FINAL

State of Vermont

Department of Information and Innovation

Department of Taxes

Independent Review of an Integrated Tax System

Review Conducted over the period September 30, 2013 through December 4, 2013

Presented to the State of Vermont, Office of the Chief Information Officer

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# Executive Summary

The State of Vermont’s Department of Information and Innovation (DII) engaged Mathtech, Inc. (Mathtech) to conduct an Independent Review of FAST Enterprise’s (FAST) proposal response dated June 19, 2013 to the State’s Request for Proposal (RFP) for an Integrated Tax System (ITS) dated May 6, 2013. Mathtech interviewed staff and management from DII, Vermont Department of Taxes (VDT) and conducted a conference call with FAST. The assigned DII Enterprise Project Management Office (EPMO) Project Manager and VDT’s Deputy Commissioner provided additional documents for Mathtech review.

On December 12, 2013, Mathtech participated in a meeting with the following personnel:

* Richard Boes, State of Vermont Chief Information Officer
* Mary Peterson, Commissioner of the Vermont Department of Taxes
* Gregg Mousley, Deputy Commissioner of the Vermont Department of Taxes
* Barbara Cormier, Enterprise Project Management Office Project Manager
* Michael Morey, State of Vermont Chief Technology Officer

During this meeting, a draft of this report and associated Cost Benefit Analysis and Risk Management Plan were reviewed. This document reflects feedback obtained during that meeting.

Details regarding the scope of effort, deliverables reviewed, and specific tasks executed during the Independent Review can be found in Section 2.0.

## Summary of Findings

Mathtech identified thirty-five (35) findings throughout the Independent Review process and forty-two (42) risks of varying severity. Some findings map directly to risks identified during the Independent Review process and are noted within this Independent Review Report. Where applicable, and where deemed supportive, Mathtech has recreated portions of the FAST proposal. Such recreated portions are clearly defined.

The table below outlines Findings by section of this Independent Review Report.

#### Table 1 – Independent Review Findings

| **Report Section** | **Findings** |
| --- | --- |
| Acquisition Cost | * Finding 1: FAST projections of VDT staffing levels are low. * Finding 2: Project Director Costs are based on an assumption that an internal resource will be hired at the same salary level as other VDT staff members. * Finding 3: VDT has based Maintenance and Support cost estimates based on FAST’s highest level (Level 3) available. * Finding 4: Additional hardware, software and peripherals are not included in the FAST proposal and not included in the VDT Total Cost of Ownership. * Finding 5: FAST rates for future work are equivalent regardless of the role of the resource. |
| Technical Architecture | * Finding 6: The FAST solution supports the State’s Strategic Enterprise Systems Direction. * Finding 7: FAST has a proven, scalable architecture that can support a high number of end users. * Finding 8: Over the course of prior implementations, FAST has developed many interfaces that are similar to the interfaces required by VDT. * Finding 10: FAST’s implementation footprint and current installation base demonstrate the GenTax’s system’s ability to support the business operations of Taxation. * Finding 11: FAST will fully comply with all required project policies, guidelines and methodologies. * Finding 12: A detailed backup and recovery plan must be defined by the State. * Finding 13: FAST does not support credit card payment transactions directly. |
| Assessment of Implementation Plan | * Finding 14: While high-level, the FAST Implementation Plan is realistic and based upon multiple prior implementations. * Finding 15: VDT staffing for data cleansing and data conversion should be defined. * Finding 16: VDT must identify and assign appropriate resources to support interface development and testing. * Finding 17: VDT must define plans to ensure adequate support of legacy systems during implementation. * Finding 18: VDT must own and drive contract management during implementation. * Finding 19: VDT must define, own and drive a deliverables management plan for implementation. * Finding 20: VDT resources should be formally assigned to the ITS implementation and backfill activities should commence immediately. * Finding 21: There is minimal time between one rollout and the next. * Finding 22: GenTax’s reporting approach should meet VDT’s needs. * Finding 23: Test Plans are expected to be completed as part of project implementation. * Finding 24: Need to ensure continued involvement from VDT resources: |
| Assessment of Organizational Readiness | * Finding 25: The VDT Project Director should have specific qualifications and experience and manage the project to achieve VDT’s needs. * Finding 26: VDT operational staff is eager for the implementation of the ITS. * Finding 27: Retaining VDT IT resources to continue maintaining existing systems may be difficult. |
| Cost Benefit Analysis | * Finding 28: FAST has completed a single benefits-based implementation of their ITS. * Finding 29: FAST has identified multiple states that attribute benefits to their ITS. * Finding 30: FAST plans the definition of implementation benefits within the first phase of the project. * Finding 31: Benefits-based implementation metrics should be defined prior to contract finalization. * Finding 32: If benefits estimates are achieved, Total Cost of Ownership shows a benefit to VDT after implementation of the ITS. In addition, VDT will have realized enough benefit revenue by the end of FY19 to pay FAST in full. According to the payment schedule, VDT will pay FAST completely by the end of FY20. * Finding 33: Benefits from the ITS implementation are anticipated to continue beyond the repayment period for FAST and should be measured as such as they represent a new annual revenue value for VDT going forward. * Finding 34: If benefits estimates are achieved, over the period of FY14-FY23, VT will realize a benefit in excess of $36MM. Fiscal years 14-19 will incur a net cost to VT while Fiscal Years 20-23 will incur a net benefit, due to the total repayment of FAST Implementation costs by the end of FY20. * Finding 35: While the benefits anticipated to be realized by VDT upon implementation of the FAST ITS are greater than the cost of implementation, the premium being charged by FAST for the benefits-based model is unknown. |

## Summary of Key Risks

Mathtech identified forty-two (42) risks associated with the FAST ITS Implementation, ten (10) of which are considered likely to occur with a high impact:

**Resources** – Many of the highly rated risks are related to resources for the ITS Implementation. Specifically there is a concern by VDT that IT resources that support legacy applications will leave the department during implementation, causing support of those systems to suffer. VDT noted that this risk has already been realized to some degree. Additionally, VDT acknowledged that they have a small core number of key operations resources that will need to be part of the implementation and there is a risk that they will be overloaded by the burden of implementation in addition to daily operational activities. ***(Maps to Risks R1 through R6)***

**Timeline and Vermont Control of the Project** – One risk was identified related to FAST’s focus on timely implementation and the resultant impact to VDT should the timeline start to slip. FAST acknowledged that if the timeline did slip it would push forward, even without adequate VDT staff involvement. This poses high risk to VDT as it would relinquish overall control of the implementation to FAST which would result in poor knowledge transfer to VDT causing a greater reliance on FAST support after go-live; it could also result in a lower rate of adoption among the user community. Related to this risk was the identification of a strong Project Director to oversee the entire ITS implementation to ensure not just successful technical implementation, but also sufficient organizational involvement, adoption and knowledge transfer. ***(Maps to Risk R8, R40)***

**Data Cleansing and Conversion** – Two risks were identified related the high-level nature of FAST’s estimates of VDT involvement in the project, specifically related to data cleansing and data conversion. These critical tasks must be properly staffed by VDT personnel because only they will know the true nature of VDT data. Inadequate estimates for such resources could cause overload when those tasks become more well-defined and resource requirements increase. ***(Maps to Risks R9, R10)***

## Independent Review Recommendations

The implementation of the FAST GenTax ITS should be pursued with a few critical steps prior to contract finalization and project commencement. FAST has a proven track record of success across multiple states and has extensive experience with Taxation operations and technology. Vermont will be joining a network of states that have implemented the GenTax system, and will able to leverage that network as required for support, knowledge sharing and innovation.

There are a few items that require further definition prior to moving forward, but none of those items are insurmountable nor should they stop the progression towards commencement of the ITS Implementation.

Mathtech’s recommendations are as follows:

* Immediately initiate a search for a Project Director and increase the estimate associated with the cost of that resource to VDT.
* Add to the current benefits-based model with clearly defined scope, assumptions, metrics, and timeframes for expected benefits prior to contract finalization.
* Immediately define the implementation project team and begin backfill activities for their daily operational activities.
* Initiate a Cultural Change Management initiative to address morale within VDT and create messaging related to the ITS implementation.

# Overview of Document and Background

## Scope of this Independent Review

In order to fulfill the requirements stated in Vermont Statute, Title 3, Chapter 45, §2222(g) for all acquisitions equal to or exceeding $1,000,000, Mathtech has been contracted to perform an independent review of the selected vendor’s COTS Integrated Tax System (ITS) to replace the Vermont Department of Taxation (VDT) existing systems. This independent review will consist of Mathtech gathering pertinent information to perform the following:

* An acquisition cost assessment
* A technology architecture review
* An implementation plan assessment
* A cost analysis and model for benefit analysis
* An impact analysis on net operating costs for the agency carrying out the activity

In addition, the State’s Independent Review (IR) process includes the development of a Risk Management Plan. This Plan is to include the following:

* Identification of risks and issues
* Documentation of the independent review vendor’s recommended approach to each risk and issue
* Collaboration with the impacted State agencies to develop a specific plan for addressing each of the identified risks and issues.

