

Report Title: IT Strategic Plan Summary

Agency: 136 Virginia Information Technologies Agency

Date: 7/27/2017

Current Operational IT Investments

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 agency's 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 agency's 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 Virginia Information Technologies Agency (VITA) is the commonwealth's consolidated information technology organization. VITA's responsibilities fall into the following primary categories:

- Governance of the commonwealth's information security programs in support of the responsibilities of the Chief Information Officer of the commonwealth;
- Operation of the IT infrastructure, including all related personnel, for the executive branch agencies declared by the legislature to be "in-scope" to VITA;
- Governance of IT investments in support of the duties and responsibilities of the Information Technology Advisory Council and the Chief Information Officer of the commonwealth;
- Sourcing and procurement of technology on behalf of other state agencies and institutions of higher education, and participating localities.

More than ten years ago, the commonwealth moved boldly to pioneer a 21st century model for information technology governance and operational excellence. The creation of VITA, and the Information Technology Partnership (ITP) with Northrop Grumman, represented one of the most comprehensive reforms of state government information technology in the nation and firmly established Virginia as a leader in IT service delivery and oversight. That boldness has resulted in benefits all across state government, such as two state-of-the-art operations centers, modern server and desktop computing platforms, a consolidated, statewide email solution, the introduction of commonwealth policies, standards and systems with a proven record of producing successful, cost-effective IT investments and projects, and a comprehensive approach to information security. However, as revolutionary as the concept was at its inception, the commonwealth is now embarking on another ground-breaking set of changes.

2016 through 2020 will be challenging years for VITA as it transitions from a service delivery model that is heavily reliant on a single-source provider to a multi-source supplier environment. This strategic planning period will culminate in the expiration of the Comprehensive Infrastructure Agreement (CIA) contract, dissolving the IT Partnership with Northrop Grumman on July 1, 2019. This represents a significant change in the service delivery model currently provided by VITA. While this does bring opportunities for offering enhanced/additional services, obtaining cost savings and reducing the risk associated with such a significant reliance on a single partner, it also presents new risks. The integration of multiple systems and applications, and the management of multiple vendors create additional levels of complexity for VITA. Issues and concerns that may arise either during the transitioning of services or the support of mission-critical applications need to be anticipated and addressed effectively. VITA is both a provider of services and a user of the services provided and may itself be impacted by disruptions in service if the transition is not planned and implemented seamlessly.

The change in the service delivery platform provides VITA with the opportunity to enhance and improve the services provided to its customers, and also is an opportunity for VITA to embed additional IT governance practices that will ensure the safety and protection of sensitive data and mission-critical applications used throughout the commonwealth. The aims for the new service delivery platform include:

- Improved service delivery quality
- Improved ease of doing business with VITA
- Increased flexibility in selection of services offered by VITA
- Enhanced cost competitiveness
- Increased innovation
- Increased transparency in service delivery options and spending
- Strengthened capabilities for commonwealth oversight in the areas of IT procurements and IT project management
- Increased security related to protection of commonwealth assets

During this transition period, the agency has three objectives. VITA must:

- Ensure that day to day operations continue without interruption in the quality or level of service to its customers
- Plan and implement the IT Infrastructure Sourcing Program (ITISP) initiative which will transition the commonwealth as a whole from a single-vendor service framework to a multi-vendor service environment
- Plan and implement the strategies needed to transition VITA as an agency to the new multi-vendor sourcing service environment and culture

Under the leadership of Chief Information, VITA's mission and vision have been updated to reflect the changing technology environment and the role that VITA plays in providing technology services and technology-related oversight for the commonwealth. VITA's current mission is to support the commonwealth by providing cyber security, information technology infrastructure services and information technology governance. Its vision is to do so by delivering agile technology services at the speed of business.

In developing this plan, VITA aligned its goals and initiatives with those identified in the Commonwealth Technology Business Plan and approved by the Customer Advisory Council (CAC), and also identified the priorities and goals that support VITA's vision and mission statement, as described below.

Goal 1 - Information Technology Services

VITA's primary goal for IT infrastructure is to successfully implement an Information Technology Infrastructure Services Program (ITISP) Program that will ensure the operating environment supports the commonwealth's ability to provide services to its citizens, has clear rules, quality delivery, and is adaptable to change. VITA will accomplish this by:

- Adopting a multi-supplier model with a services integrator through a competitive bid, providing increased flexibility in adding new services, increased transparency into cross-functional activities and improved accountability for all stakeholders.
- Transitioning services to a flexible and responsive IT service model.
- Reducing implementation risk through the use of a phased approach based upon industry best practice and recommended by Integris Applied in their Report on the Comprehensive Infrastructure Agreement Final Agency Assessment dated June 2015.
- Implementing a new infrastructure governance model that includes a greater level of agency involvement.
- Transitioning to a new organization structure to support the new service model.

The program's implementation is organized into three "waves," with discrete service areas included in each of the waves that will address the service and the associated operations.

- Wave 1: Messaging, IBM Mainframe, Microsoft Licensing and Collaborative Tools
- Wave 2: Multi-Source Service Integration (MSI), Service Desk, Server/Storage, Managed Security, Internal Chargeback, Authentication/Directory Services for Commonwealth of Virginia (COV) employees and business partners
- Wave 3: Desktop, Data/Voice Networks

Additional IT Sourcing Projects include:

- Unisys mainframe service termination, including migration of customer applications and data
- Development and implementation of plans for the insourcing of applications (such as Microsoft Office) currently supported under the Northrop Grumman Partnership Agreement

Other strategies and initiatives identified under this goal focus on the delivery of services that meet customer business needs and meet or exceed our service level agreements. Developing strategic

partnerships with the agencies will be critical to VITAs successful transition to the new multi-vendor environment. Within the ITISP Program, VITA has projects related to the following:

VITA as a Service Provider

- Development and implementation of a cloud oversight service
- Establishment of an Innovation Center of Excellence (ICE) in support of the exploration, evaluation and exploitation of new technologies and technology solutions
- Completion of the transformation by the Virginia Department of Emergency Management (VDEM) and the Virginia Employment Commission (VEC) to the commonwealth standard IT service provision model used by other in-scope executive branch agencies

VITA Relationship Management Projects

- Implementation of new Telco contracts that will enhance the services available to our customers
- Fulfillment of the requirements of Executive Directive (ED) 20 to strengthen small, women and minority-owned (SWaM) business reporting capabilities
- Customer service enhancement through implementation of a comprehensive Customer Relationship Management (CRM) solution (VCAST Phase V and revisions to the CRM Strategy)

Additional FY 2019-2020 initiatives include:

- Execution of Wave 3 activities
- Planning and implementation of the use of IT services by non-executive branch entities

One of the demanding aspects of the IT Infrastructure Services Program will not be a technological one, but will be the challenge that VITA faces in transitioning the organization and its culture – and the culture of customer agencies - to adapt to the new service delivery model. In essence, VITA will have to re-define significant aspects of itself. That will take a great deal of time and effort, and will require acceptance of multiple stakeholders (including VITAs own workforce) in order to be successful. Initially, the services available to VITAs customers are not likely to change; however, the methods of service delivery and the providers of those services may be different.

Goal 2 - Cyber security

The goal is to protect the commonwealths information technology systems, resources and information assets from loss, damage and misuse. VITA will protect citizens data through effective security programs, fully implement the National Institute of Standards and Technology (NIST) framework for risk management, and collaborate with private sector and law enforcement on threat information and best practices.

Identified initiatives for FY 2016-2018 in support of this goal include:

- Establishment of a new Commonwealth of Virginia operational security model for the new enterprise multi-supplier environment
- Expansion of the ability of agencies to self-assess the risk to their information technology environments
- Offering of “sensitive system” audit services, Information Security Officer (ISO) services and vulnerability scanning services
- Updating the enterprise security incident playbook, which establishes strategies, plans and prevention, mitigation, and remediation checklists of activities for responding to security events
- Evaluation of VITAs incident response and cyber insurance resources
- Implementation of two-factor authentication for web mail services (part of messaging transition)
- Establishment of monitoring protocols for backup and recovery of sensitive systems
- Development of an IT application recovery plan for commonwealth application software
- Upgrades to the current Archer security risk software to an enterprise-ready application able to better support additional new security services

Additional FY 2019-2020 initiatives include:

- Integration of new security reporting and assurance methodologies for the new enterprise environment

Goal 3 - IT Governance, Financial Framework, Work Force Planning and Workflow

VITAs goal is to ensure that its processes, organization and decision-making are effective and efficient and customers find it easy to do business with the agency. An established IT governance capability helps to ensure that not only is the commonwealth making the right decisions concerning its IT investments, but that

Virginia has established sound decision-making processes that incorporate the impacts on VITAs customers (needs/interests) and other stakeholders.

Identified initiatives for FY 2016-2018 in support of this goal include:

- Adoption of a new customer engagement model and customer satisfaction measures as a component of the IT sourcing strategy
- Clarification and enhancement of the commonwealths hosting strategy, including cloud services
- Development and implementation of an enterprise mobility strategy for managing mobile devices, networks and related mobile computing services for use in conducting the commonwealths business
- Development of procedures for the monitoring of outsourced application activities to ensure that COV and VITA IT policies and procedures are followed
- Fulfillment of the requirements under Executive Directive ED-07 to establish governance for data sharing and data analytics
- Definition of a strategy to expand the use of inter-system and inter-agency data sharing and data analytics to add value to commonwealth information and to support improved agency decision-making
- Restructuring VITAs organization and positioning its workforce in continued support of VITAs mission under the new business and service delivery models
- Procurement of a single content management system to integrate websites for Virginia.gov, the governors and lieutenant governors websites, and VITA
- Coordination and support of the statewide deployment of Next Generation 9-1-1 (NG 9-1-1) in cooperation with the 9-1-1 Services Board and local stakeholders
- Completion of the implementation of a modern, integrated, customer-friendly Telecommunications Expense (management) and Billing Solution (TEBS)
- Documentation of the operations environment, including VITA applications, servers, and vendor hosted environments, and data residing on servers

Additional FY 2019-2020 initiatives include:

- Establishment of an automated customer workflow management tool with information reporting and dashboard capabilities

VITAs current IT investments are focused on support of the agencys strategic goals and its plan to transition the service delivery model from a single source solution provider to a multi-supplier solution.

VITAs strategy for managing existing IT investments includes:

- During the transition, sustaining without disruption its existing governance processes and methodologies, enterprise architecture oversight, security and risk management assessment and compliance, sourcing and procurement controls, project management oversight, and VITA applications
- Strengthening its supplier-management protocols and capabilities
- Enhancing its development and deployment of policies, standards, management tools and techniques, and best practices addressing the entire investment lifecycle

Strategies and initiatives to manage current operation IT investments and address related challenges include those listed below.

