2022 - 2024 IT Strategic Plan

Agency: 161 Department of Taxation

Date: 9/24/2022

Current IT State

In this section, describe the high-level strategy the agency will use to manage existing operational IT investments over the next year to 5 years. This section should align with identified Business Requirements for Existing Technology (BReTs). At minimum, please address the following questions in your description of your agencys strategy for managing existing operational IT investments:

Are there existing IT investments that will require additional funding over the next year to 5 years, such as license renewals, re-competition of current IT contracts, or system enhancements required by the Agency Strategic Plan?

If there are systems that will no longer support the agencys business needs, either through poor performance or excessive cost, how does IT leadership in the agency plan to address the issues?

If the agency does not have the staff or funding to meet increasing demand for IT services, how will IT leadership fulfill the requests?

The Department of Taxation continues to make Information Security its number one priority. In support of this priority as well as ongoing agency operations, technology has placed primary emphasis on upgrades, maintenance, mandated enhancements, and desired enhancement to IRMS, our agency application suite. In addition, the agency spends considerable time coordinating activities with VITA and Outside Contractors related to the Commonwealth's outsourced infrastructure to ensure compliance with enterprise mandates and standards.

Current technology projects for the agency: As stated, TAX's primary focus continues to be information security. Tax is a highly automated agency and houses approximately 120 terabytes of highly sensitive state and federal taxpayer information, plus hundreds of computer-off-the-shelf-software (COTS) products and numerous custom large scale applications. Ensuring our security profile is effective, is a large undertaking. Compounding our size, is our external offerings. Constituent self-service is a goal of the Commonwealth, a demand of taxpayers, an excellent method to reduce agency operational costs and/or compensate for a shrinking workforce. Taxation has embraced the selfservice concept, and Agency applications give taxpayer's access to their tax accounts via the internet, basically allowing taxpayers access to their information from anywhere in the world. In addition to a wide-variety of internet based applications serving taxpayers. Taxation also has internet based applications that service other Agencies. Virginia Localities, and Courts. Added to this is a robust telework environment for agency staff that allows sensitive data access from outside our primary office space. Given the breadth of our applications and the numerous access points, Taxation has a higher than average risk for data loss. Storage of highly sensitive information and a belief that State systems are directly tied to Federal systems have made the Commonwealth a highly-valued target for hackers. Unfortunately, hackers become more sophisticated every day, and ensuring data and applications are as protected as possible is a continual activity and requires significant automation, especially given the agency's limited resources.

Government entities are the number two target of hackers and VITA reports that over 30 million attack attempts have been blocked at the Commonwealth's Data Center. Unfortunately, not all attempts are blocked. Every day Commonwealth agencies, including Taxation, deal with security incidents. To ensure TAX systems continues to meet or exceed Commonwealth and IRS security standards, TAX continues to focus on applying security patches and upgrading computer-off-the-shelf-software (COTS) products and VITA out of scope agency infrastructure items, for technology whose vendor support has expired, or will expire in the near future. This process is required to maintain vendor support in order to receive vendor supplied security patches and updates, and to ensure continuity of operations for TAX's mission critical applications, and to ensure the agency takes advantage of new security features and increased functionality with new versions or releases in order to improve security and operational efficiency. TAX has significant focus on refund review. This focus is needed to prevent fraudulent refunds from

being issued. Unfortunately, as hackers have become more sophisticated in obtaining sensitive information so have those seeking fraudulent refunds, as such to ensure requested refunds are validated TAX must continually perform refund review activities which require significant automation. The mandated upgrades to VITA/Outside Contractors (OC) enterprise infrastructure continue to consume a large portion of the agency's technical resources. TAX staff completed numerous projects working with VITA/OC such as: CESC move to QTS, Windows Server upgrade, TLS upgrade, Unix upgrade, Redhat Linux upgrade, and

Factors Impacting the Current IT

In this section, the agency will describe the changes in their business environment that will require or mandate changes to the agencys current IT investments. These are requirements and mandates from external sources, such as other agencies or business partners, the agencys customer base, product and service providers, or new federal or state legislation or regulations. The agency must identify the business value of the change, any important deadlines that must be met, and the consequences if the deadlines are not met. In your discussion, be sure to note whether the proposed enhancements are funded or not. If the agencys existing current IT investments will not need enhancement due to requirements or mandates from external sources in the foreseeable future, the agency should enter the following text rather than leave the Factors Impacting the Current IT section blank

For each mandated change, summarize your agencys response from your Agency Strategic Plan, and is it the opinion of agency IT leadership that the IT portion of the response is adequately funded?

Do the mandated changes effect IT in other Commonwealth agencies, or in other states? If so, how?

Technology systems, including application software and hardware, must be upgraded and refreshed on an ongoing basis to ensure they operate correctly and are available for use by end users. Further, TAX must refresh hardware, upgrade and patch software versions in a timely manner to eliminate the risk of the Commonwealth's revenue systems becoming vulnerable to security breached, obsolete or unsupported, jeopardizing all of TAX's business operations. These items are funded via the agency's core budget. VITA/OC's roadmap for enterprise systems impacts agency staff as we work to understand roadmap requirements and navigate the VITA/OC bureaucracy for service offerings and delivery in order to move forward with projects/initiatives. These items, if known prior to budget prep, are included in the agency's core budget. Most tax-related legislative changes necessitate changes to TAX's automated systems. The variety of filing and service "channels" provided by TAX often means the change must be made in several systems, each supporting a different channel.