It is the intent of the State that the following items be addressed through the Statement of work (SOW) for this Independent Review:

* After award, the review vendor (Mathtech) sets up kick-off teleconference or in person meeting within 3 days of award.
* The State EPMO assigns Project Manager to work with Independent Review vendor.
* The review vendor will spends approximately 2 days on-site at the State offices in Vermont collecting information and interviewing stakeholders.
* The review vendor holds a teleconference with the selected vendor.
* Mathtech will catalog risks that are identified and discuss strategies to mitigate risks identified.
* The review vendor conducts other meetings and collects other information as necessary.
* Mathtech will incorporate risks and strategies to mitigate risks identified in a Risk Management Plan.
* The review vendor writes the independent review deliverable according to the Scope of Work, and delivers the draft document to the State Enterprise Program Management Organization (EPMO).
* The review vendor holds an on-site meeting with the State EPMO Director, Project Manager, DII Deputy Commissioner, Project Sponsors, and Chief Information Officer (CIO) to “close” the review and answer final questions.
* The review vendor makes final adjustments to the deliverable, and submits the final independent review document(s).
* The review vendor will work with sponsor on the mitigation of the risks and plan that are defined in the Independent Review.
* Project Manager follows up with the State’s risk mitigation plans with CIO and Sponsor to close process on open tasks and gains CIO approval to move forward on project.
* Contracts & Procurement Specialist will receive the final report from the Sponsor & Vendor on how they answered and managed the risks.
* Project Manager forwards signed CIO acceptance report to Contracts & Procurement Specialist and copies Vendor.

## SOW Requirements and Activities

In conducting the Independent Review, Mathtech has completed the following activities:

#### Table 2 – Independent Review Requirements

| **Independent Review Requirements** | **Activity Performed** | **Date(s) Performed** |
| --- | --- | --- |
| The State notified Mathtech  of award of the ITS Independent Review Project. | Mathtech issued formal document request of DII EPMO Project Manager, Barbara Cormier and Peter Kipp. | 9/30/13 |
| After award, the review vendor sets up kick-off teleconference or can be in person within 3 days of award. | An introductory call with Peter Kipp and Barbara Cormier, to clarify the project timeline and scope of engagement. | 10/1/2013 |
| EPMO assigns Project Manager to work with Independent Review vendor. | Mathtech was informed that Barbara Cormier has been assigned to this project to represent the EPMO. | 9/30/13 |
| After award to review vendor, the reviewer’s staff spends approximately 2 days on-site at the State offices in Vermont collecting information and interviewing stakeholders. | The following onsite meetings were held in  Montpelier:   * Independent Review Expectations * Compliance Risks * Taxpayer Service Risks * Information Systems Risks * Cost Implications and CMF * Legal Risks * Accounting Risks * Enterprise Architecture Risks * Revenue Reporting Risks | 10/10/2013 – 10/11/2013 |
| The reviewer holds a teleconference with the selected vendor if needed. | Mathtech conducted a conference call representative from FAST. | 11/4/2013 |
| Mathtech will catalog risks that are identified and discuss strategies to mitigate risks identified. | Mathtech cataloged risks in a Risk Matrix and issues in an Issues Log throughout the process of reviewing materials and interviewing key State staff. | 11/11/2013 |
| The reviewer conducts other meetings and collects other information as necessary. | See Table 3 for a list of all documents reviewed during the Independent Review. |  |
| Mathtech will incorporate risks and strategies to mitigate risks identified in a Risk Management Plan | Mathtech cataloged risks and issues in the Risks & Issues Management Plan, incorporated our recommendations regarding risk and issue responses, and collaborated with State staff to develop an action plan for each risk and issue in the Plan. | 10/10/2013-10/11/2013 |
| The review team writes the independent review deliverable according to the Scope of Work, and delivers the draft document to the State EPMO; | Mathtech submitted the Draft Independent Review to the Oversight Project Manager. | 11/18/13 |
| The reviewer holds an on-site meeting with the CIO, and others at his discretion to “close” the review and answer final questions. | Mathtech conducted this review meeting on Thursday 12/12/13. | 12/12/13 |
| The reviewer makes final adjustments to the deliverable, and submits the final independent review document(s). | Mathtech incorporated edits to the deliverables as identified by VDT and DII during the 12/12/13 review meeting and submitted the Revised Draft Report on 1/13/14 | 1/13/14 |
| Once the CIO agrees the Report is accepted, Contractor will submit “Final” Report and Deliverables Acceptance Document to OPM. OPM will accept the Deliverable & notify the Contractor that it is okay to submit an invoice to OPM for payment. | To be completed after notification from Office of the CIO. | 1/16/14 |
| Oversight Project Manager forwards signed CIO acceptance report to Contracts & Procurement Specialist and copies Vendor. | To be completed after formal deliverable acceptance. |  |

Table 3 – Document Inventory lists the documents provided to Mathtech by the State for review during the Independent Review process.

#### Table 3 – Document Inventory

|  |  |  |
| --- | --- | --- |
| **Document Title / Topic** | **Source** | **Filename(s)** |
| FAST Response to Information Technology RFP | Barbara Cormier | \_VDT ITS – Consolidated Proposal File – FAST – 19June2013.pdf |
| VDT ITS Preliminary Project Plan | Barbara Cormier | VDT ITS Preliminary Project Plan.mpp |
| DII Strategic Plan FY2013-2018 | Barbara Cormier | DII-Strategic-Plan-FY2013-2018.pdf |
| VDT ITS Business Case | Barbara Cormier | VDT ITS Business Case Final 2-4-2013.pdf |
| VDT Request for Proposal | Barbara Cormier | Request for Proposals VDT ITS v9.docx and all Attachments |
| VDT ITS Functional and Technical Requirements | Barbara Cormier | VDT ITS Functional and Technical Requirements final.xls |
| Hawaii Digital Summit Presentation | Gregg Mousley | Hawaii digital summit.pptx |
| ITS Cost of Ownership | Gregg Mousley | 2013 ITS RFP Cost of Ownership (V3).xls  2013 ITS RFP Cost of Ownership (V4).xls |
| VIC Portal Cost Projections | Gregg Mousley | VIC Portal Costs Projection.xlsx (10/28/13) |
| FAST Reference call notes | Gregg Mousley | Notes on Reference Checks for Mary Peterson.doc  Reference call notes for Gregg Mousley.doc |
| ITS Benefit Estimates | Gregg Mousley | ITS Benefits.xls |
| Benefit Sources and Baselines | Gregg Mousley | Benefits Sources and Baselines v2.docx |
| Lifecycle Cost Analysis for RSI Data Warehouse | Gregg Mousley | Life-Cycle-Cost-Analysis – RSI-DTax-FY14.xlsx |
| FY14 IT Activities | Gregg Mousley | TAX $100k IT Activities FY2014.xlsx |
| RSI Data Warehouse Benefits Forecast | Gregg Mousley | Benefits\_Forecast\_BY\_FISCAL\_YEAR.xlsx |
| Lifecycle Cost Analysis for GenTax | Gregg Mousley | Life-Cycle-Cost-Analysis - GENTAX-For5YrDIIPLan.xlsx |
| Lifecycle Cost Analysis for Oracle ETM | Gregg Mousley | Life-Cycle-Cost-Analysis - ETM Ongoing-FY14.xlsx |
| Lifecycle Cost Analysis for Advantage Revenue | Gregg Mousley | Life-Cycle-Cost-Analysis - AdvRev-FY14.xlsx |
| FAST Benefits Estimates | Gregg Mousley | VT Benefits Projections v1.xlsx |
| Infrastructure cost estimates | Claus Lund | TAX FAST SUSTAIN MODEL MMOREY.xlsx |

Table 4 – Interview Sessions lists the interview session conducted by Mathtech as part of the Independent Review process. In addition to the formal interviews noted in Table 4, multiple follow up conference calls were held between Mathtech, VDT and DII to review cost of ownership values.

#### Table 4 – Interview Sessions & Review Meeting

|  |  |  |
| --- | --- | --- |
| **Date/Time** | **Topic Area(s)** | **Participants** |
| 10/10 8:00-8:30 | Introductions and Expectations | Barbara Cormier, Peter Kipp, Ted Rainer |
| 10/10 8:30-10:00 | ITS Independent Review Deliverables | Richard Boes, Mary Peterson , Gregg Mousley, Barbara Cormier, Ted Rainer |
| 10/10 10:00-11:00 | Compliance Risks | Frank Partsch, James Whitehouse, Judy Lambert, Ted Rainer |
| 10/10 11:00-1:00 | Taxpayer Services Risks | Douglas Farnham, John Demeter, Ted Rainer |
| 10/10 1:30-3:00 | Information System Risks | Tom Buonomo, Kelly Reagan, Tanya Perry, Gregg Mousley, Ted Rainer |
| 10/10 3:15-4:30 | Cost Analysis Model Review | Gregg Mousley, Ted Rainer |
| 10/11 8:30-9:30 | Legal Risks | Jaye Johson, Ted Rainer |
| 10/11 9:30-10:30 | Revenue Accounting Risks | Valerie Rickert, Alexa Lewis, Ted Rainer |
| 10/11 10:30-11:00 | Enterprise Architecture Risks | Mike Morey, Ted Rainer |
| 10/11 11:00-1:00 | Taxpayer Services Risks (continued) | Douglas Farnham, John Demeter, Ted Rainer |
| 10/11 1:00-2:30 | Compliance Risks (continued) | Frank Partsch, James Whitehouse, Judy Lambert, Ted Rainer |
| 10/11 2:45-4:30 | Revenue Reporting Risks | Rebecca Sameroff, Maribeth Spellman, Victor Gauto, Ted Rainer |
| 12/12 9:30-2:00 | DRAFT Independent Review Meeting | Richard Boes, Mary Peterson, Gregg Mousley, Michael Morey, Darwin Thompson, Barbara Cormier, Frank Nestore |

## ITS Project Background

The notion of an Integrated Tax System (ITS) in Vermont is not new. The VDT took the first steps toward an ITS in 1998 when it began the implementation of an Advantage Revenue system for processing trust taxes (sales/use, rooms/meals and withholding) and successfully installed the Computer Aided Collections System for Government (CACS-G) system. CACS-G is used by the VDT to help with collections of payments that are more than thirty days past due. The Advantage Revenue implementation was finalized in 2001 despite problems with implementation with the income tax.