- VITA is in the final stages of replacing its legacy telecommunications billing system with a modern Telecommunications Expense (Management) and Billing System (TEBS). VITA has also replaced the Computer Services Chargeback System. Finance anticipates that replacing these systems will improve the customer experience, reduce customer request/form processing times, provide better access to customer billing information, support the addition of new services, increase service quality, enhance customer relations, decrease the environmental impact of the agencys activities, and reduce risks associated with aging systems and lack of IT staff to support those systems.

- There are a number of legacy systems, including spreadsheets that are used to track agency information assets, that make it difficult to track and maintain assets or to develop and follow an internal IT roadmap. IT investment is needed in tools that facilitate the automation and single view of agency assets and roadmaps. VITA has initiated a content management consolidation project to procure a single content management system and integrated websites for Virginia.gov, the governors and lieutenant governors websites as well as VITAs own website. This will support the statewide strategic goal of more transparency in government.

- Significant IT investment will be required in this biennium for upgrades to existing system and application software and tools (including Windows 10 OS , SQL Server 2008 upgrades, Oracle 11G, .NET, Ektron, MS Office 2016 Upgrade, PeopleSoft Tool Suite Upgrade, etc.).

· With the continued implementation of a comprehensive Customer Relationship Management (CRM) system, the VITA Customer Account Support Tool (VCAST) provides for a single automated solution for tracking and reporting on customer interactions and issues. This solution has facilitated sharing of customer contact histories across the organization. Planned enhancements include development of a catalog of customer information sources, implementation of a federated customer data model, development of a CRM technology roadmap and a customer portal, and implementation of mobile devices for customer-facing staff.

VITA as an agency faces challenges with our current infrastructure support including the following systems that may no longer support VITAs business needs:

- The existing Commonwealth Technology Portfolio tool (CTP), used for IT investment management and for project management, is not well suited to the complexity of the evolving Governance environment and will likely require significant investment in improvements, enhancements, or a replacement during the biennium.

- VITA Internal Portfolio is a custom-designed agency application used to track and manage resources and assign work to ensure clear visibility of resource utilization and capacity. Investment in a new, more robust tool that would provide consistency and facilitate tracking and reporting is needed.

VITA worked with the Department of Planning and Budget (DPB) to define required roles for the new organization needed during the transition and after completion of the NG contract. In addition, roles were also identified for security-related needs of the commonwealth. VITA received budget package approval for FY 2017 for 41 additional positions based on the DPB review. VITA anticipates that additional funding may be necessary, and is in the process of preparing estimates of the commonwealths transition and post-transition funding requirements. As the biennium progresses, additional funding may be required to provide for temporary staffing needed to support this significant effort and for procurements related to implementing these new technology platforms.

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 agencies current IT investments. These are requirements and mandates from external sources, such as other agencies or business partners, the agencies 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 agencies 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 agencies 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?

The commonwealths current technology environment is built upon the premise of VITA, the states designated information technologies organization, having a relationship for infrastructure services with a single partner providing one-stop shopping for VITA customers. However, because the current contract with Northrop Grumman expires in 2019, VITA has had to assess other business models and develop a plan to transition the commonwealth to a multi-vendor infrastructure sourcing environment, while still supporting the current operational environment through the end of the NG contract. This represents the most significant change impacting VITAs business environment since its creation. This change impacts business operations and technology services across the state.

With the approaching expiration of the CIAs term, continued evolution of market place offerings, and enterprise-wide frustrations with service delivery, VITA recently implemented a program to develop a next generation sourcing strategy. The Information Technology Infrastructure Services Program (ITISP) was designed to examine all factors of the commonwealths current infrastructure services delivery model and provide recommendations that would position VITA to more effectively support the commonwealths future technology needs.

VITAs strategic intent is to create an integrated multi-supplier platform. This integrated platform will:

increase transparency into delivery activities, allow for the addition of new suppliers and technologies, and provide VITA with more management control of the services it provides to commonwealth agencies. The ITISP infrastructure program has been divided into 3 phases (waves):

- Wave 1: Messaging, IBM Mainframe, MS Licensing and Collaborative Tools
- Wave 2: Multi-Source Service Integration (MSI), Service Desk, Server/Storage, Managed Security, Internal Chargeback, Authentication/Directory Services for COV employees and business partners
- Wave 3: Desktop, Data/Voice Networks

Planning for Wave 1 activities is complete and transition activities for some of these services began in August 2016. Planning for Waves 2 and 3 activities is well underway. Inherent with the new approach to service delivery is the establishment of the governance and associated staffing to support the new model. This will be a significant challenge for VITA. Until VITA has a greater understanding of how the service model will be implemented, it will be difficult for the agency to determine the nature of the organizational changes that will be necessary to support this new model.

The ever increasing complexity of IT in the commonwealth makes this effort critical to meeting the needs and expectations of VITA's customer agencies, the governor, the General Assembly and other stakeholders.

VITA has established an internal Platform Relationship Office (PRO) to implement and oversee the new IT infrastructure environment and manage the relationship between customers and service providers in the new multi-supplier service delivery platform. Some of the functions that will be added over time include overseeing service delivery, aligning services with evolving customer needs and market offerings, managing contractual and financial relationships with platform service providers, managing customer relationships, and engaging the marketplace for new services. VITA is working with the Customer Advisory Council (CAC) to enhance customer involvement in the design and implementation of the services delivery platform.

Additional factors that may potentially require changes to VITA's current IT investments and may require the need for additional funding include those listed below.

- According to the Commonwealth of Virginia Technology Business Plan, the modest financial growth anticipated for Virginia "presents an opportunity to reconsider the role of technology in meeting the state's business needs and develop funding models for the acquisition of new technology solutions as well as properly sustain existing technology investments". Effective deployment of technology solutions remains one of the commonwealth's best strategies for responding to the need to "do more with less" during times of fiscal constraint.
- The anticipated growth in Virginia residents demands for public services may require new or expanded technologies and/or technology services most specifically increase internet usage. This increased usage may require additional investments in this area.
- The pace of technological change continues to increase, which may require additional unanticipated investments to modernize software in order to meet security standards and reduce maintenance cost.
- The consumption and analysis requirements of governance-related data and decision-making information has been increasing. Changes in customer demands for VITA to provide additional services in the area of data management and analytics may result in the need for additional, unplanned IT investments.
- VITA is providing an increasing level of technology support including provision of infrastructure services, development and maintenance of websites and application systems, support for research and development of big/open data initiatives. This requires additional allocation of funds and resources that impact VITA's ability to address business needs through proposed IT Investments.
- Based on the outcome of the messaging procurement, VITA may have to transition from SharePoint to another tool. This transition may require significant resources to redefine workflows and establish new processes for workplace collaboration.
- Trends identified in the Commonwealth Strategic Plan for technology will also impact VITA IT investments. These include IT Sourcing Programs (ITS), Shared Data and Analytics (SDA), Information Security and Risk Management (ISRM), Enterprise Information Architecture and Governance (EIAG), Cloud Computing Services (CCS), Digital Government/Internet of Things (DG) and Enterprise Services (ES). VITA, as the central IT organization for the commonwealth, may need additional investment funds for innovation and research to address these trends and provide the appropriate services to customers.
- A significant share of VITA's workforce is retirement-eligible or nearing this eligibility. At the same time, VITA, like all of state government, is encountering difficulty in hiring and especially retaining skilled workers. Further, the transition to the new environment and new solutions will require specialized skills (for example,

in the areas of vendor management and systems integration management). VITA expects that additional funding will be needed to enable VITAs staffing to fully support its business model by attracting and retaining talent, with in-demand skillsets, and by providing for knowledge transfer and business continuity/staff succession planning.

· In May, 2016, the governor signed Executive Directive 07 to leverage the use of shared data and data analytics among state agencies to improve services and outcomes, maximize the use of resources, and increase the return on investment of citizens tax dollars in state government. The ED07 requires the CIO, secretary of technology and secretary of finance to submit a report to the governor by October 15, 2016. Depending on the outcome of this report, additional funding may be required to implement the recommended strategies.

Additionally, with the ending of its current contract with Northrop Grumman, VITA must also be planning for a potential relocation from its existing facilities at the Commonwealth Enterprise Solutions Center (CESC) in Chester, and the Southwest Enterprise Solutions Center (SWESC), in Lebanon, Virginia. These are sizable installations, and the transfer of an operations center to a new location is far more complex than a simple office move. Extensive planning and coordination will be required to ensure that there is no disruption in service to VITAs customers. This strategic project will include technical and non-technical aspects that could require additional funding.

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 agency's 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 agency's 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?

VITA strategy for its new IT investments centers on the multivendor platform and includes an emphasis on improvements in the services delivered, establishment of governance for new technologies, strengthening of supplier relationships, and improved ease of doing business. VITAs approach to planning for future investments will include the incorporation of longer-range planning, the use of "best in breed" technology solutions and a greater focus on multi-agency/enterprise solutions as well as business readiness support.

As we move through the transition phases to the new multi-supplier environment, VITAs strategy includes a reorganization and realignment of staff that will better meet our business objectives and the needs of our customers. The establishment of an internal Platform Relationship Office (PRO) to implement and oversee the new IT infrastructure environment and manage the relationship between customers and service providers in the new multi-supplier service delivery platform is the first of several organizational alignments with the new model.

Many of the planned projects for the biennium have evolved as a result of the pending contract expiration with Northrop Grumman. Additional projects have been placed on hold due to the priority of the transition projects and lack of resources. Those projects will be reviewed as we progress through the transition process and as resources become available. In addition to the IT projects that are already underway, the VITA Agency Strategic Plan includes projects to address:

· Wave 2 and 3 IT Partnership Comprehensive Infrastructure Agreement (ITP CIA) contract expiration planning.

- Cloud computing and hosting strategy. The objective is to establish a strategy and policy as well as a standard and guidelines for public cloud computing.
- Technology to enable a mobile workforce. Continue to support and promote technology that enables agency staff to support a mobile workforce, including next generation mobile devices.
- VITA customer relationship management improvements (VITA Customer Account Support Tool (VCAST) Phase V). Further enhancements include Work Request Integration to display work requests for each account, SharePoint Integration to link documents related to accounts, and Escalations to communicate escalated cases and tasks.
- Development of business reporting capabilities for Small, Woman and Minority-Owned (SWaM) activity per Executive Directive (ED-20).