Shared Services Transition scope, timeframes and budget could severely impact Technology's ability to meet business constituents needs. These items are not funded in the agency's core budget: SECURITY SHARED SERVICES (TAX will hire a contractor or contract staff to perform security and audit functions), Cloud Application Hosting (SAAS), EO19 Cloud Readiness. The customer demand for and use of electronic, self-help services continue to increase, requiring continued capacity expansions within existing services. Decision packages are prepared as required to fund these activities. Taxpayers, agency management and general staff continue to demand automated solutions to replace historically manual tasks. This results in increased operating efficiency and improved customer services, but requires an ongoing commitment to information technology services. Where funding exists, the agency moves forward with changes that will benefit the Commonwealth. The necessity to assign staff to VITA/OC activities has a negative impact on the agency's ability to meet its internal technology needs.

Virginia Tax is waiting for approval from VITA to upgrade the Westmoreland (WM) Data Center Virtual infrastructure in order to be compliant with EO19 requirements. Virginia Tax Datacap (paper tax return processing) and IBML high speed paper scanning systems located at WM encountered system operation failures and poor processing performance when the proof of concept for moving to QTS was conducted. These systems have typically run on physical servers at WM and are critical to processing tax returns which can result in refunds to citizens of Virginia. Virginia Tax proposed the following to VITA and is awaiting approval (which directionally aligned with VITAs instruction for EO19):

- 1. Upgrade the Virtual infrastructure at WM
- 2. Tax will move the systems to virtual servers
- 3. Virginia Tax will continue to work with software vendors requesting enhancements which may allow the System to move to QTS in the future

**Note: **The Datacap systems cannot be upgraded in the current environment until the WM VM upgrade is completed.

Proposed IT Solutions

In this section, describe the high-level strategy the agency will use to initiate new IT investments over the next year to 5 years in support of the agency strategic objectives documented in your Agency Strategic Plan. The agency does not need to consider specific technologies at this time, however, the strategy should identify how the IT implementation will provide business value to the organization. This section should align with identified Business Requirements for New Technology (BRnTs). At minimum, please address the following questions in your description of your agencys strategy for initiating new IT investments:

What are the most important solutions, based on the priority assigned to the requirements by the business sponsors in your agency, and what is the approach to achieving these priority solutions?

If any new IT initiatives will be started in the upcoming budget biennium, is it the opinion of agency IT leadership that it is adequately funded?

Does the agencys current IT staff have the appropriate skill set needed to support future agency technologies? If not, what skill sets need to be acquired?

If the agency will be engaged in multiple new IT initiatives, how will agency IT staff and agency subject matter experts be used across the initiatives?

TAX continuously implements numerous changes to its technology environment and its technical capabilities. But, technology changes rapidly, and the Agency must position itself to stay current in order to meet the increasing demands of constituents and Commonwealth personnel. With this increase in demand in the forethought, the following IT changes are anticipated (TAX will evaluate the support required for each proposed IT solution to determine if the development resources will be needed ongoing. In the event, ongoing support is needed, TAX will investigate the option of requesting FTE rather than staff augmentation resources.):

Virginia Tax is waiting for approval from VITA to upgrade the Westmoreland (WM) Data Center Virtual infrastructure in order to be compliant with EO19 requirements. Associated BRTs: EO19_TAX_Infrastructure TAX_Repurchase - BRT and Westmoreland Datacenter upgrade to Tier III - BRT

Agency commercial off-the-shelf products (whether customized or used out-of-the-box) and VITA out of scope agency infrastructure items, will be upgraded to the most current stable versions on a continual and rotating basis. This will ensure that COTS products maintain vendor support, and that our systems avail themselves on all new, and stable, functionality offered. By ensuring a supported platform, all users of our technology, internal and external, will be served through improved security features, higher availability and enhanced functionality.

The Agency security initiatives will augment staff and procure additional security software products to ensure enhanced security of taxpayer data. TAX will utilize software and staff that will not only track access, but assist with granting and terminating access, access reconciliations, reporting, and ensuring proper protocol has been followed when utilizing/consuming taxpayer data. TAX has an extremely robust technical environment, with a significant number of sensitive applications, COTS products, and a large data foot-print. Constituent self-service is a goal of the Commonwealth, a demand of taxpayers, and an excellent method to reduce agency operational costs or compensate for a shrinking workforce. Taxation has embraced the self-service concept, and Agency applications give taxpayer's access to their tax accounts via the internet, basically allowing access to sensitive information from anywhere in the world. In addition to a wide-variety of internet based applications serving taxpayers, Taxation also has internet based applications that service other Agencies, Virginia Localities, and Courts further increasing the risk of data loss. -- Associated BRTs: BReT Security Initiatives FY21/22 and Security Initiatives FY23 -FY25

Storage of highly sensitive information and a belief that state systems are directly tied to Federal systems have made the Commonwealth a highly-valued target for hackers. Unfortunately, hackers become more sophisticated every day, and ensuring data and applications are as protected as possible is a continual activity and requires

automation.