VDT, however, opted not to integrate any additional taxes into Advantage Revenue. In late 2007, the VDT developed a bid for a new ITS and CGI, Inc. won the contract with its proposal to install the new ETM product from Oracle in January 2008. VDT and CGI agreed to implement corporate, business income tax, property transfer and fuel gross receipts taxes (which at that time was on the legacy mainframe system), and the CACS-G collection system into the new ETM system. The ETM system went live with these taxes, as well as billing and collections, in August 2010.

ETM has been challenging for VDT. Business users have experienced high processing times, and cited unintuitive design and an unfriendly user experience with the software. ETM did speed the processing cycle for taxes from the prior mainframe and manual processes (for example, corporate income processing times were reduced from an estimated average of 18 months to 11 months); however, other performance, usability, accounting and reporting issues have arisen. A proposed solution to these issues was provided by Oracle in March 2012, but the consensus of the VDT and the DII was that the solution had several potential problem areas, including immaturity of the product, concerns with future ETM development plans, overly optimistic assumptions about Vermont’s internal capacity for IT proficiency, relatively high cost for the solution, and ongoing performance problems based on the current design. A technical upgrade to ETM was considered to improve the existing performance. Specific components to the upgrade included migrating to a newer version of ETM (version 2.3.1 from 2.2.1), updating hardware, simplifying some customizations performed during implementation, and fixing “bugs” that had not yet been addressed.

VDT put out an RFI for a technical upgrade and, based on that response, issued a formal RFP. Four responses were received. One notable issue among the responses was that none of the respondents had a proven track record with ETM. Based on this information, the VDT suspended plans for the technical upgrade.

In addition to the technical upgrade RFP, the VDT issued an RFI in August 2012 to solicit vendor input on possible alternative ITS solutions. The VDT received seven responses: one vendor offered consultant services only, two vendors propose continuing with ETM implementation, and the remaining vendors offered four alternative COTS products.

In late October 2012, VDT decided it needed to hire a consultant to assist in the consideration of alternatives to reach the goal of an ITS in Vermont. A statement of work was issued to retain a business analyst and project manager who would write a business case for an ITS, high-level business requirements, and an RFP for a COTS solution. This business case illustrated that an ITS is appropriate for the VDT, and why the acquisition of a COTS is the best way to achieve that goal.

In May of 2013, the State of Vermont Buildings and General Services Office of Purchasing & Contracting, on behalf of the Vermont Department of Taxes (VDT), solicited competitive sealed, fixed‐price proposals for an Integrated Tax Solution (ITS) from qualified vendors.

The result of this procurement will be the acquisition of a commercial off‐the‐shelf (COTS) software solution for an ITS. All Vermont taxes, functions, and funds will be consolidated into the ITS. The initial intent for the contract resulting from this RFP was a deliverables‐based, fixed‐cost contract. COTS software, software integration services, hardware to operate that software or appropriate hosting, warranty, and ongoing operations and maintenance activities are within the scope of this procurement.

## Project Cost Summary

**Budget**

* Within the VDT ITS Business Case Final 2-4-2013.pdf, an expectation was set for a range of $12.4MM to $27.7MM total cost for an ITS.
* The FAST proposal outlines a total fixed cost of $28,377,475 for implementation over the period FY14 through FY18, a 5 year Maintenance and Support plan, and a 2 year software warranty on each phase of implementation.
* Acknowledging the premium associated with the benefits-based acquisition model of GenTax, FAST’s proposed cost for implementation is considered reasonable as compared to other states similar to Vermont.

**Hardware**

* The FAST solution proposes the procurement of hardware including 12 servers, 4 network switches, 2 firewalls, 4 load balancers, 1 hardware mounting rack, and 1 storage area network. The acquisition costs for this hardware are projected at $353,000. The lifetime of this infrastructure is expected to be five years.
* After the initial five year period, a technology refresh will occur to support five additional years. While it is not possible to know the exact cost of this refresh five years in the future, VDT has noted that it is anticipated that the cost for the refresh is estimated to be the same as the first five years given that the performance requirements will remain the same and the hardware cost per MIPS (Millions of Instructions Per Second) will also remain about the same. In addition, DII has estimated that the refresh cost will be less than the initial cost value. Mathtech has addressed the refresh value with a conservative 5% increase estimate in the Cost Benefit Analysis.

**Software**

* The software license fees are proposed as a fixed fee of $4,477,350.
* The software support costs for the first five years $4,046,625.
* The software implementation costs are spread across four implementations each taking approximately one year and are set at $15,500,000.
* The warranty costs cover 2 years after each phase of implementation and are specific to the scope of each phase of implementation. Total cost for all warranty periods is $4,000,000.
* Upgrades to the GenTax software during the implementation period are factored in to FAST’s proposal (i.e., FAST will implement the most current software throughout implementation).

The following Project Milestones were submitted with the FAST proposal. Based on elapsed time and contract negotiation timing, these dates will shift.

#### Table 5 – Project Milestone Timing

|  |  |  |
| --- | --- | --- |
| **Project Milestone** | **Date** | **Fiscal Year** |
| Project Start | October 1, 2013 | FY14 |
| GenTax Installed | October 25, 2013 | FY14 |
| Rollout 1 Delivered | September 29, 2014 | FY15 |
| Rollout 2 Delivered | September 28, 2015 | FY15 |
| Rollout 3 Delivered | September 26, 2016 | FY16 |
| Rollout 4 Delivered | September 25, 2017 | FY17 |
| Rollout 4 Warranty Period Complete | September 24, 2019 | FY20 |
| Completion of Renewal Term 2 | September 30, 2019 | FY20 |

## Limitations of this Review

This Independent Review of the selected FAST solution is limited by:

* Mathtech understands that negotiation with FAST is currently underway and that components of the FAST Proposal and ITS Implementation may be altered as a result of that negotiation. Mathtech’s Independent Review was conducted based on the FAST Proposal and all materials contained therein, and does not address any modifications that may be in progress.
* Availability and schedules of key VDT staff members for interviews and follow-up clarifying conversations.
* Documentation provided to Mathtech by the State (see Table 3 – Document Inventory).
* Throughout this Independent Review, Mathtech has relied on the accuracy of the documents and interviews provided by the State EPMO, the State VDT, the State DII, the FAST RFP response and the FAST conference call.

## Proposal Review

### Project Goal

As outlined in the **Integrated Tax System (ITS) Planning Project Business Case Analysis** dated February 4, 2013, the goal of the VDT ITS RFP and the resulting solution is to consolidate all taxes and associated functions into a single integrated tax solution. Other legacy systems will all be phased out when the COTS solution is implemented and operating. The anticipated end state will:

* Merge all major tax types into a single solution or an integrated set of modules as soon as possible;
* Provide a robust web interface for the taxpayers to file returns and make payments;
* Allow taxpayers to be able to obtain information about their accounts (concept of self-service) via the web;
* Use a well-tested product that has a long-term future and can be easily expanded to include future tax types;
* Leverage the product’s existing functionality by re-engineering manual workflows and operations;
* Be able to migrate to an X86 based technical environment using mid-tier servers in a virtual environment;
* Provide a single view of each taxpayer, where taxpayer data is available through one search, report, and/or display screen; and
* Allow the State to shift its focus away from internal staff developing and supporting software.

### Project Scope

As outlined in the **VDT RFP Information Technology Request for Proposal (RFP) Vermont Department of Taxes Integrated Tax Solution** dated May 6, 2013, VDT is in the process of acquiring a COTS integrated tax solution to consolidate all tax types. An integrated solution is an important objective for all tax departments since it will bring together taxes being processed across multiple, disparate computer systems and associated manual processes. The project scope is to integrate tax functions and processing, creating efficiencies and benefits that the legacy systems environment in Vermont cannot provide. The chief benefit is a single view of a taxpayer that eliminates the need to access separate systems for information on a single entity.

Included in the project scope will be the re-examine of VDT business processes with a goal of standardizing them to practices utilized in other states. This may require that the VDT re-engineer its processes in order to realize workflow efficiencies. Finally, a COTS product that is designed to administer all VDT taxes from one centralized system allows the department to leverage a benefits based funding model. A COTS ITS allows VDT to capitalize on potential efficiencies, improve customer service, reduce system performance problems, and increase revenue (through improved tax collection).

FAST is proposing a COTS ITS solution with an implementation plan that is composed of three phases, the third phase has two components, 3a and 3b. The phases relate to four targeted rollouts, each rollout anticipated to take 12 months. Currently the project plan has subsequent rollouts occurring immediately after the prior rollout completes.

