

Report Title: 2020 - 2022 IT Strategic Plan

Agency: 132 Department of Elections (ELECT)

Date: 12/3/2020

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 Department of Elections (ELECT) operates three primary applications, the statewide voter registration and election management system (VERIS), the electronic pollbook program (EPB) and the statewide campaign finance disclosure application (COMET). Additional applications support the operations of these primary applications and other administrative needs of the agency.

Over the prior biennium, the Department embarked on several significant initiatives to address key issues in these systems and improve elections in the Commonwealth. These efforts share a common approach of bringing control of core solutions within the agency in order to better support, maintain and improve these critical systems.

· List Maintenance - ELECT strives to make Virginia a national leader in the practices of list maintenance. This requires ongoing cooperation with many other states, including neighboring states, by sharing list information and voter registration data. This cooperation is streamlined through Virginia's participation in the following nationally-recognized voter file list maintenance partnership in the country: the Electronic Registration Information Center ("ERIC"). The partnership agreement for this organization ensures that the data is properly managed and places certain requirements on each partner state related to improving data quality. ELECT is currently mandated by the General Assembly to provide two

additional staff resources to maintain this program. The following is a link to the last four Annual List Maintenance Reports released by the agency: <http://www.elections.virginia.gov/resultsreports/maintenance-reports/>.

- VERIS Support - ELECT has successfully maintained control of VERIS in-house, thereby enabling the agency to support the solution going forward. Additionally ELECT has increased its efforts to minimize costs related to support. Relationships have been cultivated with vendors who provide competitive rates for skilled IT workers. As a result, ELECT is in a more advantageous position to negotiate with technology consulting firms.

- VERIS Improvements -ELECT's in-house support team has addressed significant VERIS system deficiencies. ELECT has applied over one hundred fixes and over 50 enhancements to the core solution, as well as numerous data and reporting fixes and enhancements over a 2-year period ending June 30, 2019. Further, updates to VERIS related to legislative changes are now implemented in alignment with the beginning of the corresponding fiscal year when the law becomes effective.

- Electronic Pollbooks - ELECT's IT staff continues to maintain this solution, thus , enabling the agency to more easily, cost-effectively and rapidly modify the solution as needed to meet the requirements of new laws and court rulings.

- Election Night Reporting - System fixes have been applied to improve performance.

- Online Voter Registration - the agency implemented improvements to make the process more user-friendly and to improve absentee ballot application processing. The solution is fully maintained by agency resources, enabling the agency to more easily, cost effectively and rapidly modify the solution as needed to meet the requirements of new laws and court rulings.

Agency efforts to improve technology solutions for voter registration and elections management have resulted in the following awards and recognition over the past 5 years:

- 2017 - Governor's Technology Award Winner - Cross-boundary collaboration on IT service delivery initiatives for the electronic motor voter registration implementation with DMV

- 2017 - Harvard Kennedy School Ash Center for Democratic Governance and Innovation Bright Ideas Award Winner for the online absentee ballot application system
- 2016 - Governors Technology Award Winner - Government to Citizen Category for the online absentee ballot application system
- 2016 - The Pew Charitable Trusts Elections Performance Index for the November 2014 election (the last election currently measured) ranks Virginia 3rd among all 50 states and the District of Columbia for overall election administration (<http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/elections-performance-index#indicator>)
- 2015 - Google award recognizing leadership in the use of technology for elections

Over the next five years, ELECT will implement significant improvements to the systems that support voter registration and election management. With key systems now supported in-house and under full agency control, ELECT will be better positioned to make needed changes in a timely manner.

Funding for most of the information technology investments over the past several years has been obtained through federal dollars. Elections currently has \$2 million in remaining Help America Vote Act (HAVA) grant funds to allocate for securing and improving the agency's systems. We estimate these funds will be exhausted by the end of FY21. Without additional investment from the Federal Government and/or the General Assembly, ELECT will face considerable challenges in continuing to maintain a robust security posture against exponentially increasing sophistication of outside threat actors.

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

ELECT faces unique challenges as compared to other state agencies with a similar relative size and mission that have a significant impact on the agency's ability to support, maintain and improve key elections IT systems. In general, the agency's IT budget and corresponding staffing make-up is not sufficient or built to accommodate all of these factors.