TAX continues to maintain IRMS. However, the current Agency resources are insufficient to meet all the requested (and in some cases required), enhancements. To better meet the needs of IRMS users, TAX will still require development staff augmentation to ensure the proper implementation of legislated mandates, approved requested enhancements, normal maintenance, and regular upgrades. TAX evaluates the support required to determine If the resources will be needed ongoing, in the event ongoing support is needed TAX investigates the option of filling the role with a FTE. Associated BRTs: BReT IRMS Maintenance and Enhancement Support— FY22/FY23, and IRMS Modernization FY22- FY25

TAX currently utilizes Microsoft Word to generate all outbound taxpayer correspondence. The Agency currently prints upwards of 12 million taxpayer letters annually based on approximately 800 unique Microsoft Word templates. The

IT Strategic Plan Budget Tables

Agency: 161 Department of Taxation

Date: 9/24/2022

Current IT Services				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Projected Service Fees	\$12,650,549.00	\$405,244.00	\$13,030,065.00	\$417,402.00
VITA Infrastructure Changes	\$608,568.00		\$892,007.00	
Estimated VITA Infrastructure	\$13,259,117.00	\$405,244.00	\$13,922,072.00	\$417,402.00
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Specialized Infrastructure	\$5,953,985.00		\$6,256,640.00	
Agency IT Staff	\$15,925,840.80		\$16,337,090.80	
Non-agency IT Staff	\$2,279,631.25		\$2,395,631.25	
Cloud Computing Service	\$1,500,000.00		\$2,500,000.00	
Other Application Costs				
Total:	\$38,918,574.05	\$405,244.00	\$41,411,434.05	\$417,402.00

Proposed IT Investments				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Major IT Projects:	\$1,606,492.00		\$600,000.00	
Non-Major IT Projects:				
Agency-Level IT Projects:	\$500,000.00		\$500,000.00	
Major Stand Alone IT Procurements:	\$3,963,066.25		\$2,983,784.65	
Non-Major Stand Alone IT Procurements:	\$1,000,000.00		\$1,000,000.00	
Agency-Level Stand Alone IT Procurements:	\$500,000.00		\$500,000.00	
Procurement Adjustment for Staffing:				
Total:	\$7,569,558.25	\$0.00	\$5,583,784.65	\$0.00

Projected Total IT Budget				
	Costs	Year 1	Costs	Year 2
Category	GF	NGF	GF	NGF
Current IT Services:	\$38,918,574.05	\$405,244.00	\$41,411,434.05	\$417,402.00
Proposed IT Investments:	\$7,569,558.25	\$0.00	\$5,583,784.65	\$0.00
Total:	\$46,488,132.30	\$405,244.00	\$46,995,218.70	\$417,402.00

Business Requirements For Technology

Agency:	161 Department of Taxation
Date:	9/24/2022

161 TAX BReT Cloud Readiness Assessment 2018 TACS BRT Type: Business Requirement for Existing Technology Date Submitted: 3/19/2021 Mandate: Yes Mission Critical: Yes Description:

In support of EO19 TAX is seeking approval to procure the resources needed to progress towards the desired goal of cloud readiness for Advantage Revenue system. This effort will include but not limited to updating applications and migrating from physical servers to VMs. -----

Governor Ralph Northam's "Executive Order 19: Cloud Service Utilization and Readiness" requires agencies to take specific actions starting this month and continuing through fall 2019.

The order requires VITA to adopt a model for evaluating and incorporating cloud services into the commonwealth's information technology (IT) strategy and services. VITA has:

Started the process of creating a cloud services model

Begun obtaining information about agency systems that can be migrated to a cloud environment Provided an overview of the process at the recent agency information technology resources (AITR) meeting

Planned additional announcements to AITRs regarding remaining steps

Included cloud-related services and migration to the new data center in the recently awarded infrastructure contracts

Additionally, VITA and all systems must move from the Commonwealth Enterprise Solutions Center (CESC) in Chester by December of 2021. One related strategy is to reduce the number of physical servicers at CESC to prepare for the move. This means migration to the cloud must be completed by that time. It is imperative to start planning now.

Agencies' IT staff members have been asked to complete cloud assessments and should be using the results to identify resource requirements. VITA encourages agencies to evaluate their resources and discuss resource planning with the appropriate financial staff to ensure work can begin as required. Resource needs should be included requests in the upcoming budget cycle.

To identify which existing solutions can be migrated to the cloud and ensure all new IT solutions proposed be cloud-enabled, VITA will issue a hosting standard in the coming weeks. This standard will define terminology and identify requirements agencies must consider when implementing cloud-based IT solutions.

Active Data Guard BRT

BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	3/19/2021	
Mandate:		
Mission Critical:		
Description:		
Tax is requesting approval to Oracle Active Data Guard. This procurement will allow for improved database performance and avoid operational cost to the agency. In support of EO19, Virginia Tax moved from physical servers to Virtual servers significantly reducing the processing power of the database due to limitations of the Virtual infrastructure Virginia Tax would like to procure the Active Data Guard to reduce the load on the Advantage Revenue database by offloading the auditors, developers, policy team to the standby database. This leverages the return on investment as the primary database is used in a more optimal way. Also, due to processor based licensing requirements for Virginia Tax online application, a standby database of Advantage revenue database is required. Implementing the Active Data Guard will help in this regard.		
Advantage Revenue		
BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	3/31/2021	
Mandate:		
Mission Critical:		
Description:		
Associated Project: CTP20384 - E	EO19_TAX_Advantage Revenue_Repurchase	
BO Reports Migration to Power	BI - BRT	
BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	5/17/2021	
Mandate:		
Mission Critical:		
Description:		
Virginia Tax is seeking approval to secure resources to migrate business objects reports to power BI. Power BI robust features and capabilities directly align with the commonwealth's and the agency's strategic objective to empower users to utilize data to make sound business decisions. Virginia Tax will utilize professional services via staff augmentation to migrate business 650 objects reports to Power BI.		
BReT Corr - Taxpayer Correspo	ndence Replacement	
BRT Type:	Business Requirement for Existing Technology	