#### Table 5 – Phased Rollout Scope

***Note that this rollout timing reflects an update received during the December 12th review session with VDT and DII.***

|  |  |
| --- | --- |
| *Phase 1 – Rollout 1 (12 months)* | *Phase 2 – Rollout 2 (12 months)* |
| *• Corporate Income Tax*  *• Business Income Tax*  *• Fuel Gross Receipts*  *• Property Transfer Tax*  *• Non-Resident Withholding* | *• Sales and Use Tax*  *• Meals and Rooms Tax*  *• Local Option Sales Tax*  *• Local Option Meals and Room Tax* |
| *Phase 3a – Rollout 3 (12 months)* | *Phase 3b – Rollout 4 (12 months)* |
| *• Corporate Income Tax*  *• Personal Income Tax*  *o Renter’s rebate*  *o Real estate withholding*  *o Property Tax Rebate*  *• Payroll Withholding*  *• Non-Resident Withholding*  *• Non-Game Wildlife (fund)*  *• Children's Trust (fund)*  *• Vermont Veteran's (fund)*  *• Cigarette Tax*  *• Tobacco Products Tax*  *• Fiduciary*  *• Estate Tax*  *• Beverage Tax*  *• Bank Franchise Tax* | *• Insurance Tax*  *• Captive Insurance Tax*  *• Telephone Property Tax*  *• Electric Energy Tax*  *• Solid Waste Tax*  *• EEE Property Tax*  *• Fire Training Tax*  *• Land Gains Tax*  *• Floor Stock Tax*  *• Tax-Def-Gen Special Fund*  *• Land Use Change Tax*  *• Hazardous Waste Tax*  *• Telephone Company Tax*  *• Railroad Company Tax*  *• Wind Property Tax*  *• Tax-Break-Open Ticket License Fee*  *• Court Cost Recovery*  *• Solar Tax*  *• New/Future Tax Types* |

### Payment Terms

The table below describes the proposed payment terms based upon the FAST proposal. Estimated Invoice Dates have been changed to be relative to the start of the project. This schedule will be modified upon finalization of the benefits-based implementation contract.

#### Table 6 – FAST Milestone Payment Schedule

| **Payment Milestone** | **Estimated Invoice Date** | **Invoice Amount** |
| --- | --- | --- |
| GenTax Installation | Month 1 | $4,200,000 |
| Hardware and 3rd Party Software | Month 1 | $630,850 |
| **Rollout One** |  |  |
| Complete One-time Planning Tasks | Month 3 | $348,750 |
| Testing Start | Month 8 | $2,557,500 |
| Production Cutover | Month 12 | $1,889,063 |
| **Rollout Two** |  |  |
| Base Configuration Start | Month 14 | $58,125 |
| Testing Start | Month 20 | $2,557,500 |
| Production Cutover | Month 24 | $1,889,063 |
| **Rollout Three** |  |  |
| Base Configuration Start | Month 26 | $48,438 |
| Testing Start | Month 34 | $1,705,000 |
| Production Cutover | Month 36 | $1,307,813 |
| **Rollout Four** |  |  |
| Base Configuration Start | Month 38 | $48,438 |
| Testing Start | Month 46 | $1,705,000 |
| Production Cutover | Month 48 | $1,385,313 |
| **Annual Maintenance** |  |  |
| Year 1 | Month 1 | $319,325 |
| Year 2 | Month 13 | $569,325 |
| Year 3 | Month 25 | $819,325 |
| Year 4 | Month 37 | $1,069,325 |
| Year 5 | Month 49 | $1,269,325 |
| **Warranty** |  |  |
| Year 1 | Month 60 | $2,000,000 |
| Year 2 | Month 72 | $2,000,000 |
| **Total** |  | **$28,377,475** |

# Acquisition Cost Assessment

## Project Cost Summary

The information contained in the table below is derived from the FAST proposal and represents the cost of implementation of the FAST GenTax solution according to FAST’s proposed payment schedule. It depicts, over the implementation period:

* FAST GenTax licensing, maintenance, support and warranty (note that FAST has committed to implementing the most current version of GenTax throughout implementation; thus there will be no additional cost for upgrade through the implementation time period)
* FAST implementation deliverables
* Costs for infrastructure and other FAST required software licensing maintenance and support

The table **does not** depict any costs associated with VDT legacy systems, portals, VDT staffing, or ongoing Maintenance and Support costs for GenTax beyond the implementation time period. A comprehensive Total Cost of Ownership which does identify those values is included in the Cost Benefit Analysis attachment to this report.

#### Table 7 – Implementation Cost by Year

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Cost Component** | **FY14** | **FY15** | **FY16** | **FY17** | **FY18** | **FY19** | **FY20** |
| FAST GenTax Licensing | $4,200,000 | $0 | $0 | $0 | $0 | $0 | $0 |
| FAST Maintenance | $250,000 | $500,000 | $750,000 | $1,000,000 | $1,200,000 | $0 | $0 |
| FAST Warranty | $0 | $500,000 | $1,000,000 | $500,000 | $1,000,000 | $1,000,000 | $0 |
| FAST Deliverable Cost | $3,045,750 | $4,460,126 | $1,902,626 | $3,549,500 | $2,464,500 | $0 | $77,500 |
| Hardware Cost | $353,500 | $0 | $0 | $0 | $0 | $0 | $0 |
| Other SW Licensing | $277,350 | $0 | $0 | $0 | $0 | $0 | $0 |
| Other SW Maint. & Support | $69,325 | $69,325 | $69,325 | $69,325 | $69,325 | $0 | $0 |
| **Total** | **$8,195,925** | **$5,529,451** | **$3,721,951** | **$5,118,825** | **$4,733,825** | **$1,000,000** | **$77,500** |

*This table shows all costs included in FAST’s fixed fee of $28,377,475 for the GenTax implementation. Additional costs for maintenance and support as well as ongoing operations to maintain the GenTax system can be found in the Cost Benefit Analysis attachment to this report.*

## Cost of Hardware

The hardware descriptions, quantities and total cost are described in the table below. Per the FAST response, the hardware lifecycle is anticipated to be five years. Per VDT, a technology refresh is anticipated in year 6 estimated at the same cost for the first five years (FY14 – FY18) given a fairly constant price per MIPS.

#### Table 8 – Hardware Cost

|  |  |  |  |
| --- | --- | --- | --- |
| **Hardware Component** | **Description/ Manufacture** | **Quantity** | **Cost** |
| Database server | Dell PowerEdge R720 | 5 | $75,000 |
| VMware hosts | Dell PowerEdge R720 | 6 | $90,000 |
| VMware Manage server | Dell PowerEdge R720 | 1 | $5,000 |
| Switching | Dell Force10 S55(1) – Primary network switch  Dell Force10 S4810(1) – iSCSI SAN switch | 2  2 | $53,000 |
| Firewall | Cisco ASA 5520 Adaptive Security Appliance Firewall for e-Services and network zone | 2 | $24,000 |
| Load Balancer | Barracuda 440 Load Balancer Appliance Web service load balancing for e-Services and GenTax. | 4 | $20,000 |
| Rack Enclosure | Dell PowerEdge 4240 Rack Enclosure | 1 | $6,000 |
| Storage Area Network (SAN) | Storage (SAN) Quantity | 1 | $80,500 |
| **Total** | |  | **$353,500** |

## Cost of Software

The cost of FAST licenses, operating systems and supporting technology is list below. These are anticipated to be one-time costs at the beginning of the project (FY14).

#### Table 9 – FAST and Other Supporting Software Licensing Cost

|  |  |
| --- | --- |
| **Acquisition Description** | **Cost** |
| GenTax V9 | $4,200,000 |
| Operating System and Web Services Software Licenses | $67,400 |
| SQL Server | $152,500 |
| VMWare | $55,200 |
| Adobe Captivate / RedGate ANTS | $2,250 |
| **Total** | **$4,477,350** |

The FAST maintenance and support costs are listed by year in the table below.

#### Table 10 – FAST Maintenance and Support Cost

|  |  |
| --- | --- |
| **Time Period** | **Cost** |
| Year 1 (FY14) Maintenance and Support | $250,000 |
| Year 2 (FY15) Maintenance and Support | $500,000 |
| Year 3 (FY16) Maintenance and Support | $750,000 |
| Year 4 (FY17) Maintenance and Support | $1,000,000 |
| Year 5 (FY18) Maintenance and Support | $1,200,000 |
| **Year 1-5 Total** | **$3,700,000** |

#### Table 11 – FAST Warranty Cost

|  |  |
| --- | --- |
| **Time Period** | **Cost** |
| Year 1 (FY14) Warranty *(Warranty costs begin after the Phase 1 rollout)* | $0 |
| Year 2 (FY15) Warranty | $500,000 |
| Year 3 (FY16) Warranty | $1,000,000 |
| Year 4 (FY17) Warranty | $500,000 |
| Year 5 (FY18) Warranty | $1,000,000 |
| Year 6 (FY19) Warranty | $1,000,000 |
| **Total** | **$4,000,000** |

The operating system and supporting technology maintenance and support is listed below. These values cover:

* Operating System and Web Services Software Licenses
* SQL Server
* VMWare
* Adobe Captivate / RedGate ANTS

#### Table 12 – Other Supporting Software Maintenance and Support Cost

|  |  |
| --- | --- |
| **Operating System and Supporting Products Maintenance and Support** | **Cost** |
| Year 1 (FY14) Maintenance and Support | $69,325 |
| Year 2 (FY15) Maintenance and Support | $69,325 |
| Year 3 (FY16) Maintenance and Support | $69,325 |
| Year 4 (FY17) Maintenance and Support | $69,325 |
| Year 5 (FY18) Maintenance and Support | $69,325 |
| **Total** | **$346,625** |

## Cost of Services

The table below describes the FAST implementation service costs by stage.

#### Table 13 – FAST Deliverables Cost

|  |  |
| --- | --- |
| **Activity, Deliverable or Milestone** | **Cost** |
| Stage 1: Project Planning and Business Analysis | $387,500 |
| Stage 2: Installation and Configuration | $8,525,000 |
| Stage 3: Testing | $3,100,000 |
| Stage 4: Training, Deployment, Go-Live and Warranty Period | $2,325,000 |
| Stage 5: On-Going Project Management | $775,000 |
| Stage 6: On-Going Operational Maintenance and Support | $387,500 |
| **Total** | **$15,500,000** |

## Additional Costs

Based upon the FAST minimum VDT project staffing hours from the FAST RFP response and a VDT estimated average rate of $36.36 per hour (value from Vermont DHR's annual "Workforce Report"), the cost of VDT staff assigned to the project are computed below by stage.