VITA has implemented a Work Plan process to prioritize all agency initiatives to verify that the most important projects are being worked appropriately and timely and that staff are not over allocated. Work Plan prioritization is established by the Executive Team and approved by the CIO. The Work Plan process uses the Internal Portfolio tool to track and manage resources and assign work to ensure clear visibility of resource utilization and capacity. The transition to the new multivendor environment may require more detailed resource tracking and necessitate a new, more robust tool for resource time tracking as well as project tracking.

The transition to the new environment will require specialized skills (for example, in the areas of vendor management and systems integration management). As vacancies occur, positions will be reviewed to make sure that required skills for the multivendor environment will be incorporated into VITA staff roles. VITA expects that additional funding will be needed to enable VITAs staffing to fully support its business model by attracting and retaining talent with in-demand skillsets and retooling and training current staff. In addition, VITA supports ongoing knowledge transfer and business continuity/staff succession planning, especially in light of the high percentage of staff that is eligible for retirement.

VITA is currently researching the anticipated funding requirements for the transition to a multi-sourcing supplier environment for the Wave 2 and 3 initiatives and has submitted a budget decision package for \$1,225,000 to support the transition to the multi-supplier sourcing environment.

Report Title: Strategic Plan

Agency:

Virginia Information Technologies Agency

Date:

7/24/2017

Current IT Services

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Projected Service Fees	\$0	\$3,500,000	\$0	\$3,500,000
VITA Infrastructure Changes	\$0	\$40,000	\$0	\$40,000
Estimated VITA Infrastructure	\$0	\$3,540,000	\$0	\$3,540,000
Specialized Infrastructure	\$0	\$1,083,336	\$0	\$1,083,336
Agency IT Staff	\$0	\$5,656,384	\$0	\$5,656,384
Non-agency IT Staff	\$0	\$775,332	\$0	\$775,332
Cloud Computing Service	\$334,706	\$0	\$0	\$0
Other Application Costs	\$0	\$1,354,941	\$0	\$1,354,941
Total	\$334,706	\$12,409,993	\$0	\$12,409,993

Proposed IT Investments

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Major IT Projects	\$0	\$33,377,820	\$0	\$25,041,682
Non-Major IT Projects	\$0	\$0	\$0	\$0
Agency-Level IT Projects	\$0	\$308,057	\$0	\$308,057
Major Stand Alone IT Procurements	\$2,438,959	\$40,225,000	\$892,117	\$26,325,000
Non-Major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Agency-Level Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Procurement Adjustment for Staffing	\$0	\$0	\$0	\$0
Total	\$2,438,959	\$73,910,877	\$892,117	\$51,674,739

Projected Total IT Budget

Category	Costs Year 1		Costs Year 2		Total Costs
	GF	NGF	GF	NGF	
Current IT Services	\$334,706	\$12,409,993	\$0	\$12,409,993	\$25,154,693
Proposed IT Investments	\$2,438,959	\$73,910,877	\$892,117	\$51,674,739	\$128,916,693
Total	\$2,773,665	\$86,320,871	\$892,117	\$64,084,733	\$154,071,387

Report Title: Business Requirements For Technology

Agency: Virginia Information Technologies Agency (VITA) Date: 7/24/2017

BReT - Corrective Action Plan Internal IT Systems

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/18/2015
Mandate:	Yes
Mission Critical:	Yes

Description:
Develop plans and implement changes to internal IT systems required to address audit comments. This includes addressing Sec508 compliance issues and development of an internal IT disaster recovery plan and process.

BReT - Security Services

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/20/2016
Mandate:	No
Mission Critical:	Yes

Description:
VITA is initiating disentanglement from NG's Security tower in 2016. Pursuant to the Northrup Grumman contract expiration in June 2019, these services need to be transitioned to a new supplier.

BReT - Server Services outsourcing initiative

BRT Type:	Business Requirement for New Technology
Date Submitted:	8/16/2016
Mandate:	No
Mission Critical:	Yes

Description:
VITA is initiating disentanglement from NG's Server Services/Storage tower in 2016. Server Services will be responsible for the current VM/Physical servers currently managed and supported by the incumbent, Northrop Grumman.

BReT Corrective Action - PEOPLE System - SR13731

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	10/28/2015
Mandate:	Yes
Mission Critical:	No

Description:
The purpose of this project is to create a new, secure Contact Repository (PEOPLE) System

(redesigned/consolidated to include VITA specific attributes from VITA Personnel Management (VPM) for the future retirement of VPM) that is in compliance with Information Technology Resource Management (ITRM) Information Security Standard SEC501-09(SEC501-09), VITA's System Development Life Cycle (SDLC) and fix customer reported production issues with the existing components.

The PEOPLE System (Contact Repository) is primarily used by Internal Portfolio and Technology Management (ITPM). The Contacts Repository Portal (also referred to as "People System" and "Contacts System") is an administrative front-end application which consists of the following modules: People Updater, Contact List Manager, Reports, and General Administration. The PEOPLE database schema and the AGENCY tables in the VITA_GENERAL schema originated from requirements for a centralized State Employee Contact Database for the Employee Directory Search. With the additional requirement to provide a central application to manage the authorization of VITA and other Agency users for VITA's applications, the PEOPLE database was expanded to include additional data attributes needed by Application Security. As the need for additional attributes, role management, vendor management and reporting grew, the Contact Repository front-end was built to address the management of look-up table data, person records not available from feeds and reports. The Contact Repository System has since become the system of record for Person related data for VITA applications.

BReT IT infrastructure IBM Mainframe Services

BRT Type: Business Requirement for Existing Technology

Date Submitted: 2/2/2016

Mandate: Yes

Mission Critical: Yes

Description:

Commonwealth of Virginia Mainframe services

The Mainframe computing platform is an IBM z/OS z9 Enterprise Class 2817-406 M15 that has been rated at 1280 MIPS with 6 LPARS. The Operating System is zOS version 2.1. See section 7.0 below for the list of software products running on the Mainframe to satisfy the needs of our customers.

The IBM mainframe utilizes an EMC VMAX 20K Storage Area Network (SAN) device for storage which is replicated to an EMC VMAX 20K SAN at Southwest Enterprise Solution Center (SWESC). Both of these SAN devices are also shared with the Unisys Mainframe environment.

All IBM mainframe tape has been virtual since third quarter 2011, utilizing an EMC DLM 2000.

The IBM Mainframe Print services includes high speed print capabilities utilizing two Xerox 4110 laser printers at CESC for the Department of Social Services, the Department of Accounts, the Virginia Information Technologies Agency, and several smaller agencies. There is one courier delivery per day to agencies located in downtown Richmond including the Department of Social Services and the Department of Accounts. There are also agencies that print utilizing their own printers via spool print (the electronic distribution of documents, reports, and letters to individual agency websites for agency staff to print).

The IBM Mainframe environment has two front end processors models 3745 and 3746.

As of the date of this writing the IBM Mainframe has a Channel Interface Processor (CIP) to enable end user communications. There is project, Mainframe Legacy Access Migration (MLAM) being executed by the VITA/Northrop Grumman IT Partnership to upgrade and standardize access to the mainframes at the Commonwealth Enterprise Solutions Center and eliminate these devices as well as the front end processors.

Three of the largest consuming agencies of IBM Mainframe services are interested in migrating off the IBM Mainframe due to high costs for support services and agency Application Development and Maintenance resources. At the time of this RFP, one of the three agencies is underway in replatforming their applications from the Mainframe to Linux based servers.

1.0 Commonwealth Enterprise Solutions Center (CESC) Mainframe

The Commonwealth of Virginia Mainframe is located at the Commonwealth Enterprise Solutions Center (CESC). The CESC is a Tier 3 data center.

The Commonwealth of Virginia Mainframe CESC platform is an IBM 2817-406 M15 that consists of 6 LPARs which are named SYS1, SYS2, SYS3, SYS4, SYS5, and SYS6. SYS1, SYS2, and SYS3 are for production processing for the following agencies:

- SYS1 - DOA, DPB, DSS, CB, SCC, TAX, VITA, VRS
- SYS2 - DMV, VDOT, VEC
- SYS3 - DSS, CB, VEC

SYS4 and SYS5 are for engineering/test environment purposes. SYS6 is used for development purposes for DSS and VEC; provides Control-D access to test batch processes and reports for DMV. There is 42.5 gigabytes total, allocated out to 6 IPARS with an additional 3 gigabytes in reserve for allocation.

2.0 Southwest Enterprise Solutions Center (SWESC) Mainframe

The Commonwealth of Virginia has redundant hardware at our secondary data center, Southwest Enterprise Solutions Center (SWESC) for Disaster Recovery Purposes.

The Commonwealth of Virginia Mainframe SWESC platform is an IBM 2818 o01 m05 configured the exactly the same as the CESC Mainframe with the 6 LPARs which are named SYS1, SYS2, SYS3, SYS4, SYS5, and SYS6. SYS1, SYS2, and SYS3 are for production processing for the following agencies:

- SYS1 - DOA, DPB, DSS, CB, SCC, TAX, VRS
- SYS2 - DMV, VDOT, VEC
- SYS3 - DSS, CB, VEC

SYS4 and SYS5 are for engineering/test environment purposes. SYS6 is used for development purposes for DSS and VEC; provides Control-D access to test batch processes and reports for DMV. There is 42.5 gigabytes total, allocated out to 6 IPARS. There are 3 gigabytes in reserve for allocation.

3.0 IBM Mainframe Storage

3.1 SAN Storage Subsystems

The IBM mainframe utilizes an EMC VMAX 20K Storage Area Network (SAN) device for storage, with 7 TB of available space, located at CESC. The SAN storage environment is a stable environment with minimal increase of storage space. This environment is replicated to an EMC VMAX 20K SAN at Southwest Enterprise Solution Center (SWESC). Both of these SAN devices are also shared with the Unisys Mainframe environment.

3.2 Tape Storage Subsystems

All IBM mainframe tape has been virtual since third quarter 2011, there are no longer any 18-track 3480 mounts, 36-track 3490e mounts, or virtual IBM TS7740 tape mounts. The DLM 2000 has 90TB usable space with 83TB configured, and approximately 115,000 800 mb virtual tapes defined to SMS tape library and CA1/TMS. Approximately 30 TB is currently utilized. The DLM2000 is also shared with the Unisys Mainframe environment.