New legislation impacts IT operations - laws relating to elections are in a constant state of flux, thereby impacting the IT investments of this agency. Each year, approximately 10% of the proposed legislation introduced by the General Assembly impacts the agency. ELECT is committed to ensuring that fiscal impact statements are as accurate as possible and include funding requirements for the ongoing operational needs to support the proposed legislative changes.

Special elections require significant IT operational support although the name suggests otherwise, special elections are a regular occurrence throughout the year. Like standard elections, special elections comprise a cycle of activities across approximately a 60 day period leading up to and following Election Day. The Governor, the General Assembly and various courts can call special elections at any time to fill needed office vacancies. ELECT is often not consulted on the scheduling of special elections and has little time to prepare. Given the frequency and unpredictable timing of special elections, these factors create a substantial strain on IT staff to support the administration of the full election cycle.

Third party requests present substantial disruption to normal agency operations - the agency's IT organization is inundated with unforeseen requests from external, third party entities for system functionality, reports, data extracts, litigation discovery requests, and FOIA requests to name the most common examples. These requests often come with heavy pressure that results in delays to timelines for critical, in progress IT projects. In addition, system changes required due to these requests rarely include additional funding, requiring the agency to constantly re-prioritize their workload and often de-prioritize critical efforts.

Challenges partnering with local General Registrars (GRs) to meet IT demands - there is a lack of clarity of roles, responsibilities, process governance, and root cause of IT issues between local GRs and the Department. ELECT lacks the ability to enforce uniformity and compliance at the local level which leads to multiple system enhancement requests for individual locality-specific business processes. As a further example, GRs and localities have the responsibility for procuring and maintaining local information technology and voting infrastructure. However, ELECT IT staff is often leveraged to provide technical support for local technology and emergency response support related to the ever increasing

security issues and concerns with voting infrastructure.

The Department of Homeland Security has included the Department of Elections (DOE) in its nationwide designation of a Critical Infrastructure organizations. As such, DOE is subject to any mandates and requirements set forth by Homeland Security as a result of this status. This status will continue to require that ELECT dedicate financial and human resources towards heightened security measures, high availability as well as disaster recovery and continuity planning.

Elections has been reliant on State funding, since federal funds were no longer available after FY 18. As a result of this loss, the agency requires regularly-sustained investment in agency IT resources by the General Assembly, in order to: 1) proceed with in-progress work, 2) improve voter registration and election management in the Commonwealth, and 3) provide a modern, maintainable, cost-effective election IT infrastructure.

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?

As VERIS is now a 10-year-old solution, the agency evaluated replacing it with a Commercial Off-the-Shelf (COTS) solution. A COTS solution implementation could cost the Commonwealth approximately \$31M with a 5-year timeline to

design, customize, test and deploy for production use. Further, there is no industry standard solution leveraged by a majority of the U.S. given the unique nature of elections management in each state.

Given these factors, ELECT began an iterative VERIS modernization process. As noted above, VERIS is now supported and maintained by the agency. Bringing the solution in house enabled the agency to modernize individual components to VERIS over time, focusing on those with the most deficiencies while keeping others intact that do not require change. ELECT has already made a substantial number of fixes and improvements and the next phase of VERIS modernization includes enhanced security, infrastructure re-architecture, database restructuring, and application usability and performance enhancements. By leveraging the components of VERIS that function sufficiently with a focus on targeted modernization improvements, ELECT will revitalize the voter registration and elections management system with a lower investment cost and less disruption to the business of elections. Additionally, ELECT has been mandated by the General Assembly to issue a request for proposal (RFP) to gather requirements for replacing the system and solicit alternatives to the current system.

Due to in-house control, ELECT has been working towards responding to the multi-source IT infrastructure changes in the Commonwealth and implement enhanced functionality requested by local General Registrars such as ad hoc reporting, GIS integration for district and precinct management, improved candidate processing, improved online ballot access for military and overseas voters and removal of congressional district reporting from non federal elections.