The State’s proposed work effort for this project is divided into six major stages:

Stage 1: Project Planning and Business Analysis *(note that no hours were estimated by FAST for this Stage)*

Stage 2: Installation and Configuration

Stage 3: Testing

Stage 4: Training, Deployment, Go-Live, and Warranty Period

Stage 5: On-Going Project Management

Stage 6: On-Going Operational Maintenance and Support

#### Table 14 – FAST Proposed Vermont Project Staffing Hours and Costs



*These costs do not include additional VDT staff for defining business rules, testing, training and project support (per a call with FAST Proposal signatory James Harrison).*

*Note – While FAST proposed the resources in Table 14 above, Mathtech’s Independent Review Cost Benefit Analysis reflects a Full-Time State Project Manager (entitled “Implementation Project Director”) as well as an additional resource not shown above entitled Implementation QA Manager. The Implementation QA Manager will function as the overall Deliverable Quality Assurance and Contract Manager of the effort.*

## Independent Review Findings

##### Finding 1: FAST projections of VDT staffing levels are low.

The VDT staff projections provided in the FAST RFP response are based upon a minimum number of personnel that FAST recommends be assigned to the project. Per Mathtech’s discussion with FAST, such estimates are not all-inclusive of all staff time required. Because the VDT Staffing Cost estimates are based upon those hours, they should be revisited and finalized before project commencement. ***(Maps to Risks R5, R6, R7)***

##### Finding 2: Project Director Costs are based on an assumption that an internal resource will be hired at the same salary level as other VDT staff members.

VDT cost estimates for Project Management (Project Director) are based upon an assumption the Project Director will be hired as a full-time VDT resource at an hourly cost equivalent to the other VDT staff required for implementation. To be successful, VDT requires a Project Director with experience implementing large-scale operational and technology transformation projects in state government (ideally one with ITS experience). Mathtech’s Cost Benefit Analysis includes an alternate estimate based upon the possibility that VDT may not find a Project Director of the right skillset available at the current cost estimate. ***(Maps to Risk R8)***

##### Finding 3: VDT has based Maintenance and Support cost estimates based on FAST’s highest level (Level 3) available.

VDT should ensure that this level is required as Levels 2 and 1 would represent a reduction in overall cost.

##### Finding 4: Additional hardware, software and peripherals are not included in the FAST proposal and not included in the VDT Total Cost of Ownership.

FAST’s proposal does not include costs associated with workstations, workstation operating system software, printers, scanners, or related equipment that VDT may need during or after ITS implementation. VDT’s Total Cost of Ownership of the ITS does not currently include any costs associated with these items.

##### Finding 5: FAST rates for future work are equivalent regardless of the role of the resource.

It is customary to provide different rates for different skillsets within a project. FAST has chosen to provide a single rate for all roles, ranging from Project Manager to Programmer / Analyst. VDT should investigate negotiation of this to arrive at a more conventional rate structure for future work.

# Technical Architecture Review

In January of 2013, the Department of Information and Innovation (DII) published a 5 year Strategic Plan. The plan was entitled “Creating Better Opportunities in Vermont: Supporting Tough Issues with the Right Information and Technology” and identified IT strategic principles that will guide the technology workforce. The procurement and implementation of a new Integrated Tax System should be in alignment with those principles to forward DII’s mission of improving State effectiveness and productivity.

## Support for State’s Strategic Enterprise Systems Direction

Based on years of government experience and research, the principles listed below are the foundation on which the DII strategic plan is built. Following each principle, Mathtech has included analysis and selected narratives from the FAST Proposal to address alignment with the specific principle.

***Leverage IT successes in other states:*** *The best way to do this is to leverage successes gained elsewhere in Government and industry. In this plan, the new methods we will adopt will not have been invented from scratch in Vermont, but instead developed and tested in other states and in markets throughout the world. While conditions in Vermont are always unique to some degree, we can succeed more readily when we adapt with common sense and discipline the IT successes of others.*

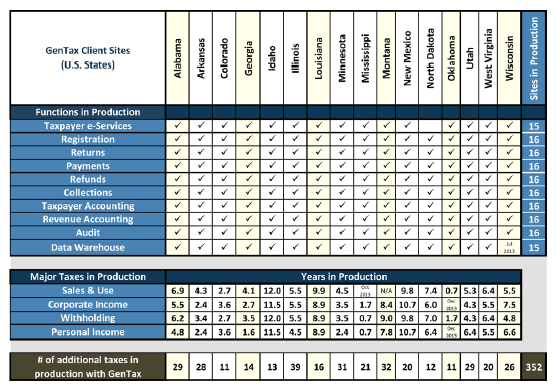
Mathtech’s analysis is that FAST’s ITS has been implemented in many state agencies successfully. FAST maintains multiple positive references from State Departments of Revenue and Taxation and will be able to provide insight into the successes of other states.

***From the FAST Proposal:***

*Since 1998, Fast Enterprises, LLC (FAST) has worked with local, state/provincial, and national governments to implement systems used to administer a wide variety of government programs. FAST has nearly 450 professionals dedicated to meeting our clients’ business needs. Their consulting team have completed or are engaged in projects for 22 state agencies, three Canadian provinces, five local governments, and four countries.*

*FAST’s GenTax® integrated tax software is the first commercial off-the-shelf (COTS) software designed specifically for tax administration, and the only COTS software processing personal income tax in the United States. Now in its ninth version in 15 years, GenTax is the most widely used COTS integrated tax software. Since its release in 1998, 30 government agencies have chosen GenTax as their integrated tax solution. GenTax is used by 16,000 government employees to administer over 900 account types for tax, fee, and license programs that serve a combined population of more than 106 million.*

*The table below illustrates the U.S. state tax and revenue agencies that are in production with GenTax. For each state tax agency, the table indicates the major integrated tax functions/processes that are in production, the number of years that major tax types have been in production, and the number of additional taxes that are in production in GenTax.*



***Leverage shared services and cloud-based IT:*** *This principle of sharing services can be applied government-wide (enterprise shared services) and in some cases to millions and even billions of users globally (via Internet standards or “the cloud”). While the risks of enterprise-wide and cloud-based IT must be carefully managed, trends continue to justify larger-scale operations.*

Mathtech’s analysis is that FAST is proposing a state-hosted environment which would fall within Vermont’s current shared services IT delivery model. In addition, FAST’s experience supporting a scalable user base supports the State’s desire to accommodate trends towards larger-scale operations.

***From the FAST Proposal:***

*The ITS solution FAST is proposing a State-hosted environment for the new tax system. FAST understands that the contractor must be responsible for full support and maintenance of the ITS operating system, application updates, security patches, database application, and firewall management, and we will assume these project responsibilities. Having the FAST Montpelier-based project team co-located with the hardware infrastructure in a centralized project location will therefore be the most efficient, effective, and economical means of supporting and maintaining the system. The solution and implementation will also be consistent with State of Vermont information and technology policies.*

*GenTax has the scalability and flexibility to meet the needs of a broad spectrum of jurisdictions. It is in production for agencies with as few as nine to as many as 70 distinct tax and license account types in jurisdictions that serve populations from 250,000 to over 35 million (10 serve populations greater than four million). The GenTax architecture allows the system to scale over time as system usage and demand increase. An additional application server handles increased load to maintain consistent throughput with increased transaction volumes. Application servers can also be added as needed to provide a cost-effective method of scaling up the system to handle growth.*

***Leverage modern IT delivery frameworks****: What’s most important about IT is not only the productivity of the technology itself, but its ability to make all kinds of work more productive. It does this largely by making activities transparent and accountable, by providing “ready to hand” guidance on an anytime/anywhere basis, by programming to shift some work from people to machines, and by networking that is especially powerful in finding innovations through collaboration and crowd sourcing*

***Couple IT with business process optimization:*** *To gain the most value from IT, the “business processes” of the state – i.e., how we handle public safety, health care, education, tax collection, human resources, etc. – must be redesigned to take full advantage of new IT capabilities.*

Mathtech’s analysis is that the GenTax system has enabled process optimization throughout prior implementations.

***From the FAST Proposal:***

*GenTax has been modeled on, and is designed to incorporate, tax agency “best practices.” While the software can be configured to accommodate agency-specific processes, we also recommend best-practice procedures during the project’s design and configuration phases. This enables business process reengineering to be reviewed in the context of the new system. GenTax also supports State-specific configuration of customer registration, collection, case management, returns processing, correspondence, security, payment transactions, audit, bankruptcy, audit selection, liens, garnishments, workflow management, and more.*

***Optimize IT investments via well-aligned EA, PM, and PPM methodologies:*** *To reach our strategic objectives, we must use Enterprise Architecture methods to choose the right investments, Project Management methods to implement investments successfully, and Project Portfolio Management methods to minimize risks and maximize returns over all the investments we make.*

Mathtech’s analysis is that FAST has an enterprise architecture that is in compliance with Vermont’s requirements. FAST is proposing a PMP certified Project Manager. The benefits-based implementation model shifts risk to FAST as payments for implementation will be made only upon VDT’s realization of financial benefits from the ITS.