4.0 IBM Mainframe Print

The IBM mainframe utilizes two Xerox Nuvera 144EA's located at CESC. Printing specifications include 144ips Simplex (it can and does do duplex but at a slower rate), Cut Sheet Only (Agencies had previously converted all of the fan fold print to cut sheet), each printer has 6 input trays for a total capacity of 9000 sheets. Print finishing options include Dual Stackers to stack output up to 3000 pages (normally stacked at 2000 pages for easy transport), Stapling (up to 100 simplex or 200 duplex)(Will staple larger jobs in sets), and currently use 20lb no-hole and 3-hole paper.

BReT IT infrastructure Messaging Services

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	2/1/2016
Mandate:	Yes
Mission Critical:	Yes

Description:

VITA will initiate disentanglement from NG messaging services in 2016. Messaging Services includes email, enterprise collaboration services, directory services and authentication, and mobile device management are required for 55,000 users and other public bodies. (Authentication and Directory Services are in Wave 2; the remainder is in Wave 1.)

BReT IT infrastructure Multi Sourcing Integrator (MSI)

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	10/4/2016
Mandate:	No

Mission Critical:	Yes
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Description:

VITA is initiating disentanglement from NG's Service Desk and Cross Functional towers in 2016. The MSI will be responsible for providing Service Desk, Incident Management and Cross Functional services in support of the multi-vendor model.

The MSI will manage the entire Managed Environment and the various Service Tower Suppliers in their provision of services within the Managed Environment for the benefit of the Commonwealth, VITA and Customers.

BReT IT Infrastructure Services Program
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BRT Type:	Business Requirement for Existing Technology
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Date Submitted:	8/22/2016
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Mandate:	Yes
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Mission Critical:	Yes
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Description:

The commonwealth's contract with Northrop Grumman – the Comprehensive Infrastructure Services Agreement (CIA) - for information technology (IT) infrastructure services expires July 1, 2019.

Accordingly, the purpose of the ITIS Program is to ensure continuity and reliability of IT infrastructure services leading up to and through that date. This will be done by partnering with multiple vendors to provide IT services which comprise an enterprise infrastructure services offering. The overall ITIS solution will account for needs, cost, performance, flexibility, standards and security for the IT enterprise across state government. This new solution must consider:

- Needs and wants of commonwealth agencies, and the expectations of the citizens they serve
- Innovative services and capabilities in the marketplace
- New delivery models, industry standard contract terms and current pricing
- VITA's existing contract with Northrop Grumman

The development and implementation of the ITIS Program will impact the commonwealth's future technology enterprise, and is a journey more than a destination. The ITIS Program is also a change management program in a large, complex political environment. IT and business leaders from agencies and the commonwealth must play a role throughout the process, as there will be tradeoffs. VITA will look for short term wins along the way.

BReT MSI Services

BRT Type:	Business Requirement for Existing Technology
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Date Submitted:	9/20/2016
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Mandate:	No
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Mission Critical:	
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Description:

Provide MSI Services to the Commonwealth

BReT Potential Assets for Infrastructure Services under CIA
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BRT Type:	Business Requirement for Existing Technology
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Date Submitted:	8/25/2014
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Mandate:	Yes
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Mission Critical:	Yes
Description:	
The Comprehensive IT Infrastructure Services contract (CIA) with NG expires July 1, 2019. VITA and the commonwealth may consider procuring and managing the assets used to provide the infrastructure services including the data center, hardware, software, middleware, tools and other systems along with related maintenance and support depending on the sourcing strategy and services methodology.	
BReT Sensitive System Audit Program	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/30/2014
Mandate:	No
Mission Critical:	Yes
Description:	
Security Standard 501 requires regular audits of sensitive systems to ensure compliance. The Internal Audit program at VITA addresses these audits and the follow up of relevant findings. The audit plan calls for all audits to be completed by then end of March 2015. Findings may result in investment in upgrades and enhancements to sensitive systems.	
BReT2015-16 Operational Upgrade Plan	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/7/2014
Mandate:	Yes
Mission Critical:	Yes
Description:	
All VITA applications, databases and server software must be compliant with manufacturing/vendor support schedules as well as the ITP and COV Product Roadmaps. All ITP and VITA applications groups must ensure that this is done by required deadlines. The VITA technical Operations maintenance Plan project will be the central focal point for VITA and the ITP to coordinate multiple upgrade effort to avoid disruptions to customers and realize efficiencies by upgrading all of VITA assets in a coordinated manner. The VITA FY15-FY16 plan includes the following core components: - Microsoft Windows Server Operating Systems - Microsoft SQL Server Database Management Systems - Oracle Database Management Systems - Red Hat Enterprise Linux Operating Systems - Application software compliance with 64-bit operating systems - Ensuring all virtual machines are in the UCS environment - Moving all VITA NAS Shares on the legacy network to the new NAS - SAN Migration for MITA	
BRnT - Contract extension Aaron Puritz	
BRT Type:	Business Requirement for New Technology
Date Submitted:	4/4/2017
Mandate:	No
Mission Critical:	Yes

Description:

Extend hours for existing contractor, Aaron Puritz.

BRnT - Shared Data Management Service

BRT Type: Business Requirement for New Technology

Date Submitted: 10/16/2014

Mandate: No

Mission Critical: No

Description:

Provide a hosted data management service to assist agencies in publishing, sharing and finding data across the Commonwealth. Pilot use of the Comprehensive Knowledge Archive Network (CKAN) web based open source data management system to determine feasibility of offering as a service.

BRnT 9-1-1 Data Analytics Procurement

BRT Type: Business Requirement for New Technology

Date Submitted: 3/28/2016

Mandate: No

Mission Critical: No

Description:

The E-911 Services Board needs to be able to analyze local call detail data for the purpose of assuring NG9-1-1 implementation does not negatively impact system performance. This is local data currently not accessible by the Board. The proposed procurement will provide a method for localities to share their data with the Board and will allow the Board to perform analytics.

BRnT Commonwealth Governance System

BRT Type: Business Requirement for New Technology

Date Submitted: 9/3/2014

Mandate: No

Mission Critical: Yes

Description:

The consumption of and analysis requirements of Governance related data and decision making information by the Assembly Committees and Governors Cabinet members has been steadily increasing. The demand for Governance focused analytics to support IT Investment Management decisions throughout state government is clearly gaining increasing importance.

There is a business need to leverage existing governance applications including CETR, Archer, and CTP to provide needed information to support IT Investment Management and Program/Project Management and oversight capabilities within the executive branch. The objective is to develop an integrated approach that provides the needed information to support IT Investment Management and Program/Project Management and oversight capabilities within the executive branch. Web enabled and business configurable reporting; ability to mine data among multiple sources along with mobile computing is required. Projected timeframe for action is anticipated in 2016 and 17.

BRnT Consolidated Asset Inventory**BRT Type:** Business Requirement for New Technology**Date Submitted:** 9/2/2014**Mandate:** No**Mission Critical:** Yes**Description:**

There several executive agency inventories of solutions and related data maintained by VITA. None of them, nor any combination have sufficient information to identify overall solution risk, architectural compliance, and solution lifecycle management or to perform infrastructure service modeling. The intent is to expand the initial implementation of Archer to include CETR and AMR (both with extended capabilities). Projected timeframe for action is anticipated from FY 2015 through 2017 with requirements gathering occurring in 2015.

BRnT data analytics tools to analyze and report on key data managed by VITA**BRT Type:** Business Requirement for New Technology**Date Submitted:** 3/24/2015**Mandate:** No**Mission Critical:** No**Description:**

There is a need across the organization for data analytics tools to analyze and report on key data managed by VITA. This includes but is not limited to the following data/initiatives:

Revitalization - Customer Insight analysis and reporting on VITA Customer data

CTP - Analysis and reporting on agency strategic plans to determine opportunities for promotion of new and shared services

BRnT Improve Commonwealth Technology Portfolio (CTP) Services to Agencies and Stakeholders**BRT Type:** Business Requirement for New Technology**Date Submitted:** 2/12/2015**Mandate:** Yes**Mission Critical:** Yes**Description:**

As the Commonwealth's ITIM and project management practices have matured and improved, commensurate incremental enhancements to the Commonwealth Technology Portfolio (CTP) Tool have vastly increased its size and complexity resulting in increasing system performance issues and outages. The following business related functions are embedded in the tool:

- IT strategic planning, governance and oversight functions and approvals for Commonwealth project management oversight;
- Project management functions for individual project managers;
- Agency procurement requests;
- Specialized quarterly and annual Commonwealth portfolio reporting;
- Document repository; and
- Project management toolkits.

This project will reduce the size and complexity of the CTP by migrating selected functionality from Oracle PPM (current CTP) to more suitable tools with the objective of maintaining a functionally integrated solution.

The purpose of this request is to correct and improve the performance of the Commonwealth Technology Portfolio (CTP), which supports the oversight and governance of IT projects and investments. The Commonwealth is nationally recognized in both the public and private sectors for maintaining a successful

oversight and governance program over IT projects and investments, with only three failed projects in the past 10 years, in sharp contrast to often-quoted IT industry benchmarks of failure rates of 50%. In order to continue to provide the oversight and governance support necessary to maintain this success, the current performance problems with the CTP must be addressed.

If this project is not done, the size and complexity of the CTP will continue to grow and system performance issues and outages will continue. The following users will continue to be adversely affected: Project Management Division Analysts, Commonwealth Project Managers, Commonwealth CIO, Money Committees, Governor, Governor's Cabinet, VITA's Executive Leadership Team.

Enhancements to the CTP will also expand the abilities of the oversight and governance group to address new demands while increasing work capacity. In addition, expansion of the CTP services will provide executive leadership with the flexibility to address multiple scenarios and views as they determine the best solution for the Commonwealth once the current IT Infrastructure Partnership contract expires.

BRnT Internal Portfolio and Resource Management Solution

BRT Type: Business Requirement for New Technology

Date Submitted: 8/20/2014

Mandate: No

Mission Critical: No

Description:

A key business need internal to VITA is the ability to manage a portfolio of initiatives, track time and manage resource allocations across the portfolio. The agency will develop best practice guidelines and process definitions for implementing portfolio and resource management. These requirements will be used to procure a tool to automate the management of the portfolio, track time and report progress.

BRnt Land Cover GIS Data Development

BRT Type: Business Requirement for New Technology

Date Submitted: 12/8/2014

Mandate: Yes

Mission Critical: No

Description:

Land Cover GIS data describes human and natural characteristics of the surface of the earth into standard classification themes. Examples include pervious and impervious surfaces, forest cover, agricultural use, and wetlands. It is an essential first step in identifying patterns to aid in stormwater management best management practices.