Report Title: Business Requirements For Technology

Agency: 132 Department of Elections (ELECT)

Date: 12/3/2020

132 VEC BReT Cloud Readiness Assessment Information System	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/30/2020
Mandate:	Yes
Mission Critical:	Yes
Description:	
<p>Governor Ralph Northam's "Executive Order 19 Cloud Service Utilization and Readiness" requires agencies to take specific actions starting this month and continuing through fall 2019.</p> <p>The order requires VITA to adopt a model for evaluating and incorporating cloud services into the commonwealth's information technology (IT) strategy and services VITA has</p> <p>Started the process of creating a cloud services model</p> <p>Begun obtaining information about agency systems that can be migrated to a cloud environment</p> <p>Provided an overview of the process at the recent agency information technology resources (AITR) meeting</p> <p>Planned additional announcements to AITRs regarding remaining steps</p> <p>Included cloud-related services and migration to the new data center in the recently awarded infrastructure contracts</p> <p>Additionally, VITA and all systems must move from the Commonwealth Enterprise Solutions Center (CESC) in Chester by December of 2021. One related strategy is to reduce the number of physical servers at CESC to prepare for the move. This means migration to the cloud must be completed by that time It is imperative to start planning now</p> <p>Agencies' IT staff members have been asked to complete cloud assessments and should be using the results to identify resource requirements VITA encourages agencies to evaluate their resources and discuss resource planning with the appropriate financial staff to ensure work can begin as required. Resource needs should be included requests in the upcoming budget cycle enabled, VITA will</p> <p>To identify which existing solutions can be migrated to the cloud and ensure all new IT solutions proposed be cloud- issue a hosting standard in the coming weeks This standard will define terminology and identify requirements agencies must consider when implementing cloud-based IT solutions.</p>	
BReT End of Life 2008 Server ELECT	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/27/2020
Mandate:	

Mission Critical:	
Description:	
Agency will create a mitigation plan to address End of Life 2008 servers.	
ELECT BReT - Citizen Portal	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/27/2020
Mandate:	No
Mission Critical:	Yes
Description:	
Online website that provides a means for voters to review and update their registration. In addition, the site provides a means for unregistered citizens to submit their voter registration form electronically.	
ELECT BReT - Information Security	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/27/2020
Mandate:	No
Mission Critical:	Yes
Description:	
Establish a fully compliant information security program for ELECT.	
ELECT BReT - Migration of Help Desk System	
BRT Type:	Business Requirement for New Technology
Date Submitted:	8/21/2019
Mandate:	No
Mission Critical:	
Description:	
Agency will migrate existing ticketing system to JIRA platform.	
ELECT BReT - Migration of Source Code Management System	
BRT Type:	Business Requirement for New Technology

Date Submitted:	8/21/2019
Mandate:	No
Mission Critical:	
Description:	
Agency will transition from Team Foundation Server to BitBucket	
ELECT BReT Military and Overseas Online Ballot Delivery and Return	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/27/2020
Mandate:	No
Mission Critical:	No
Description:	
Federal and state law require the electronic delivery of unmarked ballots to self identified military and overseas voters and their dependents 45 days prior to an election. ELECT has deployed an online ballot delivery tool to assist the localities in meeting this requirement	
In 2014, SB11 was passed by the General Assembly This bill requires an enactment vote in 2016 along with the completion of recommendations by a workgroup for the secure electronic return of marked ballots by uniformed overseas personal	
ELECT BReT ? SOCH Tool	
BRT Type:	Business Requirement for New Technology
Date Submitted:	8/21/2019
Mandate:	Yes
Mission Critical:	
Description:	
Tool allows Elections to improve compliance and monitoring activities related to the localities' voting and pollbook systems, vendors, solutions and devices.	
ELECT BReT ? SPLUNK	
BRT Type:	Business Requirement for New Technology
Date Submitted:	8/21/2019

Mandate:	Yes
Mission Critical:	
Description:	
Enables Elections to better secure its system and manage its applications	
ELECT BReT Voter Registration and Election Management	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/27/2020
Mandate:	Yes
Mission Critical:	Yes
Description:	
ELECT is required to maintain a statewide voter registration system on behalf of the localities. The system is continuously being improved, with planned updates to include data warehousing and GIS capabilities.	
ELECT Network Upgrade BReT	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	6/12/2019
Mandate:	
Mission Critical:	
Description:	
Network Upgrade	

Report Title: IT Strategic Plan Budget Tables

Agency: 132 Department of Elections (ELECT)