***From the FAST Proposal:***

*Our proposal is based on the use of Microsoft SQL Server 2008 R2 (or 2012) as the relational database management system (RDBMS). However, our system is open database connectivity (ODBC) compliant and also supports Oracle and IBM DB2 database technologies.*

*Application Architecture – Our software uses a multi-tier distributed architecture that can be divided into four distinct logical tiers: (1) interface [Client] tier, (2) web tier, (3) business tier, and (4) data tier.*

***An overview of each logical tier of the architecture is provided below.***

* **Interface Tier** – In the interface tier, agency users access the application using a recent version of any major web browser. The client interface uses an HTML and JavaScript rendering engine to provide a cross-platform, cross-browser interface for internal and external users. Client machines do not directly communicate with the database servers.
* **Web Tier** – The web tier acts as a communication interface between the client and business layers. This layer hosts services that create the HTTP endpoints to which end users submit calls. These endpoints then “forward in” the requests via secure and encrypted TCP packets to the application servers on the business tier that then process the requests. Requests are then returned to the client layer in the reverse order.
* **Business Tier** – The business tier is where all of the business rules are implemented and where all database actions are performed. Only business objects running on the application servers communicate with the database servers. Business objects (application server DLL components) apply business logic and request database queries and updates to the database.
* **Data Tier** – The database layer is responsible for managing all the data used to configure the application as well as all the data the application collects and interacts. The data layer is implemented on a relational database management system using an ODBC or ADO.NET interface.

*The FAST project manager must have a Project Management Professional (PMP) designation from the Project Management Institute or similar project management credential. The FAST proposed project manager has his PMP certification and has served as project manager or engagement manager for at least one implementation of the COTS ITS in another United States state tax or revenue jurisdictional implementation. The proposed project manager has over 11 years of experience performing project management, GenTax implementation, and software development services for Fast Enterprises (FAST). He is currently the FAST project manager for the Colorado Department of Revenue’s GenTax-based Colorado Integrated Tax Architecture (CITA) system. The CITA project recently completed implementation of more than 50 tax and licensing account programs, including individual income tax, corporate income tax, wage withholding, and sales tax. The project manager has also served on GenTax for all issues related to the project and the software. This full-service delivery model allows FAST to expedite delivery of the GenTax solution to customers.*

***GenTax supports benefits funding and return on investment*** *– GenTax has been proven to deliver benefits for our client agencies and their stakeholders. All of our state tax agency clients have generated and/or recovered additional revenues through use of GenTax. Benefits include increases in revenue brought on by our solution’s compliance and automated collections activities, improvements in customer service and employee confidence and morale, elimination of redundant user tasks allowing redeployment of resources to higher-value activities, real-time access to statistics for performance and operations analytics, enhanced responsiveness to legislative changes and stakeholder requests, new system automations and virtual self-service features, and overall improvements to agency training, efficiency, and effectiveness. We obtain benefits on the project from multiple approaches that have proven successful, including process automation and improvements, operational efficiencies, legacy system cost reductions, staff training and knowledge transfer, integration of discovery and compliance programs, and integrated workload management functions.*

## System Integration Requirements

FAST noted that “In total, hundreds of interfaces with third-party systems are in production at client sites. In fact, interfaces/data exchange are in production at our GenTax client sites for systems similar to all those listed” in the VDT RFP. This statement, coupled with FAST’s large installation base, suggests that VDT required integration will be able to be handled without material risk.

One additional point of note is FAST’s statement regarding credit card processing, specifically “GenTax does not process or store credit card information. Rather, our solution interfaces with thirdparty credit card systems that are compliant with PCI-DSS standards. Interfaces with third-party credit card systems are in production at 15 of our GenTax client sites…” While not part of the base FAST solution, these statements indicate FAST’s experience handling PCI-compliant credit card processing.

## Ability of the Technology Vendor to Support the Business Needs

FAST’s track record of successful implementations and experience in the Taxation field, in addition to the configurable nature of the GenTax product, indicate its ability to support the business needs of VDT.

## Vendor Compliance to Required Project Policies, Guidelines and Methodologies

FAST did not request any exceptions to section 3.9 Required Project Policies, Guidelines and Methodologies of the VDT’s RFP. As such, FAST is expected to fully comply with all required elements of that section.

## Independent Review Findings

##### Finding 6: The FAST solution supports the State’s Strategic Enterprise Systems Direction.

Each tenant of the State’s Strategic Enterprise Systems Direction is supported by the FAST GenTax solution and FAST implementation approach.

##### Finding 7: FAST has a proven, scalable architecture that can support a high number of end users.

FAST has a track record of successful implementation in other states, some of which are larger than Vermont in terms of population and agency staffing size. FAST has provided slightly “oversized” infrastructure requirements based upon an assumption of scalability.

##### Finding 8: Over the course of prior implementations, FAST has developed many interfaces that are similar to the interfaces required by VDT.

While VDT’s interface needs will be unique, it is beneficial that FAST has developed many interfaces for other implementations and, as a result, understands how to successfully drive the effort. In addition, it is possible that there are technical specifications from prior similar interfaces that VDT may benefit from during implementation. VDT and DII should review FAST’s interface design documents prior to implementation commencement to ensure they meet VDT and DII’s standards.

##### Finding 9: VDT should ensure that the contract with FAST includes, in scope, all current interfaces.

A list of interfaces is provided in the VDT RFP and FAST agreed to the scope. In addition, VDT should include language in the contract to ensure that all interfaces for current systems are in scope for implementation.

##### Finding 10: FAST’s implementation footprint and current installation base demonstrate the GenTax’s system’s ability to support the business operations of Taxation.

VDT will benefit from FAST’s Tax Operations experience, and will likely find it difficult to identify an operation or process that cannot be accommodated by the GenTax system.

##### Finding 11: FAST will fully comply with all required project policies, guidelines and methodologies.

FAST did not request any exceptions to Section 3.9 of VDT’s RFP. In addition, FAST’s experience over multiple successful implementations indicate a deep familiarity with good project practices.

##### Finding 12: A detailed backup and recovery plan must be defined by the State.

The FAST proposal provides only general guidance on backup and recovery of the GenTax system and alludes to a more detailed exploration of needs with the State. Based upon FAST’s proposal to have Vermont host the GenTax system, it is expected that DII will incorporate GenTax into the normal review and prioritization process for Backup and Disaster Recovery. Currently, VDT has not defined Recovery Time Objectives (RTOs) with DII for legacy systems and as a result, no RTOs exist for the GenTax solution.

##### Finding 13: FAST does not support credit card payment transactions directly.

As stated, FAST does not offer a PCI-compliant credit card payment system but has interfaced with multiple systems in other states, indicating the ability to handle this requirement.

# Assessment of Implementation Plan

## Reality of the Timetable

FAST proposes to implement VDT’s taxes in four one-year rollouts over three phases. Since implementing and rolling out major taxes simultaneously places an undue strain on an agency’s operations and resources, FAST is proposing to implement personal income tax and sales and use taxes in separate project rollouts. The proposed cost and schedule will accommodate VDT’s original phased implementation and deployment plan as outlined in the ITS RFP. FAST proposes a slight alteration to VDT’s proposed plan to reduce project risk and provides the agency with a more consistent and manageable workload.

Based on FAST’s track record of successful implementation in one-year increments, it is believed that their timetable is realistic. Based on a conference call with FAST, it was conveyed to Mathtech that if the timetable is at risk, FAST will push forward even without the recommended level of state interaction to implement according to the project timeline. The impact to VDT in that instance could be limited involvement by VDT resources resulting in a need for more intensive training, and a potentially low degree of buy-in from end users.

While the timetable is reasonable, VDT must consider the longer-term effects to the Department of FAST’s focus on meeting that timetable.

***From the FAST Proposal:***

*FAST’s approach includes implementation of the processes and functions necessary to meet the requirements of the RFP, as well as a number of additional functions and processes necessary for a robust, comprehensive, and modernized integrated tax system. FAST typically does not implement functionality in phases but rather all GenTax functionality will be installed and available upon rollout to production. Interfaces with VDT’s Revenue Accounting System, data warehouse, and legacy systems will be live in Phase 1 of the project.*

*The FAST proposed rollouts by tax type are described in the table below.*

***Note that this rollout timing reflects an update received during the December 12th review session with VDT and DII.***

|  |  |
| --- | --- |
| *Phase 1 – Rollout 1 (12 months)* | *Phase 2 – Rollout 2 (12 months)* |
| *• Corporate Income Tax*  *• Business Income Tax*  *• Fuel Gross Receipts*  *• Property Transfer Tax*  *• Non-Resident Withholding* | *• Sales and Use Tax*  *• Meals and Rooms Tax*  *• Local Option Sales Tax*  *• Local Option Meals and Room Tax* |

|  |  |
| --- | --- |
| *Phase 3a – Rollout 3 (12 months)* | *Phase 3b – Rollout 4 (12 months)* |
| *• Corporate Income Tax*  *• Personal Income Tax*  *o Renter’s rebate*  *o Real estate withholding*  *o Property Tax Rebate*  *• Payroll Withholding*  *• Non-Resident Withholding*  *• Non-Game Wildlife (fund)*  *• Children's Trust (fund)*  *• Vermont Veteran's (fund)*  *• Cigarette Tax*  *• Tobacco Products Tax*  *• Fiduciary*  *• Estate Tax*  *• Beverage Tax*  *• Bank Franchise Tax* | *• Insurance Tax*  *• Captive Insurance Tax*  *• Telephone Property Tax*  *• Electric Energy Tax*  *• Solid Waste Tax*  *• EEE Property Tax*  *• Fire Training Tax*  *• Land Gains Tax*  *• Floor Stock Tax*  *• Tax-Def-Gen Special Fund*  *• Land Use Change Tax*  *• Hazardous Waste Tax*  *• Telephone Company Tax*  *• Railroad Company Tax*  *• Wind Property Tax*  *• Tax-Break-Open Ticket License Fee*  *• Court Cost Recovery*  *• Solar Tax*  *• New/Future Tax Types* |

## Adequacy of Vendor’s Proposed Risk Management Plan

Two components to identifying and managing risk have been identified in the FAST response, the first is issues management and the second is risk management. The FAST approach is derived from multiple engagements in multiple states, is based on Project Management Institute definitions, and should be considered to be adequate for VDT’s ITS implementation requirements.