BRnT Next Generation 9-1-1

BRT Type: Business Requirement for New Technology

Date Submitted: 9/9/2014

Mandate: Yes

Mission Critical: Yes

Description:

The current E-911 network is built upon analog, voice circuits with little to no ability to process data. As the world of telecommunications has shifted to processing data, the focus of the E-911 industry has slowly shifted to replacing the legacy network with an Internet-Protocol (IP)-based network. This new approach has become

known as Next Generation 9-1-1 (NG9-1-1). NG9-1-1 is comprised of managed IP networks, applications, and databases that replicate traditional E9-1-1 features and functions and provide additional capabilities such as text-to-911. NG9-1-1 is designed to provide access to emergency services from all connected communications sources, and provide multimedia data capabilities for 9-1-1 centers and other emergency service organizations. In 2009, the E-911 Services Board provided funding for four NG9-1-1 demonstration projects in the Tidewater, Southside, Southwest and the New River Valley regions of the Commonwealth. The Board is undertaking a comprehensive feasibility study that will provide recommendations for a single, statewide approach to NG9-1-1 in the Commonwealth.

BRnT Supplier Reporting System

BRT Type:	Business Requirement for New Technology
Date Submitted:	8/28/2014
Mandate:	Yes
Mission Critical:	Yes

Description:

Provide an automated solution for suppliers to report sales and IFA payments due to VITA. These IFA payments are the primary funding source for centralized IT supply chain management. In addition EO #20 requires that all contractors meet the SWaM participation goals as agreed to in their contracts. This application assists VITA Supply Chain Management in tracking compliance.

BRnT Telecommunications Expense (Management) and Billing Solution (TEBS)

BRT Type:	Business Requirement for New Technology
Date Submitted:	2/11/2014
Mandate:	No
Mission Critical:	Yes

Description:

The Telecommunications Expense (Management) and Billing Solution (TEBS) project will procure and implement a modern, integrated, user-friendly telecommunications expense management and billing solution. The TEBS project is for the Virginia Information Technologies Agency (VITA). The project is sponsored by VITA's Director of Finance and Administration. TEBS stakeholders include Telco vendors, agency customers, VITA, and Northrop Grumman. The TEBS solution is expected to create additional categories of stakeholders to include (Budget, Partnership Expense Management and Recovery (PEMR), Customer Relationship Management (CRM), Customer Account Managers (CAMS), Telco Services, Billing, Customers, Vendors, Telco Reconciliation).

The goal of the TEBS project is to replace the 30 + year old mainframe Telecommunications Inventory Billing System (TIBS) that currently supports VITA's Telecommunications Service Delivery with a modern integrated, user-friendly system that supports all of the existing TIBS functionality and providing additional telecommunication expense functionality.

VITA will provide the functional leadership for the project with participation from agency personnel who will use the TEBS system. Additionally, VITA and agency personnel will participate in the requirements definition of the TEBS project to help determine the technological approach (in-house options, outsourcing, SaaS, COTS, etc) for a TEBS solution.

The proposed solution will incorporate Telecommunications Expense Management. This is an integrated approach that extends beyond transaction processing to cover all aspects of telecommunications services to include: sourcing management, ordering and provisioning and user support, inventory management, invoice management, usage management, dispute resolution and executive information and decision support.

Deloitte - Security auditing services	
BRT Type:	Business Requirement for New Technology
Date Submitted:	1/10/2017
Mandate:	Yes
Mission Critical:	Yes
Description:	
CSRM has engaged Deloitte to perform IT Security audits for us while the IT Security Audit team is being built.	
VITA IT Sourcing BReT	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/19/2016
Mandate:	
Mission Critical:	
Description:	
<p>Messaging BReT: VITA is initiating disentanglement from NG messaging services in 2016. Messaging Services for email, enterprise collaboration services, and mobile device management are required for 282 users in our agency. We also have applications that have hooks into messaging services which will not need to be tested since the Outlook client will not change. We will be implementing GASMO which will allow user to continue to use Outlook with Google.. Workplace Collaboration Services (VITA provided SharePoint) VITA uses WCS SharePoint. We have 119 applications serviced via AirWatch which will need remediation.</p> <p>IBM Mainframe BReT: VITA is initiating disentanglement from NG IBM Mainframe services in 2016.VITA has 2 number of applications on the IBM which will need to be migrated and tested during this transition.</p> <p>Server/storage (including housing of equipment) BReT: VITA is initiating disentanglement from NG servers and storage. VITA has 249 number of servers which will need to be migrated and tested during this transition. 85 will be affected by this move and will need to be tested.</p> <p>Authentication/directory services BReT: VITA has 15 number of applications which will need to be migrated and tested during the authentication/directory services transition. Number of users (internal and external) are 282 internal and unknown external.</p> <p>End user computing BReT : VITA has 17 number of desktops and 303 number of laptops, 29 tablets and 15 network printers which will need to be migrated.</p> <p>Data networks BReT : VITA no (0) networks that are not mpls whichwill need to be migrated.</p> <p>Voice Networks BReT: VITA has 294 UCaaS phone lines and 0 other phone lines which will need to be migrated.</p> <p>Cloud Computing BReT: <insert agency name here> is investigating moving <X> number of applications to a Cloud services vendor. The business reason for the move is to <reduce costs; increase efficiencies; reduce IT agency footprint; etc.>. Applications <are/are not> cloud ready. Agency <will/will not> need to bring in outside consulting to assess what needs to be done to the applications and supporting infrastructure in order to become cloud</p>	

ready.

VITA does anticipate that it will move some applications to a Cloud Services Vendor, but it has not yet identified which applications will be considered.

Security Services BReT:

To meet Commonwealth Security requirements, VITA will engage VITA's Shared Security Services/procure outside security services from an outside vendor utilizing DPB funds.

Internet Usage BReT:

VITA projects that internet usage will increase, but we have yet to determine an estimate of the increase. Some examples of why internet usage might increase are as follows: an increase use of video streaming, an increase in user access to the internet, etc. Much of the increase will be determined by the number of applications moved to the Cloud.

Report Title: Appendix A 16 - 18 Report

Agency: Virginia Information Technologies Agency (VITA) Date: 7/24/2017

Agency Head Approval: No

Budget Category: Major Projects				
IT Infrastructure Services (ITIS) Program				
Appropriation Act/Funding Status			Investment Business Case Approval -	
The ITIS Program is the effort to transition VITA out from the NG IT services contract, and into a multi-supplier IT services strategy. The program consists of the work to Disentangle, Source, Transition, and hand off to Ongoing Operations. Once all of the services have transitioned off of NG and on to the new supplier, the ITIS Program will be complete.				
Planned project start date:	9/2/2016	Planned project end date:	10/1/2019	
PPEA Involvement:	No			
Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$100,000,000	\$0	\$100,000,000	
Estimated project expenditures first year of biennium:	\$25,000,000	\$0	\$25,000,000	Non-general - State
Estimated project expenditures second year of biennium:	\$25,000,000	\$0	\$25,000,000	Non-general - State
Funding Required:	Total	General	Nongeneral	Nongeneral Funding Source
Funding required for first year of biennium:	\$25,000,000	\$0	\$25,000,000	Non-general - State
Funding required for second year of biennium:	\$25,000,000	\$0	\$25,000,000	Non-general - State
Service Area			Weight	
There are no service areas for this project.				
There are no procurements for this project.				
Mainframe Services Project				
Appropriation Act/Funding Status			Project Initiation Approval -	
The CIA the commonwealth has with Northrop Grumman is ending in 2019. This investment is specific to mainframe services as provided in that agreement. The intent is to replace the supplier of mainframe services with one or more new suppliers. The investment in this project is to make that change in suppliers and the corresponding provider of mainframe services.				

Implementation Process. As part of the Implementation Plan the initial implementation schedules have been created and will be managed as separate, but interdependent, projects within the Implementation Plan: Mainframe, Network, Storage, Database Administration (DBA), Backup and Recovery (BUR), Disaster Recovery (DR), Security, Cross Functional, and Service Desk (for Levels 2 and 3). All changes to implementation schedules will be given to the TPMO for review before being presented to VITA for final approval. The implementation schedule will consolidate all implementation schedules for individual components of the solution into an integrated master schedule (IMS).

Implementation Phases

The phases described below will yield the following Critical Deliverables:

- Mainframe Services Detailed Implementation Plan (1 month from Commencement Date) – This documents the VITA specific technical details each service area has developed, with all of the updates gained from knowledge transfer, discovery, and shadowing of the current operations. This lays out specific technical execution steps leading up to, during, and immediately after the Commencement Date and Mainframe Services Operating on the Supplier's platform events.
- Mainframe Services Implementation Readiness Plan (1 week prior to Commencement Date) – Provides a report on the progress against the schedule and issues in executing the Mainframe Services Detailed Implementation plan, to be used as the document going into Governance gateways such as an Operational Readiness Review.

Other Critical Deliverables will be produced during the overall effort that will be incorporated into the Mainframe Services Detailed Implementation Plan.

Phase 0 (Months 0–3), Project Startup. First, as described for the methodology, the initial planning and governance are foundational to success for implementation projects, and some will begin prior to contract award: Program office with strong execution mechanisms to enable implementation progress and maintain alignment with the vision and plan

- Conducting an Accelerated Delivery Planning (ADP), including:
 - Governance, including communication and escalation paths and risk and issue management
 - Clarity of roles and responsibilities
 - Finalized implementation schedule
 - Project Management Plan
 - Critical Deliverable Acceptance Process for deliverables for the remainder of the project
 - Mainframe Services Detailed Implementation Plan
 - Implementation activities based on the incumbent and stakeholder feedback from the initial knowledge transfer discussions
 - Aligned to the approved final schedule
 - Includes all service areas: Mainframe, Network, Storage, DBA, Backup and Recovery, Disaster Recovery, Security, Cross Functional, and Service Desk (Level 2 and 3)
 - Will include activities for application owners to provide test plans and perform mock tests in the new environment
- Initial Technology Plan
 - Aligned to the approved final schedule and Mainframe Services Detailed Implementation Plan
 - Based on initial knowledge transfer for any known ongoing projects
 - Confirmation of technology for replication and to begin provisioning of the new service
 - Initial refresh and software currency plans, based on initial knowledge transfer

Phase 1 (Months 1–3), Commencement of VITA Mainframe Services. Next, make certain that there is an urgency and priority to completely transfer day-to-day operational responsibilities for current VITA operations and with minimal impact to the Agencies:

- Expert knowledge transfer and shadowing of current operations
- Create Mainframe Services Implementation Readiness Plan
- Create the Policy and Procedures Manual – Initial Draft
- Create the Service Performance and Reporting – Phase 1
- Create the Initial Security
- Create initial Complete Asset Inventory and CMDB Data Population
- Create the Request and Fulfillment Implementation Report
- Commencement of VITA Mainframe Services
- Operational support for the current VITA Mainframe Services hosted at the CESC begins as of the Commencement Date, marked by the Commencement of VITA Mainframe Services milestones

Phase 2 (Months 1–5), Design and Configure Supplier Mainframe Services. In parallel with the Assumption

of Current Operations, the pre-implementation activities will progress, including the design and configuration of the Supplier Mainframe Services:

- Design and configure the new Supplier Production and Disaster Recovery (DR) Platforms specific to VITA
- Establish Replication of VITA Data to Supplier Platform
- Create the first Annual Refresh and Currency Plan based on the design of the target environment
- Develop the first Annual Technology Plan to confirm that all infrastructure is in place to support the testing of operations and identify known future changes and upgrades
- Develop the first Annual Disaster Recovery Test Plan based on the design of the new DR environment.
- Create the Annual Security Plan
- Update the Policy and Procedure Management Manual/Service Management Manual Quarterly Update

Phase 3 (Months 5–7), Replicate and Migrate. Finally, VITA data is replicated to the new environment, the production and DR simulations are tested, and VITA is migrated to the new SUPPLIER platform:

- Transfer VITA data to the Supplier Mainframe Services solution to establish a baseline infrastructure that is specific to VITA.
- Complete the Network Setup tests for the core network, hardware, and software configuration components as identified in the Mainframe Services Implementation Readiness Plan
- Perform mock production tests in coordination with the tests being conducted by application teams for COV Agencies
- Replicate VITA data to the Disaster Recovery Platform and test Supplier Disaster Recovery processes.
- Complete the first Annual CMDB Reconciliation to include the new Supplier Production and DR Platforms
- Establish and document all processes for request and fulfillment implementation adapted to the new environment.
- Create the Policy and Procedures Manual – Final Document
- Complete the final migration of live production services to the Supplier platform
- Update Service Performance and Reporting – Phase 2
- Conduct the Operational Readiness Review with VITA for approval to transfer operations to the Supplier platform based on the status of completion of activities in the Mainframe Services Detailed Implementation Plan, and updates to the Mainframe Services Implementation Readiness Plan
- Migrate operations based in the VITA CESC to the Supplier platform across all service areas: Mainframe, Network, Storage, DBA, Backup and Recovery, Disaster Recovery, Security, Cross Functional, and Service Desk (Level 2 and 3)

Phase 4 (Month 7), VITA Mainframe Service Operating on Supplier Platform. Initiate decommissioning activity of existing Services to cleanly disengage all system functions, monitoring, network, and storage, wipe storage, provide information for final asset disposition, and begin closedown of the implementation project—ongoing operations begin. This includes Implementation of Main Processes, Migration, and Application Testing and Migration.

The main processes to be transitioned for the VITA Mainframe Services will include:

1. Operations
2. Production Control and Scheduling
3. Technical Support
4. Database Support and Management
5. Online Storage and Backup Management
6. User Support
7. Backup and Recovery Services
8. Middleware Administrative Services
9. Intrusion Prevention
10. Systems Network Architecture (SNA) and TCP/IP Technical Support
11. Change Management

Planned project start date:	9/27/2016	Planned project end date:	8/12/2017
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PPEA Involvement:	No
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Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate)	\$12,743,631			

at completion):				
Estimated project expenditures first year of biennium:	\$18,150,000	\$0	\$18,150,000	
Estimated project expenditures second year of biennium:	\$9,350,000	\$0	\$9,350,000	

Service Area	Weight
There are no service areas for this project.	
There are no procurements for this project.	

Managed Security Services Project

Appropriation Act/Funding Status	Investment Business Case Approval -
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The project approach is to publish an RFP and utilize the procurement processes in selecting the most appropriate supplier of Managed Security Services. Once a supplier has been selected and approved VITA will award a contract with the winning supplier. VITA and the selected supplier will implement the supplier's recommended solution using a jointly developed detailed project plan. The project approach is based on the phases in the Commonwealth of Virginia Project Management Standard —initiate, plan, execute in a monitored and controlled environment, communicate, report, and closeout. The Managed Security Services project will be milestone driven with milestones identified in the RFP as well as those milestones identified as part of the joint detailed project plan and schedule.

The Managed Security Service area is intended to be an integrated service consumable by VITA and Customers. The requirements that will be included as part of the Services are classified into the following categories:

- 1.) Information Security Program - This category includes information about the general information security program requirements that the selected security supplier must satisfy. This component of the security program includes some of the requirements for integrating with suppliers in the Managed Environment. The security Supplier will need to collect, monitor, and integrate multiple systems and data sources with the Multi-Service Integrator as well as other appropriately identified suppliers. The Supplier is also required to provide the cross-functional services as set forth in the procurement RFP which are common to all Service Tower Suppliers and support integration in the Managed Environment.
- 2.) Security Services – This category includes the detailed requirements for the following security related areas:
 - a.) Threat Management – Threat management includes the integration and monitoring of data from all components of the Managed Environment for analysis and review of the environment. The data is reviewed for security issues and when a compromise of a security control occurs there are resources that will remediate the situation and restore services back to functioning.
 - b.) Perimeter Security - This category includes requirements pertaining to security controls between the internet and other external connections. These security controls are designed to protect the internal COV network environment from threats originating outside of the Customer networks and Managed Environment.
 - c.) Internal Network Security - This category includes the security requirements for protecting the internal network which includes communication between devices within the Customer networks and the Managed Environment.
 - d.) End Point Security - This category addresses requirements for end points in the Managed Environment. These controls may extend to any device including but not limited to servers, desktop, mobile devices, etc.
 - e.) Application Security - Application security controls focus on applying security measures that impact applications. The controls are intended to provide additional security for circumstances when the security controls are needed as well as when there are compensating controls required.
 - f.) Data Security - Data security includes security controls that are intended to protect Commonwealth data. Data may traverse or be stored both within and outside the Managed Environment. The controls included in this section focus on protecting the data itself with controls such as encryption.
- 3.) Physical Security - Physical security controls are intended to protect the facilities where the hardware, systems, and other tangible components of the Managed Environment are located.

The project will deliver the following:
 Integrated Project Schedule
 Detailed Implementation Plan
 Implementation Readiness Plan
 Security Service Manual
 Service Management System/Tools
 Service Performance and Reporting framework
 Initial Security Plan
 Initial Technology Plan
 Complete Asset Inventory and updated CMDB
 Service Catalog to include service request and fulfillment
 Service Management System
 Service improvement plan
 Annual Technology Plan Review Process
 Annual Refresh and Currency Plan
 Disaster Recovery Plan with Annual Reviews
 Integrated Capacity Plan
 Facilities (e.g., Joint Operations Center, Service Desk)
 Financial Management Plan
 Program Management Office
 Risk Management Framework
 Service Management Manual
 Operations Implementation Manual
 Operations playbook
 Document control program

Planned project start date:	7/1/2017	Planned project end date:	5/31/2018
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PPEA Involvement:	No
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Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$8,287,331	\$0	\$8,287,331	
Estimated project expenditures first year of biennium:	\$0	\$0	\$0	
Estimated project expenditures second year of biennium:	\$2,707,801	\$0	\$2,707,801	Non-general - State

Funding Required:	Total	General	Nongeneral	Nongeneral Funding Source
Funding required for first year of biennium:	\$0	\$0	\$0	
Funding required for second year of biennium	\$2,707,801	\$0	\$2,707,801	Non-general - State

Service Area	Weight
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There are no service areas for this project.	
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There are no procurements for this project.	
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Messaging Services Project

Appropriation Act/Funding Status**Project Initiation Approval -**

This project transitions from the legacy messaging and directory services provider(s) to Tempus Nova, the messaging services supplier for email, enterprise collaboration services, and mobile device management for the required Commonwealth 55,000+ users and other public bodies. The project will be complete when VITA has transitioned to the ongoing Operations and Support mode with the winning supplier. Project Deployment Approach: Tempus Nova recommends a phased approach, which is endorsed by the Google Deployment Team as a best practice and results in a more successful transition to the Google Apps solution. Tempus Nova recommends three (e.g., Phase I Core IT; Phase II Early Adopters; Phase IIIa, IIIb, and IIIc Remaining Users) well planned deployment phases, each addressing a specific group of users: Core IT, Early Adopters, and Remaining Users. The three transition phases are described below. Phase I (Core IT Users): Phase I Core IT is comprised of a small user group with approximately 250 IT users from agencies typically with more than 100 employees to help confirm technical components are integrated and the system is working properly. The purpose of this phase is to ensure all technical components are working properly via a proof of concept (POC) designed to validate results, uncover risk, identify issues, solve problems and develop solutions. Phase IIa & IIb (Early & Late Adopters): Phase II Early Adopters are a medium-sized group comprised of approximately 2,500 representatives across multiple agencies functioning in different roles of formal and informal influence. Early Adopters should represent a microcosm of the Commonwealth's user demographic (e.g., this phase should include users from all the agencies going Google in VITA). Ideal candidates include business users, functional owners, Executives, Executive Assistants and other users. Phase IIb Late Adopters are a smaller group comprised of ~500 representatives across multiple agencies, including ~200 VIP users. Tempus Nova strongly recommends Early Adopters include representatives from each agency. The purpose of this phase is to test the training and change management efforts in earnest, prepare the end user support infrastructure, complete systems integration and update documentation. This approach empowers the Commonwealth to make adjustments to the transition strategy on a small scale before exposing it to the larger user community in Phase III. Transition Phase IIIa, IIIb, and IIIc All Remaining Users (~20,000 users for each sub phase): Phase IIIa, IIIb, and IIIc includes remaining users at the Commonwealth and agencies. This last series of phases will migrate all remaining users who will be informed and prepared for the change in advance. The purpose of this phase is to concentrate migration, training and support into a single effort which lowers the cost often associated with long term cyclical enterprise migration projects. This is accomplished by using Phase I and Phase II as a proof of concept and dress rehearsal respectively; leveraging feedback from the Core IT and Early Adopters phases as success metrics and applying them as lessons learned for Phase IIIa, IIIb, and IIIc.