Date Submitted:	3/19/2021
Mandate:	
Mission Critical:	
Description:	

Virginia Tax currently utilizes Microsoft Word to generate all outbound taxpayer correspondence. The Agency currently prints upwards of 12 million taxpayer letters annually based on approximately 800 unique Microsoft Word templates. The complexity compounds itself because Virginia Tax maintains previous versions of the correspondence templates which brings the total number of unique templates up to more than 2,500. The Agency has standardized on Office 2007 for the past 10 years due to the significant level of effort required to upgrade Microsoft Office and test each of these unique templates. The Agency is currently undergoing that upgrade process to standardize on Office 2016 but wants to break the dependency between taxpayer correspondence and Microsoft Word in order to recognize substantial internal savings as well as providing flexibility with important and strategic communications to our taxpayers.

In addition to eliminating 3rd party (Microsoft Word) dependencies and establishing a real-time communication platform, the correspondence engines on the market also provide multiple features that would aid in the Agency's ability to communicate with its customers including:

- Customer Service Improvements modern correspondence engines offer improved methods of communication that are designed to decrease expensive calls to Virginia Tax's three call centers.
- Omni-channel support taxpayers could opt in for email and mobile correspondence allowing them to communicate in the channel of their preference which will drive higher satisfaction and expedited payment. Multiple studies have shown customers across all industries are using mobile apps 50% more to conduct business than 10 years ago.
- Template consolidation based on industry standards Virginia Tax could go from maintaining 800 current templates to less than 100 templates which would dramatically decrease the day to day support costs of the current system.
 Global changes the Agency would have the capability to make changes to all templates or a subset of templates. i.e., a global change to logo or seal. This functionality would allow the Agency to react or plan for Cyber Security attacks/threats or other important communications in hours versus days.
- Advertising campaigns Virginia Tax could use the excess whitespace on correspondence to push initiatives like opting in for electronic correspondence empowering the Agency to optimize all communications delivered.
- Archival Agency will be able to directly update the Enterprise Content Management system with an archived copy of the correspondence. Current archive copies are dependent on 3rd party (Microsoft Word) putting the Agency at risk at recreating past communications. A modern correspondence engine would allow the Agency to create a digital image (PDF) for archive.
- Business Driven Modern correspondence engines empower the Business User and are far less dependent on IT resources. This allows the Agency to be much more efficient and strategic with all communications as the Business User is able to make changes in hours/days instead of weeks.
- Platform consolidation Capability to combine forms design with correspondence design will further consolidate the number of applications Virginia Tax maintains. The ability to import regulated forms into the Correspondence Systems will allow for far greater efficiencies, cost savings and improved design capabilities.
- Field Auditor communication improvements A modern correspondence engine will provide a guided experience for Field Auditors improving their ability to easily and effectively generate accurate correspondence that utilizes pre-approved content and templates. This will eliminate expensive calls to the call center as all communications will follow strict Agency guidelines.

BReT Filenet P8 Cloud Upgrade

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/19/2021
Mandate:	
Mission Critical:	
Description:	

This Procurement will cover the services and support for the Filenet cloud solution for base and optional years. Additionally, this procurement will utilize professional services to support and provide technical assistance to TAX with migrating on premise FileNet P8 to the cloud along with upgrading various additional tools related to TAX's mission critical imaging application, Filenet.

BRnT Cobol Migration to Java BRT Type: Business Requirement for New Technology Date Submitted: 3/19/2021 Mandate: Mission Critical:

Description:

Cobol migration to Java involves a complete rewrite of COBOL programs to Java. Currently the IRMS Advantage Revenue application contains a total of 38 COBOL programs. The purpose of this project is to rewrite AR Cobol batch jobs in JAVA using the Spring Batch framework.

Requirements:

- o Provide cost saving and avoidance for the Commonwealth by eliminating the need for Cobol licenses
- o Save hardware costs by reducing the number of AR batch servers.
- o Ensure process scalability to improve performance during peak times
- o Ensure the framework is reusable to support shorter implementation times
- o Ensure the ability to maintain staffing, since Java skills are readily available and are not as scarce as COBOL skills.
- o Provide the ability to support resource retooling and retention. Learning a new technology increases leverage and motivation to Cobol and PowerBuilder developers.

BRT - SAS Cloud Analytics BRT Type: Business Requirement for Existing Technology Date Submitted: 4/29/2021 Mandate: Mission Critical: Description:

Virginia Tax is seeking an analytic technology solution to enhance the quality, efficiency, and effectiveness of its Field Audit, Desk Audit and ongoing Collections activities. Virginia Tax is responsible for administering 37 state and local taxes, sales and use tax, and miscellaneous excise taxes and has revenue in excess of \$26.1 billion annually. Virginia Tax Compliance capabilities have not kept up with emerging technologies and needs to enhance its capacity to strengthen and advance its abilities going forward. This new technology will offer greater efficiencies in identifying noncompliant taxpayers, strengthen our audit candidate selection processes across all industries and tax types, and maximize current resource time spent auditing versus administrative activities. The results of procuring these capabilities are improved processing efficiency, higher volume of audits conducted annually, and improved selection process all resulting in increased revenue generation for the COV and more successful programs that mitigate risk of taxpayer non-compliance in the future.

