 Page No: 1 / 8

### User Log Report

Audit Date	Time	Operator	Program	Batch	Action	Description
05/03/2013	09:35:52	Beth	AIDE	0001001297	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001297	Close	Data Flushed. BV Set=2
05/03/2013	09:35:52	Beth	AIDE	0001001298	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001298	Close	Data Flushed. BV Set=2
05/03/2013	09:35:52	Beth	AIDE	0001001299	Open	PPBV=1 BV=2 Scanline Fix
05/03/2013	09:47:35	Beth	AIDE	0001001299	Close	Data Flushed. BV Set=2
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001290	Open	PPBV=0 BV=0 Collector
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001290	Close	PPBV=0 BV=0 Collector
01/16/2013	16:26:13	STAGER	Build2_CommonService	0001001290	Open	PPBV=0 BV=16 Pass 1 Batch Collect
01/16/2013	16:26:13	STAGER	Build2_CommonService	0001001290	Close	PPBV=0 BV=16
01/16/2013	16:26:15	STAGER	Build2_RecognitionSe	0001001290	Open	PPBV=0 BV=21 A2IA Stager
01/16/2013	16:26:21	STAGER	Build2_RecognitionSe	0001001290	Close	PPBV=0 BV=21
01/16/2013	16:26:26	STAGER	Build2_CommonService	0001001290	Open	PPBV=21 BV=1 Pass 1 Staging
01/16/2013	16:26:29	STAGER	Build2_CommonService	0001001290	Close	PPBV=21 BV=1
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001291	Open	PPBV=0 BV=0 Collector
01/16/2013	16:26:09	STAGER	Build2_CollectorsSer	0001001291	Close	PPBV=0 BV=0 Collector
01/16/2013	16:26:14	STAGER	Build2_CommonService	0001001291	Open	PPBV=0 BV=16 Pass 1 Batch Collect
01/16/2013	16:26:14	STAGER	Build2_CommonService	0001001291	Close	PPBV=0 BV=16
01/16/2013	16:26:21	STAGER	Build2_RecognitionSe	0001001291	Open	PPBV=0 BV=21 A2IA Stager
01/16/2013	16:26:22	STAGER	Build2_RecognitionSe	0001001291	Close	PPBV=0 BV=21

A batch may be tracked in real-time by a supervisor using the USM. The supervisor(s) can view the status of TMS\_TAX batches waiting for the various data entry functions by clicking the Data Entry tab, or the corresponding speed button or bar from the Home screen.

TMS Data Entry						
Processing Stage	Batch Count	Sub Count	Check Count	Items Waiting DE	Operators	
CAR IDR waiting	20	6000	6000	0		
Scan Fix waiting	35	10500	10500	720	2	
Balance Stage Waiting	16	4800	4800	0		
Amount Entry waiting	120	36000	36000	18000	2	
Rekey Waiting	20	6000	6000	900	1	
Essential Data Entr	8	1400	1400	174	0	
Balance Waiting	11	3300	3300	165	1	
Accum Data Waiting	15	4500	4500	0		
Extract Waiting	1	300	300	0		
ECS IFL input waiting	200	60000	60000	0		
IDUA Review waiting	4	1200	1200	360	0	
<b>Grand Summary</b>	<b>451</b>	<b>134300</b>	<b>134308</b>	<b>20259</b>		

**4.17.7. Describe your system's ability to prioritize the processing of different batches of work. Describe the different levels of prioritization available. I.e. - batch, customer, date, box, etc.**

The system has priority values from 00 to 99, with 99 the maximum. Priority is assigned to the batch. Batch priority can be set automatically or manually by the user.

**4.17.8. What is the retention period of reports?**

Reports are created using SQL server reporting services. They can be created as long as the data retention period. If reports are needed beyond the data retention period, they can be saved as PDF or Excel files. Retention periods are client driven.