Date: 12/3/2020

Current IT Services				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Projected Service Fees	\$2,620,061.00	\$0.00	\$2,751,064.00	\$0.00
VITA Infrastructure Changes	\$0.00	\$0.00	\$0.00	\$0.00
Estimated VITA Infrastructure	\$2,620,061.00	\$0.00	\$2,751,064.00	\$0.00
Specialized Infrastructure	\$0.00	\$0.00	\$0.00	\$0.00
Agency IT Staff	\$2,941,985.00	\$0.00	\$2,941,985.00	\$0.00
Non-agency IT Staff	\$1,945,000.00	\$2,200,000.00	\$1,945,000.00	\$0.00
Cloud Computing Service	\$552,000.00	\$0.00	\$552,000.00	\$0.00
Other Application Costs	\$200,000.00	\$0.00	\$215,000.00	\$20,500,000.00
Total	\$8,259,046.00	\$2,200,000.00	\$8,405,049.00	\$20,500,000.00
Proposed IT Investments				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Major IT Projects	\$0.00	\$0.00	\$0.00	\$0.00
Non Major IT Projects	\$0.00	\$0.00	\$0.00	\$0.00
Agency Level IT Projects	\$0.00	\$0.00	\$0.00	\$0.00
Major Stand Alone IT Procurements	\$789,919.00	\$1,528,814.00	\$0.00	\$0.00

Non-Major Stand Alone IT Procurements	\$0.00	\$91,627.00	\$0.00	\$91,627.00
Agency-Level Stand Alone IT Procurements	\$0.00	\$0.00	\$0.00	\$0.00
Procurement Adjustment for Staffing	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$789,919.00	\$1,620,441.00	\$0.00	\$91,627.00

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Projected Total IT Budget				
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Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Current IT Services	\$8,259,046.00	\$2,200,000.00	\$8,405,049.00	\$20,500,000.00
Proposed IT Investments	\$789,919.00	\$1,620,441.00	\$0.00	\$91,627.00
Total	\$9,048,965.00	\$3,820,441.00	\$8,405,049.00	\$20,591,627.00

Report Title: IT Strategic Plan Projects

Agency: 132 Department of Elections (ELECT)

Date: 12/3/2020

Projects			
Primary Election System - Project			
Oversight and Governance Category:		Investment Business Case Approval	
<p>ELECT is seeking a solution to replace its current system known as the Virginia Election and Registration Information System (VERIS). VERIS is antiquated and the technology is soon to reach end-of-life; preference is for a cloud based solution to enhance efficiencies and availability, in order to meet the critical needs of data security related to Commonwealth elections data. Estimated Project Costs include staffing, SEC525, ECOS, data transition and conversion, organizational change management, project management, RFP estimates, and a 10% contingency.</p>			
Planned Project Start Date: 9/28/2020		Planned Project End Date: 9/7/2023	
Estimated Costs:	Total	General Fund	Nongeneral Fund
Project Cost	\$30,000,000.00	\$68,000,000.00	\$10,000,000.00
Estimated project expenditures first year of biennium	\$8,000,000 00	\$8,000,000 00	\$0 00
Estimated project expenditures second year of biennium	\$12,000,000.00	\$2,000,000.00	\$10,000,000.00
Project Related Procurements			
Primary Election System - Procurement			
<p>ELECT is seeking a solution to replace its current system know as the Virginia Election and Registration Information System (VERIS). VERIS is antiquated and the technology is soon to reach end of life. Preference is for a cloud based solution to enhance efficiencies and availability, in order to meet the critical needs of data security related to commonwealth elections data.</p>			

Report Title: IT Strategic Plan Procurements

Agency: 132 Department of Elections (ELECT)

Date: 12/3/2020

Stand Alone Procurements:	
Procurement Name:	VERIS IT Support - Staff Aug 2020 (Amended Oct-2020)
Procurement Description:	Provide support for critical IT election security. Utilize CAI contingent labor contract. These are all mid-high to high-level security professionals being used to augment staff without such internal security resources
Procurement Date:	8/10/2020
Procurement Name	Splunk Procurement
Procurement Description:	Splunk is a powerful enterprise tool that allows for the remote management and monitoring of various systems,health of processes, availability of programmatic tasks, and system security optimization.
Procurement Date	7/17/2020