and more successful programs that mitigate risk of taxpayer non-compliance in the future.	
Business Intelligence - Report	and Datamart
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/31/2021
Mandate:	
Mission Critical:	
Description:	
Associated Project: CTP20315 -	EO19_TAX_Aggregate_ReHost
CACSG/CACSG-CDCO	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/31/2021
Mandate:	
Mission Critical:	
Description:	
Associated Project: CTP20384 -	EO19_TAX_Advantage Revenue_Repurchase
eFile (MEF)	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/31/2021
Mandate:	
Mission Critical:	
Description:	
Associated Project: CTP20315 -	EO19_TAX_Aggregate_ReHost

Infrastructure TAX	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/31/2021
Mandate:	
Mission Critical:	
Description:	
Associated Project: CTP20	0388 - EO19_TAX_Infrastructure TAX_Repurchase

IRMS Maintenance and Support FY22 -FY23 BRT

BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	5/18/2021	
Mandate:		
Mission Critical:	Yes	

Description:

The Department of Taxation requests approval to allocate TAX staff and enter into a Staff Augmentation (CAI) contract for developers to perform maintenance and enhancement support TAX Integrated Revenue Management System (IRMS). These resources will also assist with implementing legislative changes, routine maintenance, and systems enhancements aimed at operational efficiency, cost savings, cost avoidance, and improved customer service.

TAX has considered hiring full time staff but has opted not because the additional full time staff will not be needed once the changes have been implemented.

This request is to provide application analysis, design and development support for Taxation's Enterprise Applications - Advantage Revenue, Virginia Tax Online (internet registration (iReg), Ifile, Quickpay, external entity secure messaging center (EESMC), ARweb, Individual Online Portal, Survey, and non profit organization (NPO)), STAUDN (audit), Share Point Online, Siebel, CACSG, and Team Foundation Server (TFS) for Application Lifecycle Management.

Automated testing solutions:

Developer with 5+ years of configuring and implementing automated testing solutions with architectural experience in the following: Expert in mapping business requirements to automated testing solution, testing solution analysis, design, and development under the direction of the Virginia Department of Taxation. Provides expert knowledge of industry standards and the best practice used to implement the solution

IRMS Modernization FY22-FY25- BRT

BRT Type:	Business Requirement for Existing Technology
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Date Submitted:	5/11/2021
Mandate:	
Mission Critical:	
Description:	
	ests approval to procure resources via COTS solution, professional staff augmentation for support to modernize TAX Integrated Revenue

The Department of Taxation requests approval to procure resources via COTS solution, professional services to include but limited to staff augmentation for support to modernize TAX Integrated Revenue Management System (IRMS). These resources will assist with implementing legislative changes and systems enhancements while rearchitecting IRMS with the goal of achieving additional operational efficiency, cost savings, cost avoidance, improved customer service and reducing technical debt.

These resources will be used to re-architect tax systems to more desirable platforms such as .net and Java which aligns with agency strategic plans to Optimize and reengineer Technology.

TAX has considered hiring full time staff but has opted not because the additional full time staff will not be needed once the modernization has been implemented.

This request is to provide application analysis, design and development support for Taxation's Enterprise Applications - Advantage Revenue, Virginia Tax Online (internet registration (iReg), Ifile, Quickpay, external entity secure messaging center (EESMC), ARweb, Individual Online Portal, Survey, and non profit organization (NPO)), STAUDN (audit), Share Point Online, Siebel, CACSG, and Team Foundation Server (TFS) for Application Lifecycle Management.

Medallia Customer Exp BRT-Fy23 -FY25

BRT Type:	Business Requirement for New Technology	
Date Submitted:	5/10/2022	
Mandate:		
Mission Critical:		

Description:

Virginia Tax is seeking approval to procure Medallia cloud solutions to implement customer experience surveys for various Virginia Tax Online (VTOL) and other agency applications. Technology modernization efforts related to VTOL applications require us to replace our aging ColdFusion environment – which is approaching end-of-life status by July 2023 – with a new solution.

Security Initiatives FY23 - FY25 BRT

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/12/2021
Mandate:	
Mission Critical:	Yes
Description:	

TAX requires approval to procure security tools to ensure enhanced security of taxpayer data. This request will provide staff and tools to not only track access, but assist with granting and terminating access, access reconciliations, reporting, and ensuring proper protocol has been followed when utilizing/consuming taxpayer data. This request will also support Tax's ability to detect and remediate areas of concern to improve the agency's overall security posture. Tax will use this approval to license 2FA solution as well as tools to support vulnerability remediation and scanning. **TACS** Business Requirement for Existing Technology **BRT Type: Date Submitted:** 3/31/2021 Mandate: **Mission Critical: Description:** Associated Project: CTP20386 - EO19_TAX_TACS_ReHost Tax preparer Online Portal Assessment - FY21 BRT **BRT Type:** Business Requirement for Existing Technology **Date Submitted:** 4/27/2021 Mandate: **Mission Critical: Description:** In response to House Bill No. 2060 and to support ongoing customer-first efforts at the agency, Virginia Tax requests that CapTech solicit input from affected stakeholders and analyze the prospect of establishing a Tax Practitioners Online Portal. Tax Practitioners (or "Tax Preparers") are entities who possess a valid Power of Attorney ("PoA") and Declaration of Representative ("DoR") form to access confidential client information and include Certified Public Accountants ("CPA"), Enrolled Agents ("EA"), and Payroll Providers ("PP"). Web Upload & eForms Support and Maint FY22-25 BRT **BRT Type:** Business Requirement for Existing Technology **Date Submitted:** 4/25/2022