**4.17.9. How does report generation affect production processing? Do reports have to be run during 'downtime'? Are reports and file outputs available throughout the day? Describe the process.**

Reports can be created at any time during the processing day, without system degradation. TMS\_TAX Reports provides the interface to allow the user to print reports and choose the data to be included in the reports. The reports screen layout is shown below:

**Main Menu**

- Data Entry Standard
- Standard Reports Menu
- Special Reports Menu
- Data Entry Statistics
- Data Entry Log Reports
- System Reports Menu
- Database Reports Menu
- Track Statistics Reports Menu
- IDR Recognition Reports Menu
- IDR Audit Reports Menu
- IDR Archive Reports Menu
- IDR BatchAudit Reports Menu

**Batch User Log Report**

Process Date: 10/01/2014

Site: [Dropdown]

Work Group: [Dropdown]

Work Source: [Dropdown]

Display Filter | Print Report | View Report

The opening screen shows a list of report menus on the left, from which users can choose the report, and a panel on the right that allows users to enter the parameters for filtering the data to include on the report. When changing from one menu option to another, an icon is displayed while the new menu option is loading.

After clicking on a menu from the menu panel, a sub-menu appears containing the reports available from that menu. Click on the desired report, and the report request parameters are then displayed in the upper right panel. The parameters included on the screen are appropriate for the requested report. The report selection process is common for all reports:

- Enter the desired parameters to filter the report (see the following section for instructions on how to filter the data).
- For reports that include batch data, click the Display Filter button to display the available batches for selection. **Error! Reference source not found.**
- When all parameters and batches are set as desired, click View Report to view the report for the selected parameters, or click Print Report to send the report depending on the user's browser.

How the report may be printed depends on the browser in use. If running through Internet Explorer, by default users are prompted to select a printer. Alternately the system may be configured to display the report in PDF mode, from which it can then be printed. If running through Chrome® or Firefox®, the report is always displayed in PDF mode, from which it can then be printed. PDF mode shows the report in a new window.

**4.17.10. Describe your system's ability to monitor incoming volumes and items processed by hour for each data entry function, capture device, application, and work type.**

The USM provides the capability to view the pending work at any time. Below is a screen shot of the USM; descriptions of each column are also provided.

Program	Hours Required (HH:MM)	ItemsWaiting DE	Operators Count	DE Items Per Hour
Amount Entry	00:01	10	0	2000
Amount Entry	00:02	57	0	2000
Batch Data Entry	00:01	6	0	400
Duplicate Review	00:02	10	0	400
Full Page Stub Data Entry	00:06	41	1	400

Operator	Site	Machine	Login Time	Last Access Time
VENKATESH G	Phoenix	J8DEY004	11:12:39 AM	2/21/2013 11:14:46 AM

Program	Hours Required (HH:MM)	ItemsWaiting DE	Operators Count	DE Items Per Hour
IQUA Review	00:01	3	0	400

Each row represents a data entry program. The columns show:

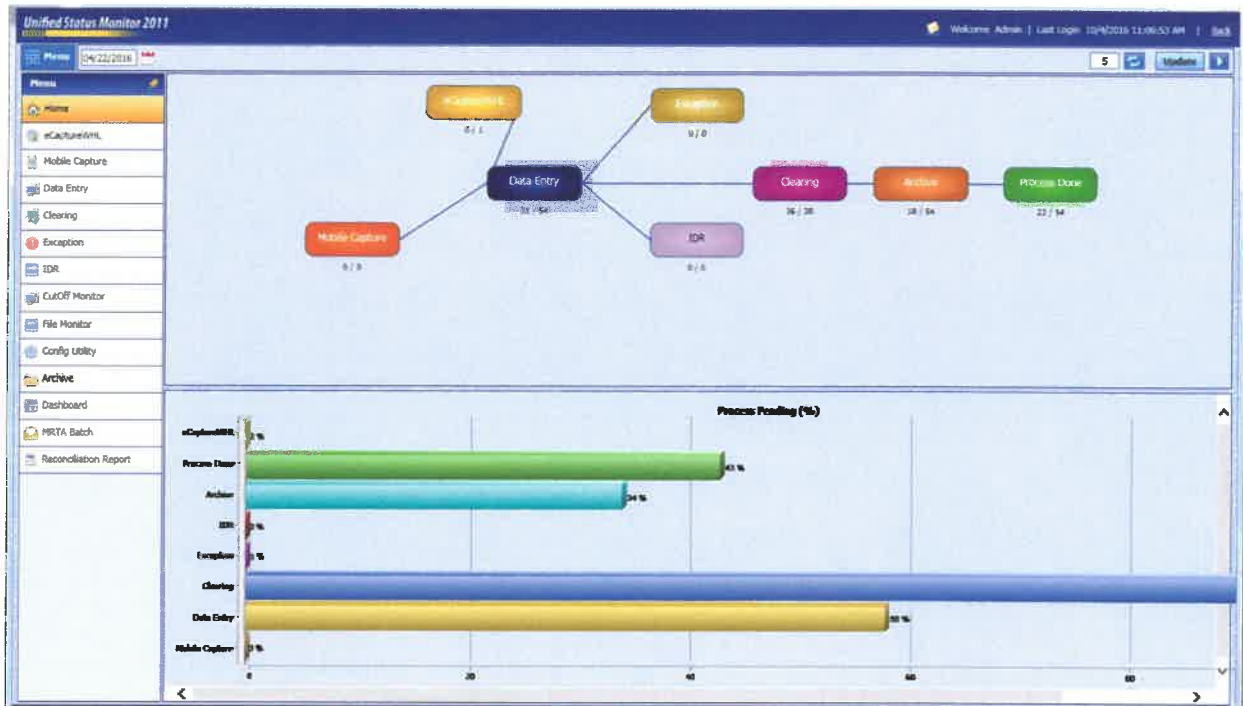
Program	The name of the program
Hours Required (HH:MM)	The estimated number of hours and minutes required to complete all the work for that program
Items Waiting DE	The total number of items in all batches that still need to be processed for that program
Operators Count	The total number of operators currently working in that program






#### 4.17.11. Does your system incorporate management dashboards? If yes, describe.



The Unified Status Monitor (USM) provides the capability to monitor work volumes, along with batch statuses, across multiple TMS Suite modules for a specified processing date. Users may gain access to the Unified Status Monitor by choosing Unified Status Monitor from the TMS Menu Manager Screen or USM from the Web Admin Monitoring Sub-Menu. The default page that is displayed when first accessing the USM is configurable. The Home Page (shown below) usually is the default page, but some installations may use other views, for instance the Data Entry Batch List view (see page **Error! Bookmark not defined.**).

The sample USM screens, pictured throughout the manual, show all possible content. Module screens are displayed according to user rights/authority.



The USM screen is made up of the following components:

- A series of menu options at the left of the screen that are used to navigate among the status screens. The menu panel may be hidden to allow more space to display the status screens. At the top of the menu panel is a pin button that is used to switch between hiding and displaying the menu panel. When the button is orange  the menu is always displayed. To hide the menu, click the button to change its color to white , and then the  button can be used to hide and re-display the menu. When the white button is displayed, the next menu choice that is displayed automatically hides the menu.
- The current processing date (which may be changed at any time).

- A field that allows the user to set the number of minutes for the automatic update of the data displayed on the screen.
- A  button that allows the user to start or stop the automatic update feature (when automatic update is enabled, the button arrows display in red ).
- An Update button that is used to update the display to reflect changes the user has made in the filters (see page **Error! Bookmark not defined.**).
- A Back link to close the USM and return to the calling screen.

The operator can view the status of all their day's processing in a single view by selecting the Reconciliation Report tab. There are no charts. Each row, aka touch point, lists how many items were processed and how many items are waiting to be processed, in addition to other statistics. Each touch point may be drilled down to show work source totals, batch totals, and item level information. The content of the report may be filtered by processing date (see page **Error! Bookmark not defined.**) and Site (from the drop-down list).