## Adequacy of Design, Conversion and Implementation Plans

FAST’s implementation model is based upon a general COTS implementation approach and has been refined over multiple engagements. It should be considered to be adequate for VDT’s ITS implementation requirements.

With regard to Data Cleansing and Data Conversion, FAST has provided high-level tasks and durations in the Preliminary Project Plan; however, it is unclear how many VDT resources may be required for these two critical sets of tasks and such estimates are not included in the estimate of VDT resources in the proposal.

## Adequacy of Support for Conversion and Implementation Activities

FAST’s Staff Loading Chart includes a section for support by 7-11 consultants over the timeframe of implementation. While not specifically identified as Conversion support, this team of resources should prove adequate to support VDT’s Conversion and general Implementation activities.

## Adequacy of Vendor’s Training Plan

FAST presents a high-level set of training tasks in the Preliminary Project Plan in addition to a two-page summary (Tab G) on their overall approach to training. Based on the materials provided and FAST’s track record of training end-users in 16 jurisdictions, the high-level Training Plan is considered adequate for VDT’s needs.

## Adequacy of Planned Testing Procedures

Testing is addressed at a high-level in Tab E and alludes to a detailed Test Planning effort during the actual Testing Phase of the implementation. While identified in Tab E, the tasks included in the Preliminary Project Plan do not seem to identify a clear User Acceptance Testing phase as a pre-requisite for rollout.

It is recommended that VDT obtain more detail related to FAST’s testing procedures and test plans prior to project commencement. This will ensure that VDT has proper expectations for testing and resource commitment.

## Independent Review Findings

##### Finding 14: While high-level, the FAST Implementation Plan is realistic and based upon multiple prior implementations.

Based upon a number of prior state implementations referenced in the FAST proposal and discussion that VDT upper management has had with these taxing agencies, the ITS project appears to have a high likelihood of following the defined implementation plan presented by FAST.

##### Finding 15: VDT staffing for data cleansing and data conversion should be defined.

Data cleansing and data conversion require a significant effort by the agency to be completed properly. FAST’s implementation plan and RFP response define data conversation activities, but VDT should understand the level of resource commitment required for those sections. In addition, VDT should identify data cleansing activities that could begin before formal implementation. Only VDT has full, contextual knowledge of its data. ***(Maps to Risks R9, R10)***

##### Finding 16: VDT must identify and assign appropriate resources to support interface development and testing.

FAST has already developed interfaces to many of the systems that the current VDT applications connect to. Their proposal indicates that most interfaces will be implemented using available configuration capabilities. This will help in keeping with the philosophy of a COTS product, and will help keep to the implementation timeline. VDT must ensure that appropriate internal personnel are identified and allocated to support FAST with interface development and testing. ***(Maps to Risk R19)***

##### Finding 17: VDT must define plans to ensure adequate support of legacy systems during implementation.

While the major focus is implementing a new ITS, supporting existing tax applications must continue until each system can be retired. Plans need to be developed and actions taken to ensure that the existing tax systems are supported during the FAST rollouts.  ***(Maps to Risks R1, R2, R3)***

##### Finding 18: VDT must own and drive contract management during implementation.

Once the contract is executed, it will need to be actively managed in order to ensure that deliverables are completed on time and acceptable to the State and that proper payments may be issued according to the contract. FAST has deep experience managing ITS implementations, but Vermont should take ownership of the entire project to ensure that the state’s needs are consistently being met. An individual with the necessary authority will need to be assigned the responsibilities of managing the contract. ***(Maps to Risk R16)***

##### Finding 19: VDT must define, own and drive a deliverables management plan for implementation.

A review and acceptance processes for all deliverables will need to be implemented. This would include deliverable categorization, organization, versioning and review/approval. FAST has deep experience managing ITS implementations, but Vermont should take ownership of the entire project to ensure that the state’s needs are consistently being met. ***(Maps to Risk R31)***

##### Finding 20: VDT resources should be formally assigned to the ITS implementation and backfill activities should commence immediately.

One of the biggest challenges during this project will be allocating resources that have the required VDT operations subject matter expertise and the time to support the FAST delivery team. Efforts should begin now to train resources to cover those subject matter experts’ operational roles (“backfill”) while they are involved in implementation. ***(Maps to Risks R4, R5, R6)***

##### Finding 21: There is minimal time between one rollout and the next.

The current plan proposed by FAST is to have each rollout take one year. Each rollout is followed by the next the next rollout with no real down time for VTD ITS project staff. This could take its toll on key VDT staff allocated to more than one project phase as the project progresses. ***(Maps to Risk R15)***

##### Finding 22: GenTax’s reporting approach should meet VDT’s needs.

The FAST proposal describes a number of standard “out of the box” and ad-hoc data reporting features. Based upon the selected DBMS’s capabilities to apply updates to the primary and secondary database (the reporting database) and keep them synchronized, this should facilitate accurate and timely reporting. This is further confirmed by FAST in that the reporting database serves as a hot standby if the primary DBMS becomes unusable.

##### Finding 23: Test Plans are expected to be completed as part of project implementation.

While testing is summarized in the proposal, and is represented by some high-level tasks in the Preliminary Project Schedule, It is recommended that VDT obtain more detail related to FAST’s testing procedures and test plans prior to project commencement. This will ensure that VDT has proper expectations for testing and resource commitment. This will also ensure that the User Acceptance Testing process for VDT’s authorization to release the ITS into Production is thoroughly understood and that expectations for staff involvement are clearly established.

##### Finding 24: Need to ensure continued involvement from VDT resources:

It will be imperative that good project Governance is established and that an experienced Project Director is tasked with leading the project in order to ensure that VDT staff are enabled to participate in the project to the degree necessary. ***(Maps to Risk R12)***

# Assessment of Organizational Readiness

As a result of conversations with the Oversight Project Manager and VDT Deputy Commission, Mathtech has documented the following project organizational structure which will be put in place to manage the ITS project, monitor progress and make timely decisions on issues as they arise. The project management structure will be composed of four tiers:

1. Governance: Is led by DII and composed to staff having enterprise implementation experience and the top members of VDT management. Its primary responsibility will be to ensure the strategic direction of DII and business processes are aligned.
2. ITS Steering Committee: This committee will take a more hands on approach to oversee the project. It will be responsible for monitoring progress, key decisions and setting direction.
3. ITS Project Director: This position will report to the ITS Steering Committee and be aligned with the FAST project manager. Responsibilities will include resource allocation of VDT staff, coordinating VDT resources, helping manage the project plan, identifying risks and issues and resolving where possible.
4. Project Implementation Team: Key members of VDT will provide continuity throughout the project. They can identify the best subject matter experts, understand the impact to current operations (both from a technology and staffing perspective), coordinate resources and judge the success of the project as it progresses.

## General Project Acceptance / Readiness for Change

Based on conversations with VDT operational resources, it is clear that they are ready for the implementation of the ITS. While they are eager for a change, there is less perceived enthusiasm from the legacy Information technology resources. In fact, there were some very high probability, high impact risks identified related to loss of those resources.

## Adequacy of Department and Partner Staff to Provide Project Management

VDT plans to hire and assign a Project Director to this project that will work in conjunction with the FAST project manager to manage each rollout. To date, Mathtech understands that no candidates have been identified; however a job description has been submitted to Human Resources by VDT.

## Ability of the User and Operational Staff to Integrate Solution to their Work

Based on FAST’s implementation track record, positive client references both in the proposal and via VDT phone calls, it is clear that other states have had success integrating the GenTax solution into their operations. As a result, it is expected that VDT will, with proper Organizational Change Management and involvement in the ITS implementation, experience the same level of integration into daily operations.

## Independent Review Findings

##### Finding 25: The VDT Project Director should have specific qualifications and experience and manage the project to achieve VDT’s needs.

The Project Director should have experience leading large transformational operations and technology projects for state government. FAST will manage their team effectively to achieve the timetable, milestones and deliverables of implementation. As communicated to Mathtech during our conference call with James Harrison of FAST, FAST’s ability to maintain their track record of implementing on time on budget every time is a direct result of their approach to implementation. If FAST senses the project timeline slipping, they will take more control and push forward with implementation even if that means they do so without full state participation. As a result, it is critical that VDT identify an experienced Project Director to manage FAST and the entire project to ensure complete success from Vermont’s perspective. ***(Maps to Risk R40)***

##### Finding 26: VDT operational staff is eager for the implementation of the ITS.

Based upon the independent review interviews recently conducted and prior experiences with key members of the VDT staff, they are very interested to implement the ITS. They see many benefits in both operational efficiencies and minimizing the need for extensive technical support teams.

##### Finding 27: Retaining VDT IT resources to continue maintaining existing systems may be difficult.

While the general sense within VDT is one of eagerness for the ITS implementation, there is trepidation associated with the morale of VDT IT resources that maintain legacy systems. VDT IT should define and implement an aggressive Organizational Change Management initiative and Communication Plan to attempt to avoid any issues related to VDT IT staff morale. ***(Maps to Risks R1, R2, R3)***

# Cost Benefit Analysis

## Costs

Costs for the ITS implementation are higher than the range established ($12.4MM to $27.7MM) within the VDT ITS Business Case Final 2-4-2013.pdf. Additionally, the cost of implementation is not able to be met by VDT without engagement with FAST by way of a benefits-based implementation model.

FAST acknowledges that the cost of ITS implementation reflects a premium value as a result of the benefits-based approach, but the premium value is unknown.