Mandate:

Mission Critical:

Description:

Virginia Tax is requesting approval to utilize professional service from NGNious to perform Maintenance and Enhancements activities on it's proprietary Web Upload and eForms software. In 2008, Virginia Tax purchased customized Web Upload software from NGNious, LLC. The software allowed tax preparer, payroll providers and businesses to upload tax returns in bulk for multiple clients with one submission directly from their own computer systems to Virginia Tax's web servers, eliminating duplicate entry of information by preparers and created a streamlined electronic filing option for Virginia Tax that did not previously exist. Web Upload continues to be the primary electronic channel for businesses who are submitting large volumes of annual wage statements, withholding payments, and Virginia Tax purchased customized eForms software from NGNious in 2012. Since 2012, NGNious has successfully developed and implemented 44 online fillable forms through the customized eForms software accessible by taxpayers form Virginia Tax's website. Utilizing the same platform, NGNious has also successfully developed and implemented 25 forms into an internal online data entry program streamlining the data entry process of prior year tax forms and other seldom used forms. NGNious is the only practical supplier in this instance because the software on which the current eForms is developed is solely owned by N'Nious who is the software creator/licensor.

Westmoreland Datacenter upgrade to Tier III - BRT				
BRT Type: Business Requirement for Existing Technology				
Date Submitted:	5/17/2021			
Mandate:				
Mission Critical:				
Description				

Description:

Virginia Tax is requesting approval to procure resources to upgrade the Westmoreland (WM) Datacenter to Tier III per VITA requirements. This datacenter must be maintained to support Virginia Tax Datacap (paper tax return processing) and IBML high speed paper scanning systems. Tax attempted to move these systems to QTS in 2020 and 2021 but during the POC these systems encountered system operation failures and poor processing performance. Tax worked with VITA and Software vendors to resolve the issues to no avail. These systems are critical to processing paper tax returns which can result in refunds to citizens of Virginia.

The following BReT "EO19_TAX_Infrastructure TAX_Repurchase Procurement" was submitted seeking approval to upgrade the WM VM infrastructure to ensure it would be cloud ready in support EO19. The resources required may include but is not limited to an assessment of the data center, electrical and Cooling redundancy ...etc.

Tax WM data Center supports many of the agency specific systems such as VOIP, Remit (Payment processing) and Total Automated Capture systems (Paper Tax return processing). These systems are vital to Tax's daily operation thus much care must be taken during this effort to ensure the Tax infrastructure is working properly. The Infrastructure will require detailed testing efforts to include but not limited to: (Unit testing, System testing, User acceptance testing and performance testing) to ensure full functionality and performance that meets or exceeds current all business requirements/standards.

IT Strategic Plan Projects

Agency:	161 Department of Taxation		
Date:	9/24/2022		
EO19_TAX_Aggregate_	ReHost		
Category 2		Investment Bus	iness Case Approval
EO19_TAX_Aggregate_F	lehost		
Project Start Date	6/1/2020	Project End Date	7/30/2021
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$1,076,800.00	\$1,076,800.00	
Estimated first year of biennium:	\$1,076,800.00	\$1,076,800.00	\$0.00
Estimated second year of biennium:	\$0.00	\$0.00	\$0.00

Project Related Procurements

There are no procurements for this project

EO19_TAX_Filenet/In	nage Retrieval_Refactor		
Category 3 Investment Business Case Approval			
Project Start Date	9/28/2018	Project End Date	
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$583,000.00	\$583,000.00	

Estimated first year of biennium:	\$583,000.00	\$583,000.00	\$0.00
Estimated second year of biennium:	\$0.00	\$0.00	\$0.00

Project Related Procurements

There are no procurements for this project

EO19_TAX_Infrastructure TAX_Repurchase					
Category 3		Investment Business Case Approval			
Project Start Date	Project Start Date 8/30/2019 Project End Date				
Estimated Costs:	Total	General Fund	Non-General Fund		
Project Cost	\$285,000.00	\$285,000.00			
Estimated first year of biennium:	\$235,000.00	\$235,000.00	\$0.00		
Estimated second year of biennium:	\$0.00	\$0.00	\$0.00		

Project Related Procurements

There are no procurements for this project

EO19_TAX_TACS_Re	Host			
Category 4		Investment Business Case Approval		
Project Start Date		10/25/2019	Project End	
			Date	
Estimated Costs:	Total		General Fund	Non-General Fund
Project Cost		\$370,000.00	\$370,000.00	

Estimated first year of biennium:	\$370,000.00	\$370,000.00	\$0.00
Estimated second year of biennium:	\$0.00	\$0.00	\$0.00

Project Related Procurements

There are no procurements for this project

eGovernment Self Help Expansion My Virginia TAX

Category 2 Investment Business Case Approval

My Virginia TAX is the Department's version of "My Account" which will allow taxpayers (individuals and businesses) to access their data/information online with the use of a more robust single sign-on/ authentication portal with security questions to allow for self-service when they forget their password.

Today TAX maintains multiple systems with multiple Login entry points. Taxpayers have long complained about not being able to go to one place on our website to access our online systems.

The My Virginia TAX concept would include an improved version of the functionality we provide today, as well as provide new functionality that is not there today.

Taxpayers would be able to electronically file and pay any tax.