Deployment Migration & Approach for SharePoint Services Tempus Nova will work with VITA to identify SharePoint Administrators and Site Owners to provide a technical assessment of the current SharePoint architecture, covering both content and infrastructure. Migration Approach · Email Migration – Exchange: Tempus Nova will utilize the free Google Apps Migration for Microsoft Exchange (GAMME) tool to migrate the ~59,000 mailboxes/users from Microsoft Exchange to Google Apps. GAMME migrates mail, calendar, and contact data, as well as PST files to Google Apps. Tempus Nova has provided a per user price for email migration from Exchange in Exhibit 4A. · Email Migration – Non-Exchange Email System: Depending on the non-exchange email system (i.e., GroupWise), Tempus Nova will setup and configure the CloudMigrator migration tool to migrate mail, calendar, and contact data. · Self Service & Administratively Managed Migration of Local PST Archives: Tempus Nova will create the self service PST migration instructions and test the results with the GAMMO tool. GAMMO (Google Apps Migration for Microsoft Outlook) migrates local end user PST files to Google Apps. Tempus Nova will provide instructions and training on the self service PST migrations. Tempus Nova will also support VITA by providing instructions and trainings on how to ingest PSTs on behalf of VITA users, whether bulk ingestion or VITA administratively managed PST migrations. · HMA Migration: Tempus Nova will migrate HMA data VITA will export HMA data to a central location in PST file format. Tempus Nova will utilize the free Google Apps Migration for Microsoft Exchange (GAMME) tool to migrate this data. Once the HMA data is in PST file format, Tempus Nova will administratively perform the PST migrations, which is a price per mailbox, as described in Exhibit 4A. · SharePoint Migrations: Tempus Nova will work with identified VITA SharePoint administrators and Site owners to perform a technical assessment of the SharePoint environment as described above in Deployment Migration & Approach for SharePoint Services and below in our week by week work plan. Integrated Project Teams (IPTs) Tempus Nova will leverage people with subject matter knowledge in various work streams from Tempus Nova, Google, VITA representatives and the Commonwealth during the Planning Phase. These workstreams will function in multiple groups called Integrated Project Teams (IPTs) whose members are responsible for providing subject matter expertise in their respective areas, demonstrating leadership, making decisions, identifying issues and developing solutions. Change Management Approach Tempus Nova will use a structured and strategic change

management approach to engage stakeholders, communicate with users and prepare the Commonwealth for their transition to Google Apps. Specific Solution Tempus Nova is a Google Apps Premier Partner and Approved Reseller. They are proposing a cloud based Google solution to provide the Commonwealth with a robust, cost effective solution to meet the requirements of the Messaging, Mobile Device Management and Related Services (MDRS) RFP. Tempus Nova will be utilizing the following strategic relationships to support the Commonwealth's Email Services Area requirements: Virtru (CJIS Compliance) - Tempus Nova is proposing Virtru's CJIS compliant email encryption product for VITA users that require CJIS compliance. AODocs (Workflow & SharePoint to Google Drive Integration): Tempus Nova is partnering with AODocs to provide the COV with a document management solution that provides VITA users with the power of enterprise document management with the ease of Google Drive. Esna (VoIP) - Tempus Nova is proposing Esna's OfficeLinx for Google Apps to integrate with VITA's VoIP systems (e.g., Cisco Unity Connection). Esna is a leading provider of unified communications and collaboration inside business applications (i.e., Google Apps). OfficeLinx is a unified communication platform that extends real time communication and collaboration across Google Apps. Okta – Okta is an enterprise grade identity management service, built from the ground up in the cloud and delivered with an unwavering focus on customer success. Okta is offering the following products to VITA:

- Okta's SSO for Unlimited Apps enables users to access applications and resources with a single username and password. Okta automatically authenticates based on the identity data stored for each user.
- Okta's Universal Directory (UD) is a flexible, cloud-based user store that will enable VITA to customize, organize, and manage any set of user attributes.
- Okta's Multi-factor Authentication (MFA) works with any SAML-enabled SSL VPN, including Juniper SA and Cisco SA and enables comprehensive, seamless authentication across all enterprise applications accessed from the public internet, whether cloud-based, in the DMZ, or protected by a VPN. Customers mandated Executive Agencies Benefits Commonwealth resources can be allocated away from email system maintenance to more business critical applications, which will change the way information is shared and decisions are made. A Google solution will remove the traditional barriers that prevent the COV from collaborating internally with other agencies. End users will have virtually unlimited storage space for email, calendar, contacts and documents. It will reduce the support burden of running thick desktop clients and the administrative overhead of maintaining and upgrading higher cost systems. IT resources will no longer need to deploy patches, manage updates, handle security issues, respond to growing needs for more storage, and conduct massive training efforts associated with those upgrades.

Planned project start date:	8/3/2016	Planned project end date:	3/31/2018
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PPEA Involvement:	No
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Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$7,212,051			
Estimated project expenditures first year of biennium:	\$0	\$0	\$0	
Estimated project expenditures second year of biennium:	\$0	\$0	\$0	

Service Area	Weight
There are no service areas for this project.	

There are no procurements for this project.

Multisourcing Service Integrator Services

Appropriation Act/Funding Status	Project Initiation Approval -
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VITA plans to established a multi-provider sourcing model, or integrated services platform to deliver certain IT services to VITA and the other Customers within its IT environments. This project will work toward the common goal of providing uninterrupted, secure, high quality services to Customers dependent on VITA's multi-supplier environment, ensure MSI and Service Tower Suppliers (STS) perform their services and interact and cooperate with each other within the Managed Environment in a manner that first considers the best interests of the Commonwealth, is grounded in the Information Technology Infrastructure Library (ITIL) framework and focused on accountability, boundaries, and consistency while maturing delivery through continual improvements in cost effectiveness, service quality and Customer experience, replaces the existing cross-functional services provided to the Commonwealth by the Comprehensive Infrastructure Agreement (CIA), and supports ITISP Relational Governance and implements highly effective Operational Governance.

The project approach is to publish an RFP solicitation with proposals due in November 2016. Once the proposal solutions has been approved and the contract signed, VITA and the selected supplier will implement the solution using a jointly developed detailed project plan.

The approach is also based on the phases in the Commonwealth of Virginia Project Management Standard—initiate, plan, execute in a monitored and controlled environment, communicate, report, and close out.

MSI Services project will be milestone driven with milestones identified in the RFP and the MSI project schedule.

The project will deliver the following:

- Service Management System/Tools
- Facilities (e.g., Joint Operations Center, Service Desk)
- IT Financial Management System
- Program Management Office
- IT Service Portal
- Service Catalog
- IT Service Continuity
- Continual Service Improvement
- Risk Management
- Service Management Manual
- Operations Implementation

Planned project start date:	10/27/2016	Planned project end date:	6/30/2019
PPEA Involvement:	No		

Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$174,000,000			
Estimated project expenditures first year of biennium:	\$500,000	\$0	\$500,000	
Estimated project expenditures second year of biennium:	\$34,800,000	\$0	\$34,800,000	

Service Area	Weight
Infrastructure Services PMO Projects	Primary

Project Related Procurements

Multi Sourcing Integrator (MSI) Procurement

Procurement Description:	VITA is initiating disentanglement from NG's Service Desk and Cross Functional towers in 2016. The MSI will be responsible for providing Service Desk, Incident Management and Cross Functional services in support of the multi-vendor
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model.
The MSI will manage the entire Managed Environment and the various Service Tower Suppliers in their provision of services within the Managed Environment for the benefit of the Commonwealth, VITA and Customers.

Planned Delivery Date: 5/31/2017

Server/Storage Sourcing

Appropriation Act/Funding Status **Investment Business Case Approval -**

VITA is initiating disentanglement from NG's Server/Storage tower. Server/Storage will be responsible for providing the infrastructure, which underpins the services used by agencies and citizens of the commonwealth. The project will include the replacement of existing services such as Windows/Unix servers (physical/virtual), storage (DASD, SAN, high availability), etc.
The IT infrastructure services contract with Northrop Grumman which started in 2006 is ending in 2019; a replacement methodology must be established. As a result of a consulting engagement with extensive stakeholder input in 2015, VITA has elected to use a multi-vendor approach to provide these IT infrastructure services.

Planned project start date: 5/15/2017 Planned project end date: 7/1/2019

PPEA Involvement: No

Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$79,935,363	\$0	\$79,935,363	
Estimated project expenditures first year of biennium:	\$0	\$0	\$0	
Estimated project expenditures second year of biennium:	\$22,414,925	\$0	\$22,414,925	Non-general - State

Funding Required:	Total	General	Nongeneral	Nongeneral Funding Source
Funding required for first year of biennium:	\$0	\$0	\$0	
Funding required for second year of biennium:	\$22,414,925	\$0	\$22,414,925	Non-general - State

Service Area **Weight**
There are no service areas for this project.
There are no procurements for this project.

Telecommunications Expense (Management) and Billing Solution (TEBS)

Appropriation Act/Funding Status **Project Initiation Approval - Fully Funded NGF 100%**

The Telecommunications Expense (Management) and Billing Solution (TEBS) project will procure and

implement a modern, integrated, user-friendly telecommunications expense management and billing solution. The TEBS project is for the Virginia Information Technologies Agency (VITA). The project is sponsored by VITA's Executive Director of Finance and Administration. TEBS stakeholders include Telco vendors, agency customers, VITA, and Northrop Grumman. The TEBS solution is expected to create additional categories of stakeholders to include Budget, Partnership Expense Management and Recovery (PEMR), Customer Relationship Management (CRM), Customer Account Managers (CAMS), Telco Services, Billing, Customers, Vendors, Telco Reconciliation).

The goals of the TEBS project are to replace the 30 + year old legacy mainframe Telecommunications Inventory Billing System (TIBS) and the Vendor Invoice Payment & Reconciliation (VIPR) applications with a modern, web-based, integrated, user-friendly system that supports all of the existing TIBS and VIPR functionality and provide additional telecommunication expense functionality.

VITA will provide the functional leadership for the project with participation from agency personnel who will use the TEBS system. Additionally, VITA and agency personnel will participate in the requirements definition of the TEBS project to help determine the technological approach (in-house options, outsourcing, SaaS, COTS, etc.) for a TEBS solution that is 1) compliant with all applicable standards (security, data, project management, etc.), 2) consisted with VITA's business and technical architecture and technology roadmap, 3) and which leverages Commonwealth enterprise shared services as appropriate.

The proposed solution will incorporate Telecommunications Expense Management. This is an integrated approach that extends beyond transaction processing to cover all aspects of telecommunications services to include: sourcing management, ordering and provisioning and user support, inventory management, invoice management, usage management, dispute resolution and executive information and decision support.