Reconciliation Report									
Total Items in TMS	Items Processed Completed in TMS	Pending Checks in TMS	Pending Slubs in TMS	Pending Checks Amount	Pending Slubs Amount	Rejected Items	Suspended Items	Items in Work Basket	
2455	28	800	887	23552.63	52505.56	41	0	2	
Items in eCapture:									
Items sent to TMS from eCapture	Pending Checks in eCapture	Pending Slubs in eCapture	Pending Checks Amount	Pending Slubs Amount					
0	0	0	0.00	0.00					
Checks in TMS:									
Checks sent to ECS from TMS	Pending Checks in TMS	Pending Checks Amount							
800	98	446	233738.63						
Checks in ECS:									
Checks Cleared in ECS	Clearing Pending Checks	Clearing Pending Checks Amount	Paper Items						
98	0	98	16338.09	1					
Items Suspended for LE:									
Items sent to LE	Pending Suspended Checks for LE	Pending Suspended Slubs for LE	Pending Checks Amount	Pending Slubs Amount					
41	41	0	0.00	0.00					
Items in LE:									
Items sent to TMS from LE	Pending Checks in LE	Pending Slubs in LE	Pending Checks Amount	Pending Slubs Amount					
41	13	8	725.90	0.00					
Items in TMS:									
Items sent to HQ	Pending Checks in TMS for HQ	Pending Slubs in TMS for HQ	Pending Checks Amount	Pending Slubs Amount					
2455	0	799	877	264386.63	52879.56				

The touch points, in sequence are:

- TMS\_TAX
- eCapture
- TMS\_TAX to ECS
- ECS
- TMS\_TAX to LE
- LE
- NetQuery

In installations that use the TMS\_TAX ECS (Electronic Clearing Suite) system, i.e., ARC and Check 21, the operator may view the status of ECS batches by clicking the Clearing menu option or the corresponding speed button or bar from the Home screen.

Site: A2 WorkGroup: A2 Lock Box: A2  
 12/12/2012 12:00:00 AM 3D chart ECS 5 update

ECS					
ECS Status	Checks	Check Amount	Stubs	Stub Amount	
ARC validation waiting	28	\$4,668.00	0	\$0.00	\$0.00
Batch No	Checks	Check Amount	Stubs	Stub Amount	
0010201122	14	\$2,334.00	0	\$0.00	\$0.00
001020112F	14	\$2,334.00	0	\$0.00	\$0.00
ECS Batch No	RT No	Account No	Check No	Amount	Trace No
4	081017342	3901991	2820	\$149.00	67
4	081017342	3901991	2870	\$148.00	66
4	081017342	3901991	2886	\$145.00	91
4	081017342	3901991	2887	\$144.00	92
4	081017342	3901991	2423	\$67.00	95
4	081017342	3901991	2889	\$142.00	86
4	081017342	3901991	2890	\$141.00	89
4	081017342	3901991	2891	\$140.00	100
4	081017342	3901991	2892	\$139.00	103
4	081017342	3901991	2407	\$254.00	104

Page 1 of 2

The Clearing status menu option provides five views – ECS, ECS Extract, ECS Exception, ECS All, and ECS Returns, which are accessed by selecting the appropriate choice from the drop-down list. Each of these views displays differing information about the status of ECS batches, and has its own set of filters.

## Attachment B - Mandatory Specification Checklist

*Complete Attachment B: Mandatory Specification Checklist. By signing and dating this attachment, the Vendor acknowledges that they meet or exceed each of these specifications as outlined in 4.5 of Section Four: Project Specifications. The State reserves the right to require documentation detailing how each is met at its discretion.*

*The following mandatory requirements must be met by the Vendor as a part of the submitted proposal. Failure on the part of the Vendor to meet any of the mandatory specifications shall result in the disqualification of the proposal. The terms "must", "will", "shall", "minimum", "maximum", or "is/are required" identify a mandatory item or factor. Decisions regarding compliance with any mandatory requirements shall be at the sole discretion of the Purchasing Division.*

### Section 5, Subsection 5.1

*5.1.1 Vendor confirms their solution will provide an upgrade to the latest Quick Modules software at either or cost or costs for only those modules not currently installed at WV TAX.*

TransCentra confirms that the TMS\_TAX system will replace the existing Quick Modules.

*5.1.2 Vendor confirms their solution will provide a common architecture for all form types within a common workflow, using a single product platform to reduce the number of different (vendor) systems required for processing and support.*

TransCentra confirms that our solution will provide a common architecture for all form types within a common workflow, using a single product platform to reduce the number of different (vendor) systems required for processing and support.

*5.1.3 Vendor confirms their solution will be able to process intermixed, full page returns, coupons, checks, envelopes and other items intermixed within the same system platform.*

TransCentra confirms that solution will be able to process intermixed, full page returns, coupons, checks, envelopes and other items intermixed within the same system platform.