Taxpayers would be able to access a complete history of their account including past filings, payments made, refunds issued (including Where's My Refund status while pending), correspondence that was sent assessments/bills pending (and paid).

Project Start Date	4/28/2021	Project End Date	9/8/2023
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$2,506,492.00	\$2,506,492.00	
Estimated first year of biennium:	\$1,000,000.00	\$1,000,000.00	\$0.00
Estimated second year of biennium:	\$1,000,000.00	\$1,000,000.00	\$0.00

Project Related Procurements

There are no procurements for this project

BO Reports Migration to Power BI - Project

Category 3

Project Initiation Approval

Virginia Tax is seeking approval to secure resources to migrate business objects reports to power BI. Power BI's robust features and capabilities directly align with the Commonwealth's and the Agency's strategic objective to empower users to utilize data to make sound business decisions. Virginia Tax will utilize professional services via staff augmentation to migrate 650 Business objects reports to Power BI.

Note: PowerBI product is a VITA approved offering and is part of the Microsoft suite. Demetrias Rodgers or Jamey Stone provided all details.

This is a state approved contract and is EO19 compliant. All TAX servers are VMs at QTS.

Project Start Date	8/1/2021	Project End Date	1/31/2023
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$1,860,506.00	\$1,860,506.00	
Estimated first year of biennium:	\$0.00	\$0.00	\$0.00
Estimated second year of biennium:	\$1,395,062.00	\$1,395,062.00	\$0.00

Project Related Procurements

BO Reports migration to Power BI IBC/PBA

SAS	Cloud	Analy	vtics	proi	ect
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Investment Business Case Approval

Virginia Tax will initiate an engagement with SAS Inc to utilize the cloud hosting options for SAS Analytics. Virginia Tax is seeking an analytic technology solution to enhance the quality, efficiency, and effectiveness of its Field Audit, Desk Audit and ongoing Collections activities. Virginia Tax is responsible for administering 37 state and local taxes, sales and use tax, and miscellaneous excise taxes and has revenue in excess of \$26.1 billion annually. Virginia Tax Compliance capabilities have not kept up with emerging technologies and needs to enhance its capacity to strengthen and advance its abilities going forward. This new technology will offer greater efficiencies in identifying non-compliant taxpayers, strengthen our audit candidate selection processes across all industries and tax types, and maximize current resource time spent auditing versus administrative activities. The results of procuring these capabilities are improved processing efficiency, higher volume of audits conducted annually, and improved selection process all resulting in increased revenue generation for the COV and more successful programs that mitigate risk of taxpayer non-compliance in the future.

TAX will use a General Services contract for SAS Cloud Services. 47QTCA18D0081

Project Start Date	12/1/2021	Project End Date	5/31/2022
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$1,874,503.24	\$1,874,503.24	
Estimated first year of biennium:	\$0.00	\$0.00	\$0.00
Estimated second year of biennium:	\$866,000.00	\$866,000.00	\$0.00

Project Related Procurements

There are no procurements for this project

IT Strategic Plan Procurements

Agency:	161 Department of Taxation
Date:	9/24/2022
Stand Alone	Procurements:
Procurement Name:	AREMOS Forecasting Software FY21 thru FY25 PBA
Procurement Date	6/15/2020
Procurement Description:	Virginia Tax is seeking approval to renew the Professional Document and Publication Services Subscription with IHS Markit for the AREMOS software. Virginia Tax has been purchasing the non-customized national and state forecasts from IHS Markit for almost 30years. Under the Code of Virginia § 2.2.1503. Filing of six-year revenue plan by Governor, Virginia Tax economist develop and prepare economic forecasts for the Governor to submit to the General Assembly. The econometric data, services, and proprietary AREMOS software that IHS Markit subscription provides are essential to those forecasts since IHS Markit is recognized by NASBO (National Association of State Budget Officers), FTA (Federal of Tax Administrators), a majority of states, the Fortune Global 500 and the World Bank as the premier economic forecasting firm.
Procurement Name:	IBM Datacap/WorkLoad Automation FY21 thru FY25 PBA
Procurement Date	5/25/2020
Procurement Description:	Tax is seeking approval to renew Licenses, Maintenance and support IBM Datacap Workload Automation a proprietary tool used in support of Advantage Revenue Tax core financial system. The Licenses, maintenance and support renewal of IBM Datacap Workload Automation is required to ensure Tax maintain audit and security compliance. This is renewal required in order for Tax to continue to use the IBM proprietary tools. Furthermore, vendor support is required to ensure Tax systems receive security updates and maintain operational efficiency.

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Procurement Name:	IBML hardware maintenance FY19-23
Procurement Date	6/29/2018
Procurement Description:	IBML is the sole manufacturer, distributor and provider of maintenance and support for their ImageTrac scanners and software. We have verified this with IBML and other sources. It is only practicable that Virginia Tax would only want the manufacturer and provider of maintenance and support to work on these high speed scanners, especially since these scanners are used to create images for approximately 15 million tax returns, payments and correspondence.
Procurement Name:	IBML Scanner Replacement with maint (PBA)- FY21-FY
Procurement Date	3/23/2021
Procurement Description:	Virginia Tax is seeking approval to replace its three ((3) IT5) high-speed document scanners before they reach the end of their life cycle with two (2) new next generation of IBML high document scanners (IBML 7400 Fusion Scanners). The 3 scanners in use are 9 years old and will need to be replaced before they reach end of lifecycle
Procurement Name:	Informatica Maintenance and Support FY21 thru FY25
Procurement Date	6/27/2020
Procurement Description:	Tax is seeking approval to renew Licenses, Maintenance and support Informatica a proprietary tool used in support of Advantage Revenue Tax core financial system. The Licenses, maintenance and support renewal of Informatica is required to ensure Tax maintain audit and security compliance. This is renewal required in order for Tax to continue to use Informatica proprietary tools. Furthermore, vendor support is required to ensure Tax systems receive security updates and maintain operational efficiency.