VDT presented to Mathtech multiple documents related to cost of ownership and anticipated benefits from the FAST GenTax ITS. All documents reviewed were used as input to Mathtech’s Cost Benefit Analysis and are listed in Table 3 – Document Inventory.

Over the ten year period which includes FAST Implementation, there is a reduction in net cost to the state as a result of implementation.

Related to cost, the following observations can be made:

* FAST’s proposed benefits-based implementation model establishes the cost of implementation to consist of Accrued costs and Cashflow basis costs. FASTS Implementation Fees, Licenses, Warranty and Support ($28,377,477) will be Accrued and payment deferred until VDT realizes benefits from implementation. All other costs will be handled on a Cashflow basis.
* VDT will remit payment to FAST for Accrued implementation costs at a rate of 80% of benefits realized from defined programs. Specific programs and estimates from FAST are noted in the Cost Benefit Analysis.
* Both Oracle ETM and Advantage Revenue will be replaced by FAST and retired after year 4 of the implementation (FY17), resulting in a reduction in maintenance and operational support costs for those systems
* Multiple backfill resources will be required to support legacy systems through the FAST implementation period, increasing overall implementation cost to VDT.
* 1 eService portals will be replaced by FAST (after FY17) and resulting in an operating cost reduction.
* The RSI Data Warehouse will be replaced by FAST and retired after year 4 of the implementation (FY17), resulting in a reduction in maintenance and benefits payments to RSI
* Reductions in maintenance and support costs for Oracle ETM, Advantage Revenue, eServices Portals and the RSI Data Warehouse are offset by increased costs for FAST GenTax maintenance and support
* Fewer VDT and DII FTEs will be required to support FAST GenTax than legacy systems
* If benefits estimates are achieved, Total Cost of Ownership shows a benefit to VDT after implementation of the ITS. In addition, VDT will have realized enough benefit revenue by the end of FY19 to pay FAST in full. According to the payment schedule, VDT will pay FAST completely by the end of FY20

## Benefits

From FAST’s proposal, and reiterated in a follow up to the FAST teleconference conducted by Mathtech, FAST identified having experience with a single implementation in which a benefits-based approach was successfully utilized. During that implementation, FAST noted that all benefits realized were “most achieved through improved collections.” In addition, FAST noted that “The revenue streams we have identified for VDT are in the areas of audit selection, and identification of non-filers/under-reporters.”

FAST also notes that many clients attribute increased revenues to the implementation of GenTax and notes, specifically, in their proposal:

***From the FAST Proposal:***

*FAST understands the need to fund the ITS project through the generation of undiscovered and delinquent revenue and cost efficiencies derived from the new ITS. GenTax has proven to deliver benefits to all our state clients. For the California Employment Development Department, GenTax produced incremental revenue of $75 million in 18 months (January 2010 to June 2011) and recovered much of the agency’s project costs within one year of project initiation. For the three-year period from 2008-2011, the Illinois Department of Revenue directly attributes the generation of $350 million to the agency’s use of GenTax. States with smaller populations have also generated additional revenues with GenTax. Idaho State Tax Commission estimates that it has collected more than $215 million in benefits from GenTax over 10 years. Montana Department of Revenue’s account-receivable collection revenues increased $17 million, or 41%, in the two years following the agency’s first production with GenTax. New Mexico Taxation and Revenue department also generated benefits through use of GenTax, increasing delinquent tax collections by $50 million in its first 17 months of production.*

While FAST has proposed that specific benefit funding values be identified during the Project Preparation Phase of implementation there are no tasks in the Preliminary Project Plan defining such a milestones for the development of specific benefits. However; FAST and VDT have been involved in analysis to identify potential benefits, which have been used to develop the Cost Benefit Analysis. VDT feels that the benefit areas and values are conservative and highly likely to be achieved.

Details related to benefits:

* VDT’s existing RSI Data Warehouse provides an annual benefit to VDT, a percentage of which goes to the Vermont General Fund; FAST will replace the RSI Data Warehouse in FY18, but no benefit estimates were available for the FAST Data Warehouse.
* Based on FAST estimates, over the period of FY14-FY23, VT will realize a benefit in excess of $36MM. Fiscal years 14-19 will incur a net cost to VT while Fiscal Years 20-23 will incur a net benefit, due to the total repayment of FAST Implementation costs by the end of FY20.

## Independent Review Findings

##### Finding 28: FAST has completed a single benefits-based implementation of their ITS.

FAST has completed only one benefits-based implementation. The contractual details of an implementation that relies on benefits achieved by the implementing agency must be well-defined and agreed to by both parties. Specifically, the scope, assumptions, metrics, and timeframes for expected benefits must be part of the contract. FAST’s limited experience with such a formal arrangement should be considered as Vermont negotiates the ITS contract. It is suggested that the details of the benefits-based arrangement be finalized prior to contract finalization. ***(Maps to Risk R7)***

##### Finding 29: FAST has identified multiple states that attribute benefits to their ITS.

While FAST has only completed a single benefits-based implementation, they have provided a listing of multiple states that attribute increased revenues with the implementation of GenTax. This is a positive indication that Vermont will be able to achieve benefits from the implementation of GenTax. It also provides a possible source of benchmarking data as Vermont works out benefits-related details.

##### Finding 30: FAST plans the definition of implementation benefits within the first phase of the project.

While some benefit analysis has taken place, FAST proposes that detailed benefits analysis occur within the first phase of the project because of the need to delve into detail regarding how VDT operates. While this is a reasonable approach, it does put VDT at risk after contract finalization if the benefits to be identified are insufficient to fund the implementation. ***(Maps to Risk R7)***

##### Finding 31: Benefits-based implementation metrics should be defined prior to contract finalization.

FAST has proposed (per VDT requirements) an ITS Implementation that will be conducted using a benefits-based methodology whereby VDT will pay FAST based upon achievement of milestones of increased revenue. This puts FAST at risk as they will not be paid until VDT achieves the increased revenue milestones. When negotiating the contract, revenue milestones and payment terms, VDT should ensure that the revenue milestones identified are clearly defined for both parties, are realistic, achievable, and have a defined measurement basis. ***(Maps to Risk R7)***

##### Finding 32: If benefits estimates are achieved, Total Cost of Ownership shows a benefit to VDT after implementation of the ITS. In addition, VDT will have realized enough benefit revenue by the end of FY19 to pay FAST in full. According to the payment schedule, VDT will pay FAST completely by the end of FY20.

Based on the benefits estimates provided by FAST, VDT will experience a revenue increase during and after implementation of the ITS. This revenue increase will be split between the VT General Fund (20%) and repayment to FAST for the ITS implementation (80%). The attached Cost Benefit Analysis includes detail regarding revenue and repayment to FAST.

##### Finding 33: Benefits from the ITS implementation are anticipated to continue beyond the repayment period for FAST and should be measured as such as they represent a new annual revenue value for VDT going forward.

The focus of the benefits-based implementation of GenTax is for VDT to achieve enough benefits revenue to repay FAST for implementation. However; there is no reason to assume that the benefits will cease to be realized by VDT after FAST is repaid. The new ITS will enable a new method of operating for VDT and will continue to enable benefits to be realized. Those benefits should continue to be measured as they will contribute directly to the VDT budget.

##### Finding 34: If benefits estimates are achieved, over the period of FY14-FY23, VT will realize a benefit in excess of $36MM. Fiscal years 14-19 will incur a net cost to VT while Fiscal Years 20-23 will incur a net benefit, due to the total repayment of FAST Implementation costs by the end of FY20.

The values shown in the Cost Benefit Analysis portray an increase in revenue flowing to the state as a result of the ITS implementation.

##### Finding 35: While the benefits anticipated to be realized by VDT upon implementation of the FAST ITS are greater than the cost of implementation, the premium being charged by FAST for the benefits-based model is unknown.

FAST notes in Tab M Cost Proposal – Cost notes “…our price reflects a premium due to the risks associated with a benefits-based project such as this one.” The premium value is unknown and as a result, could represent a greater overall cost over time to VDT compared to an alternative method of funding. VDT would still target the same revenue benefits from the implementation of the ITS, but an alternative funding method may enable a lower implementation cost, yielding more revenue for the state.

# Risk Management Plan

## Risk Register and Mitigation Strategies Plan

Mathtech conducted workshops with VDT and DII resources over two days in Montpelier. The purpose of the workshops was to review and finalize risks associated with the ITS Implementation. Mathtech began the workshops by reviewing a list of pre-defined risk based on experience with ITS and related Tax technologies, and typical State Agency large system implementations. Mathtech subsequently reviewed, refined and edited Probability and Risk scores. The content of the Risk Register (without scoring) was provided to all VDT personnel for review who attended the workshops. No changes to the content were suggested. The full Risk Register and Mitigation Strategies Plan can be found in Appendix A, and a graphical mapping is depicted below:



# Appendix A – FAST Rate Card

FAST provided a rate table for hourly rates for optional future work that could be procured after implementation. Additional hours (and thus costs) are not required because of VDT’s choice of Service Level 3 Support which would be in place immediately after implementation. If VDT chose an alternate support level, additional effort from FAST (and cost) may be required.

#### Table 15 – FAST Rate Card for Future Work

|  |  |
| --- | --- |
| **Labor Category** | **Hourly Rate** |
| Project Manager | $175 |
| Functional Lead | $175 |
| Technical Lead | $175 |
| Test Lead | $175 |
| Data Conversion Lead | $175 |
| Training Lead | $175 |
| Subject Matter Expert | $175 |
| Programmer / Analyst | $175 |

# Appendix B – Cost Benefit Analysis

See attached file Cost Benefit Analysis - VT Integrated Tax System Independent Review - Mathtech REVISED DRAFT.