*5.1.4 Vendor confirms their system will provide unlimited, unrestricted software licensing to the State for all software modules.*

TransCentra confirms that the application license is unrestricted for this project.

*5.1.5 Vendor confirms their system will not be restricted to the number of images processed for data capture, including check recognition and must include software licensing that is unlimited and unrestricted. No click charges are to apply to any of the software modules for processing.*

TransCentra confirms that the application is not restricted to a specific number of images. The third party recognition engines do have volume licensing.

*5.1.6 Vendor confirms their system will be able to process intermixed from types and perform virtual batching.*

TransCentra confirms that our system will be able to process intermixed from types and perform virtual batching.

*5.1.7 Vendor confirms their system will be able to process in batch and/or transaction level depending upon the workflow setup within the system.*

TransCentra confirms that our system will be able to process in batch and/or transaction level depending upon the workflow setup within the system.

*5.1.8 Vendor confirms their system will have a common configuration environment for setting up forms workflow and business rules.*

TransCentra confirms that system will have a common configuration environment for setting up forms workflow and business rules.

*5.1.9 Vendor confirms their system will have a common library of business rules which can be selected by field for each form type. This common library of business rules must be available to all applications/jobs within the system.*

TransCentra confirms that system will have a common library of business rules which can be selected by field for each form type. This common library of business rules must be available to all applications/jobs within the system.

*5.1.10 Vendor confirms their system will utilize thin client architecture for all user interfaces.*

TransCentra confirms that system will utilize thin client architecture for all user interfaces.

*5.1.11 Vendor confirms their system will provide Check 21 process with acceptance of configuration of deposit from the bank. This process must include a user interface for monitoring the deposit process.*

TransCentra confirms that our system will provide Check 21 process with acceptance of configuration of deposit from the bank. This process must include a user interface for monitoring the deposit process

*5.1.12 Vendor confirms their solution will be database driven using COTS software such as MS SQL.*

TransCentra confirms that solution will be database driven using COTS software such as MS SQL.

*5.1.13 Vendor confirms their solution will have the ability to authenticate with Active Directory.*

TransCentra confirms that our solution will have the ability to authenticate with Active Directory.

*5.1.13 Vendor confirms their solution will include a visual dashboard which provides real time updates to process from scanning to output. Vendor confirms the dashboard will provide the ability to search for items in the workflow while in process.*

TransCentra confirms that solution will include a visual dashboard which provides real time updates to process from scanning to output. The dashboard will provide the ability to search for items in the workflow while in process.

## **Section 5, Subsection 5.2**

*5.2.1 Vendor confirms their solution shall provide real-time read/write access to the scanner database while scanner is running.*

TransCentra confirms that while the scanner is running the solution can provide real time access to the database.

*5.2.2 Vendor confirms their solution shall be able to provide the table layout of the database.*

TransCentra confirms that we will provide the table layout of the database.

*5.2.3 Vendor confirms their solution shall be able to configure the images to be stored on the scanner or on the network.*

TransCentra confirms that images can be configured under application control and output to customer requirements.

*5.2.4 Vendor confirms their solution will use multiple barcodes to determine pocket selection.*

TransCentra confirms that 1 D or 2 D barcodes can be read real time from multiple read zones and based on the data read, the output pocket can be selected under application control.

*5.2.5 Vendor confirms their solution will be able to start a new batch based off of reading a new batch header sheet.*

TransCentra confirms that solution will be able to start a new batch based off of reading a new batch header sheet.

*5.2.6 Vendor confirms their solution will be able to alternate between pockets when next batch is started.*

TransCentra confirms solution will be able to alternate between pockets when next batch is started.

*5.2.7 Vendor confirms that when alternating between pockets on new batch, their proposed scanner will be able to stop the track if the next pocket has not been emptied.*

TransCentra confirms when alternating between pockets on new batch, our proposed scanner will be able to stop the track if the next pocket has not been emptied

*5.2.8 Vendor confirms their solution shall be able to handle various barcode symbolizes and various barcode lengths simultaneously.*

TransCentra confirms the requirement. The system is capable of reading various industry standard 1 D and 2 D barcodes of various lengths.