Procurement Name:	IRMS Modernization FY22 -FY25 Procurement
Procurement Date	12/31/2024
Procurement Description:	The Department of Taxation requests approval to procure resources via COTS solution, professional services to include but limited to staff augmentation for support to modernize TAX Integrated Revenue Management System (IRMS). These resources will assist with implementing legislative changes and systems enhancements while rearchitecting IRMS with the goal of achieving additional operational efficiency, cost savings, cost avoidance, and improved customer service.
	TAX has considered hiring full time staff but has opted not because the additional full time staff will not be needed once the modernization has been implemented.
	This request is to provide application analysis, design and development support for Taxation's Enterprise Applications - Advantage Revenue, Virginia Tax Online (internet registration (iReg), Ifile, Quickpay, external entity secure messaging center (EESMC), ARweb, Individual Online Portal, Survey, and non profit organization (NPO)), STAUDN (audit), Share Point Online, Siebel, CACSG, and Team Foundation Server (TFS) for Application Lifecycle Management.
	Additionally, Virginia Tax will require use of Sole Source Procured by Agency to engage professional services from selected vendors. At such time, Tax will update the PGR with the Agency approved Sole Source documentation.
Procurement Name:	Oce Printer - PBA
Procurement Date	1/28/2021
Procurement Description:	The current OCe printers will reach end of Life 12/31/2020. TAX must replace the printers in order to maintain vendor support. These printers are used to print all correspondence that is mailled to taxpayers, i.e bills and letters.

Procurement Name:	Security Initiatives FY23 - FY25 IBC/PBA
Procurement Date	7/1/2022
Procurement Description:	Tax will use this approval to license the 2FA solution as well as tools to support vulnerability remediation and scanning. This request will provide tools to not only track access, but assist with granting and terminating access, access reconciliations, reporting, and ensuring proper protocol has been followed when utilizing/consuming taxpayer data. This request will also support Tax's ability to detect and remediate vulnerabilities as well as areas of concern to improve the agency's overall security posture. TAX will renew licenses for Rapid7 (security scanning tool) and Dou.
Procurement Name:	Twilio - PBA
Procurement Date	
Procurement Description:	Virginia Tax will be implementing Two-Factor Authentication (2FA) Security to support Virginia Tax Online (VTOL) applications. Two-factor authentication (2FA), sometimes referred to as multifactor authentication, is a method Tax will use to verify user's identity when they are trying to access VTOL applications. In addition to a password, 2FA requires the user to provide a second piece of information to confirm his or her identity. With 2FA, an extra layer of security is added to the user's account to prevent someone from logging in, even if they have the user's password. This extra security measure requires user to verify his or her identity using a randomized code sent to the user each time he or she attempts to log in.
Procurement Name:	Web Upload & eForms Support and Maint FY22-25 PGR
Procurement Date	6/30/2025

Procurement Description:	Virginia Tax is requesting approval to utilize professional service from NGNious to perform maintenance and enhancement activities on its proprietary Web Upload and eForms software. In 2008, Virginia Tax purchased customized Web Upload software from NGNious, LLC. The software allowed tax preparers, payroll providers and businesses to upload tax returns in bulk for multiple clients with one submission directly from their own computer systems to Virginia Tax's web servers, eliminating duplicate entry of information by preparers and created a streamlined electronic filing option for Virginia Tax that did not previously exist. Web Upload continues to be the primary electronic channel for businesses who are submitting large volumes of annual wage statements, withholding payments, and sales tax returns.
	Virginia Tax purchased customized eForms software from NGNious in 2012. Since 2012, NGNious has successfully developed and implemented 44 online fillable forms through the customized eForms software accessible by taxpayers form Virginia Tax's website. Utilizing the same platform, NGNious has also successfully developed and implemented 25 forms into an internal online data entry program streamlining the data entry process of prior year tax forms and other seldom used forms. NGNious is the only practical supplier in this instance because the software on which the current eForms is developed is solely owned by NGNious who is the software creator/licensor.
	This PGR covers an existing maintenance contract for FY22 to FY 5. This totals \$174,560.00
	This PGR also covers a new enhancements and legislative requirements contract for FY22 to FY25. This totals \$914,160.00
Procurement Name:	Westmoreland Datacenter upgrade to Tier III - PBA
Procurement Date	12/30/2022

Procurement Description:

Virginia Tax is requesting approval to procure resources to upgrade the Westmoreland Datacenter to Tier III per VITA requirements. This datacenter must be maintained to support Virginia Tax Datacap (paper tax return processing) and IBML high speed paper scanning systems. Tax attempted to move these systems to QTS in 2020 and 2021 but during the POC these systems encountered system operation failures and poor processing performance. Tax worked with VITA and Software vendors to resolve the issues to no avail. These systems are critical to processing paper tax returns which can result in refunds to citizens of Virginia.

These improvements include electrical and mechanical systems as detailed in the VA Tax DC Assessment document attached to the procurement.