Planned project start date:	2/26/2015	Planned project end date:	9/15/2017
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PPEA Involvement:	No
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Estimated Costs:	Total	General Fund	Nongeneral Fund	Nongeneral Funding Source
Project Cost (estimate at completion):	\$3,689,610			
Estimated project expenditures first year of biennium:	\$1,674,436	\$0	\$1,674,436	
Estimated project expenditures second year of biennium:	\$0	\$0	\$0	

Service Area	Weight
136 VITA 89903 Accounting and Budgeting Services	Primary
BRnT Telecommunications Expense (Management) and Billing Solution (TEBS)	Primary

Project Related Procurements

TEBS Business Analyst 2013-2014

Procurement Description:	The purchase of extended services for a CAI contract resource to continue to provide assistance to the Telecommunications Expense (Management) and Billing Solution (TEBS) project team in the planning, RFP development, proposal evaluation, and contract award phases of the TEBS project.
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Planned Delivery Date:	6/30/2014
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Telecommunication Expense (Management) Billing Solution APR

Procurement Description:	The goal of this procurement is to procure VITA-hosted licensed software and
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implementation services for a modern, integrated, user-friendly Telecommunications Expense Management (TEM) and Billing Solution (TEBS) to replace 30+ year old legacy mainframe billing and server-based payment reconciliation systems. VITA is interested in procuring proven commercial off-the-shelf (COTS) software that meets the requirements which will be specified in an RFP and the services required to implement the software. The new system will be a web-based, integrated, user-friendly application that supports VITA's existing functionality such as:

- Sourcing (management of state-wide telecommunications contracts)
- Ordering and provisioning (service catalog management etc.)
- Asset inventory and asset management
- Usage management (validation and optimization)
- Carrier payment (invoice reconciliation, VITA-carrier dispute resolution, accounts payable and cost allocations)
- Customer support (client organization and end-user)
- Re-billing to customers (accounts receivable, billing and customer- VITA dispute resolution)
- Reporting (transactional, operational, managerial, and executive information/decision support)

and provide additional telecommunication expense functionality. VITA anticipates the new solution will be an enterprise-wide application with over 1000 staff in over 800 customer entities to include state agencies, institutions of higher education, and participating localities.

VITA and its customers will use the new solution in new ways for new purposes. For example, customers will be able to employ the system to initiate their requests for telecommunications services, go on-line to track the status of orders, obtain their bill electronically and see their bill detail, and extract their organization's order, inventory and billing information for their own cost allocation purposes. The new solution should support the expected transition from using the various telecom technologies for communications to using them as smart platforms for conducting Commonwealth business.

The project is sponsored by VITA's Director of Administration and Finance. The scope of this RFP is intended to encompass all TEBS software, licenses, related tools, and services. The scope of services required for this part of the project includes all project management, system analysis, design, configuration, development, testing, implementation, and training material development and delivery required to implement the TEBS Solution. VITA will provide the functional leadership for the project with participation from agency personnel who will use the TEBS solution.

Planned Delivery Date:	12/31/2015		
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TEBS Project Manager

Procurement Description:	<p>The TEBS PM responsibilities include, but may not be limited to, the following activities:</p> <ul style="list-style-type: none"> • Accountable for the project as a whole; for the quality of its products, for staying on schedule and on budget. • Directs and manages TEBS project development from beginning to end in accordance with the TEBS PMP and component plans. • Works with stakeholders to define 24x7 requirements for operational support. • Defines TEBS project scope, goals and deliverables that support business goals in collaboration with senior management and stakeholders. • Develops TEBS project plans and associated communications documents. • Effectively communicates TEBS project expectations to team members and stakeholders in a timely and clear fashion. • Serves as liaison with TEBS project stakeholders on an ongoing basis. • Estimates the resources and participants needed to achieve project goals. • Drafts and submits budget proposals, and recommend subsequent budget changes as necessary. • Determines and assesses need for additional staff and/or consultants and
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make the appropriate recruitments if necessary during project cycle.

- Where required, negotiates with other department managers for the utilization of required personnel from within the agency.
- Sets and continually manages project expectations with team members and other stakeholders

Planned Delivery Date:	4/30/2016		
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Report Title: Appendix A 16 - 18 Report

Agency: Virginia Information Technologies Agency (VITA)

Date: 7/24/2017

Agency Head Approval:

No

Stand Alone Major Procurements

Procurement Name:	9-1-1 Data Analytics Procurement		
Procurement Description:	The E-911 Services Board needs to be able to analyze local call detail data for the purpose of assuring NG9-1-1 implementation does not negatively impact system performance. This is local data currently not accessible by the Board. The proposed procurement will provide a method for localities to share their data with the Board and will allow the Board to perform analytics		
Procurement Planned Start Date		Procurement Planned Completion Date	5/16/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Consultant Auditing Services		
Procurement Description:	The new Centralized IT Security Audit Services group in CSRMS will use the Auditing Services firm to perform IT security audits of certain IT systems/applications belonging to various agencies.		
Procurement Planned Start Date		Procurement Planned Completion Date	8/17/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	IT infrastructure IBM Mainframe Services		
Procurement Description:	VITA is currently planning to release an RFP for IBM Mainframe Services no later than early March that currently supports 10 enterprise agencies.		
Procurement Planned Start Date		Procurement Planned Completion Date	7/29/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	IT infrastructure Messaging Services		
Procurement Description:	Provide Messaging services for the COV. This is expected to be a 7 year contract. The cost includes the NG exit fee and the migration cost. VITA anticipates releasing an RFP for Messaging Services in mid to late February to support its approximately 55,000 users and other public bodies. This RFP will likely include email, enterprise collaboration services, directory services and authentication, and mobile device management. Respondents may propose services for one or multiple components of this RFP.		

Procurement Planned Start Date		Procurement Planned Completion Date	7/29/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Managed Security Sourcing Procurement		
Procurement Description:	<p>Managed security will be responsible for managing and maintaining security services that protect Commonwealth systems and data. The security implementation is designed to integrate technology and threat mitigation into all IT services offered by VITA for Commonwealth consumption. Each service established within the VITA service catalog has a corresponding security technology implemented to protect that service. Management of that technology along with implementation of information security oversight are included in the managed security services. The services are critical to ensuring the confidentiality, integrity and availability of Commonwealth data.</p>		
Procurement Planned Start Date		Procurement Planned Completion Date	10/2/2017
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Oracle Agency DR related Licenses Procurement		
Procurement Description:	<p>Oracle changed their licensing rules in 2014. Their change resulted in all tiers of VITA Disaster Recovery (DR) services being no longer covered by agency production licenses for WebLogic Suite and Oracle Database including RAC and Advanced Security.</p> <p>VITA worked with Northrup Grumman to identify all servers affected and confirmed the results with the agencies who use those servers. The Oracle change impacts 18 servers used by 5 agencies: DOA-Cardinal, VDOT, TAX, DPOR, VITA.</p> <p>The base discount that a Commonwealth agency receives on Oracle products is 43%. The full impact of Oracle's change is \$3,294,805.20 based on this discount by combining all 5 agencies' needs, VITA has been able to negotiate a 61% discount, which reduces the impact to \$2,254,340.40 (a savings of over 31%). The larger discount can save agencies over \$1.8 million over 5 years.</p>		
Procurement Planned Start Date		Procurement Planned Completion Date	3/11/2015
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Orthophotography Procurement Contract		
Procurement Description:	<p>Budget Code of Virginia directs the Virginia Geographic Information Network to acquire statewide high resolution aerial photography every four years. The procurement of this product allows VITA to provide this data for state and local government use as a primary base mapping product. It is used as the foundational product for Geographic Information Systems (GIS) in state and</p>		

	local governments.		
Procurement Planned Start Date		Procurement Planned Completion Date	12/1/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Procurement of services to develop geospatial data known as 'Land Cover'		
Procurement Description:	Land Cover GIS data describes human and natural characteristics of the surface of the earth into standard classification themes. Examples include pervious and impervious surfaces, forest cover, agricultural use, and wetlands. It is an essential first step in identifying patterns to aid in stormwater management best management practices.		
Procurement Planned Start Date		Procurement Planned Completion Date	1/5/2016
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	Server/Storage Sourcing Procurement		
Procurement Description:	VITA is initiating disentanglement from NG's Server/Storage tower in 2017, with an award expected to be made in 2018. Server/Storage will be responsible for providing the infrastructure, which underpins the services used by agencies and citizens of the commonwealth. The procurement will include the replacement of existing services such as Windows/Unix servers (physical/virtual), storage (DASD, SAN, high availability), etc.		
Procurement Planned Start Date		Procurement Planned Completion Date	11/1/2017
		Appropriation Act Status	
Service Area			Weight
BRReT - Server Services outsourcing initiative			Primary
Procurement Name:	Third Party Advisory Support for Infrastructure Services Transition FY17		
Procurement Description:	Specialized support services for disentanglement, procurement, transition related to IT infrastructure services currently with Northrop Grumman under the Comprehensive Infrastructure Services Agreement (CIA). Support services include planning and implementation, procurement, negotiations support, contract development, services platform support including integration and governance transition, financial analysis, general strategy, change and communications. This third party advisory firm has specific, applicable experience and expertise relative to recommends under consideration by the CIO on behalf of the Commonwealth.		
Procurement Planned Start Date		Procurement Planned Completion Date	8/2/2016
		Appropriation Act Status	
Service Area			Weight

BReT Potential Assets for Infrastructure Services under CIA		Primary	
Procurement Name:	Third Party Advisory Support for Infrastructure Services Transition FY18		
Procurement Description:	Specialized support services for disentanglement, procurement, transition related to IT infrastructure services currently with Northrop Grumman under the Comprehensive Infrastructure Services Agreement (CIA). Support services include planning and implementation, procurement, negotiations support, contract development, services platform support including integration and governance transition, financial analysis, general strategy, change and communications. This third party advisory firm has specific, applicable experience and expertise relative to recommendations under consideration by the CIO on behalf of the Commonwealth.		
Procurement Planned Start Date		Procurement Planned Completion Date	7/1/2017
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			

Stand Alone Non-Major Procurements

Procurement Name:	Contract extension Aaron Puritz		
Procurement Description:	Extending contract for Aaron Puritz for FY17 and FY18		
Procurement Planned Start Date		Procurement Planned Completion Date	4/18/2017
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			
Procurement Name:	VSP Criminal Justice Information Systems (CJIS) Infrastructure Assessment		
Procurement Description:	Perform a security assessment of the VSP IT systems		
Procurement Planned Start Date		Procurement Planned Completion Date	7/1/2017
		Appropriation Act Status	
Service Area			Weight
There are no service areas for this project.			