*5.2.9 Vendor confirms the throughput rates at 300dpi will be over 280 pages per minute while scanning 8.5 X 11 inch documents.*

TransCentra confirms that the proposed scanner will meet and exceed these requirements. The rated speed while scanning at 300 DPI is 325 pages per minute while scanning 8.5 by 11 inch documents.

*5.2.10 Vendor confirms their scanner will have a high speed option that provides throughput rates at 200dpi of over 420 pages per minute while scanning 8.5 X 11 inch documents.*

TransCentra confirms that the proposed scanner will meet/exceed these requirements. The rated speed while scanning at 200 DPI is 485 pages per minute for 8.5 by 11 inch documents.

*5.2.11 Vendor confirms their solution will have both hardware and ultrasound double feed detection.*

TransCentra confirms that the proposed scanner includes hardware four wheel friction doubles detection as well as triple ultrasonic doubles detection. The combined methodologies are user and application selectable designed to minimize false doubles and maximize detection. Triple ultrasonic doubles detection is also used for scanning envelopes co-mingled with single paged documents.

*5.2.12 Vendor confirms their solution will provide a scanner that will support full disk encryption.*

TransCentra confirms that our solution will provide a scanner that will support full disk encryption

*5.2.13 Vendor confirms their solution scanner and software will be 508 compliant.*

TransCentra confirms that the proposed scanner is 508 compliant.

*5.2.14 Vendor confirms their solution will have an integrated camera and illumination system with dust free optical path*

TransCentra confirms that solution will have an integrated camera and illumination system with dust free optical path.

*5.2.15 Vendor confirms their solution capture software will be configured to sort documents as described directly through the software interface without programming.*

TransCentra confirms that solution capture software will be configured to sort documents as described directly through the software interface without programming.

*5.2.16 Vendor confirms their solution shall have an application controller, and will contain redundant hard drives (RAID 0 mirrored array), and redundant power supplies to minimize single points of failure in the sub-system.*

TransCentra confirms that solution shall have an application controller, and will contain redundant hard drives (RAID 0 mirrored array), and redundant power supplies to minimize single points of failure in the sub-system.

*5.2.17 Vendor confirms their solution will be able to convert existing ImageTrac applications (parm files) to the new solution.*

TransCentra confirms that IntelliScan parm files will be converted and replaced by scanner job profiles and parameters.

*5.2.18 Vendor confirms their solution will be able to contain up to 1000 documents in the pockets before requiring the operator to clear the pockets.*

TransCentra confirms that solution will be able to contain up to 1000 documents in the pockets before requiring the operator to clear the pockets.

*5.2.19 Vendor confirms their solution will have an automatic document feeder capable of holding 1500 documents.*

TransCentra confirms that the document feeder has a onetime load capacity of up to 1,500 documents. For optimized loading it is recommended that the input hopper be loaded with approximately 1,000 documents adding “manageable handfuls continuously on the fly” resulting in an unlimited amount of documents that can be loaded into the feeder. Upon reloading the feeder hopper back plate automatically retracts to allow the operator easy access to loading and a push button reset.

*5.2.20 Vendor confirms their solution will have continuous feeding capabilities.*

TransCentra confirms that solution will have continuous feeding capabilities. Also, please refer 5.2.19.

*5.2.21 Vendor confirms their solution will support multiple Color of Greyscale images in a single job.*

TransCentra confirms that under a single job, the scanner can scan and output multiple color, bitonal, and grayscale images in a single job.

*5.2.22 Vendor confirms their solution will store images in memory for security.*

TransCentra confirms that our solution will store images in memory for security.

*5.2.23 Vendor confirms their solution will deny scan operators access to the image repository.*

TransCentra confirms that access to the scanner controller and image repository is enabled by Windows security features.

*5.3.1 Vendor confirms their solution will have a duplicated production environment for testing.*

TransCentra confirms that duplicate production and test environments are maintained. A separate test and production environment is included in the solution.

**NOTE: Although the following requirements were not included in Attachment B, TransCentra confirms our ability to support each.**

*5.41 Phase 1: Installation of hardware, software, testing, training, documentation, and first set of forms. Forms shall include change returns and GenTax vouchers. Phase 1 must be completed within six (60 months from the issuance of the Notice to Proceed.*

TransCentra confirms our understanding of and capability to support this requirement.

*5.4.2 System Acceptance shall be defined as the successful demonstration and testing of all equipment and system requirements, including but not limited to training. Agency will not formally accept the System until the System has operated without failure for thirty (30) consecutive days. The Agency with the Vendor's mutual Acceptance will issue written letter and Change Order request to the West Virginia Purchasing Division as formal Acceptance of the System. Upon agreement of acceptance by both the Agency and the Vendor, the Change Order issued by the WV Purchasing Division will start the First-Year Maintenance Support, warranty. This date will be used for yearly maintenance/support/warrant initiated by the Agency and agreed to by the Vendor and issued by the WV Purchasing Division.*

TransCentra confirms our understanding of and capability to support this requirement.

*5.4.3 Phase 2: Testing, training, documentation, and second set of forms. Forms in Phase 2 shall include PIT returns. Phase 2 must be completed within six (6) months of the acceptance of the system.*

TransCentra confirms our understanding of and capability to support this requirement.

*5.4.4 Phase 3: Testing, training, documentation, final set of forms, and the shutdown of current IFP system. Forms in Phase 3 shall include business returns. Phase 3 must be completed within twelve (12) months of the acceptance of the system.*

TransCentra confirms our understanding of and capability to support this requirement.



## Resident Vendor Preference Certificate

Note that TransCentra is not requesting resident vendor preference.

## Addendum Acknowledgment Form

TransCentra's executed Addendum Acknowledgement Form and signed addenda follow this page.

**ADDENDUM ACKNOWLEDGEMENT FORM**

**SOLICITATION NO.:** CRFP 0702 TAX1700000001

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

*(Check the box next to each addendum received)*

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

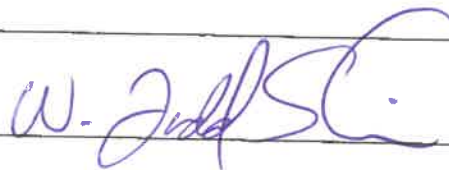
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

J&B Software, Inc.

Company

W. Todd Shiver, EVP

Authorized Signature



April 11, 2017

Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 28 - Office Equip.

Proc Folder: 290212

Doc Description: Addendum 1 - Remittance Processing System

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2017-03-08	2017-04-19 13:30:00	CRFP 0702 TAX1700000001	2

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

TransCentral Inc  
 4855 Peachtree Industrial Rd  
 Norcross, GA 30092  
 606-309-6855

**FOR INFORMATION CONTACT THE BUYER**

Michelle L Childers  
 (304) 558-2063  
 michelle.l.childers@wv.gov

Signature X

FEIN #

32-0345387

DATE

April 11, 2017

All offers subject to all terms and conditions contained in this solicitation



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 28 - Office Equip.

Proc Folder: 290212

Doc Description: Addendum 2 - Remittance Processing System

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2017-03-31	2017-04-19 13:30:00	CRFP 0702 TAX1700000001	3

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

**Vendor Name, Address and Telephone Number:**

TransCentra Inc  
 Address - 4855 Peachtree Industrial Blvd,  
 Norcross, GA 30092  
 Phone - 606.309.6855

**FOR INFORMATION CONTACT THE BUYER**

Michelle L Childers  
 (304) 558-2063  
 michelle.l.childers@wv.gov

Signature X

W. Todd Shiver, EVP

FEIN # 32-0345387

DATE April 11, 2017

All offers subject to all terms and conditions contained in this solicitation

## Purchasing Affidavit

TransCentra's executed Purchasing Affidavit form follows this page.

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: J+B Software, Inc.

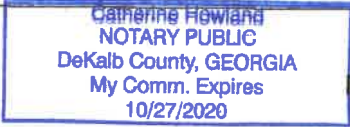
Authorized Signature: [Signature] Date: 3-28-17

State of Georgia

County of Gwinnett, to-wit:

Witnessed, subscribed, and sworn to before me this 28<sup>th</sup> day of March, 2017

My Commission expires \_\_\_\_\_, 20\_\_\_\_.



NOTARY PUBLIC [Signature]

SEAL HERE