

2024 - 2026 IT Strategic Plan

Agency: 301 Department of Agriculture & Consumer Services

Date: 12/28/2023

Current IT State

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

Over the next six years, the Virginia Department of Agriculture and Consumer Services will invest mainly in existing applications. Several BReTs address this initiative. In order to provide modern applications to the agency and to citizens, VDACS will continue moving to a new development environment and modernize all existing legacy Oracle applications. In addition, an agency priority is to ensure that constituents and customers have online access to services provided by VDACS and to improve the customer experience with VDACS. Several projects are underway and planned in the future to improve these services that include the online services for Pesticide Registration and Charitable Solicitation, Pesticide Services and Agricultural Commodities, including on-line payments for registration and permitting fees. Several applications supported and/or hosted by outside vendors will also be enhanced. VDACS' Information Technology environment includes 40 internal Oracle applications. Twenty-five additional applications are supported by outside vendors. The infrastructure is provided by the Virginia Information Technologies Agency's Multisourcing Service Integrator (MSI) contracts. These collection of services provide the technology infrastructure on which the agency operates. VDACS will continue to require vendor management, project management, resources for changes in agency responsibilities, and disaster recovery service costs. A mobile workforce is a key element in the way technology is currently being used and how it will be used in the future.

System replacements or enhancements in the 2024-2026 biennium that support the agency's strategic goals and support the automation of manual processes are underway. New initiatives over the next six years include continuing the migration of the agency's legacy Oracle applications into a new regulatory program platform to add functionality. VDACS will also require new applications as new regulatory programs are identified by regulation and legislation. VDACS manages requests for new application services using the Information Technology Investment Management (ITIM) model. Agency leadership will use these initiatives to satisfy new business requirements, improve performance, improve efficiencies, and provide improved services to constituents.

New initiatives, processes, and tools are being implemented by VITA and may be implemented by other central agencies such as DOA, DHRM, DPB, Treasury and DGS as Virginia modernizes its technology stance and infrastructure. It is anticipated that the impacts to agency resources will continue into FY 2026. VDACS must support the projects required by central agencies and use resources to manage the VDACS responsibilities that are required. Expectations include the need for multiple projects to be managed internally to protect VDACS' interests, which will influence the agency's current investment strategy. VDACS' development, project management, business analysis, database, infrastructure and security resources will be required during the planning and implementation periods. A project manager is required to coordinate and facilitate communications and technical work.

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?

A continuing demand for streamlined, self-service online applications from constituents, an increasing requirement for compliance with central agency standards, policies and procedures, and resource limitations impact the agency's ability to move forward with information technology (IT) initiatives. The Commonwealth of Virginia (COV) Security Standards, Executive Order 19, audit requirements, budget limitations, new central agency applications, new federal mandates and data standards are examples of specific mandates. New legislation will require that changes be made to existing applications. Although IT resources are limited, the agency will make use of cloud offerings, the IT Contingent Labor Contract, the eGov contracts, COTS applications, and the Regulatory Program Platform contracts to fulfill requests in the changing environment. Several initiatives may require additional funding to complete on schedule and within the next several bienniums. In addition, Commonwealth requirements through Executive Order 19 to move to the cloud will continue to be addressed in this biennium.

Security requirements continue to increase. The changes include increased governance by the central IT agency, increased reporting requirements, detailed audits, and increased threats from internal and outside sources. Examples include compliance with the new SEC530 standard, Knowbe4 security awareness training, assessment and reporting requirements of third-party vendors and vendor-hosted software, SOC report reviews, ECOS oversight and assessments, and compliance and security considerations related to VITA-provided cloud offerings such as M365 and the Oracle Cloud Infrastructure. VDACS has been handling these needs with a slim security staff and has committed other existing resources to meet the requirements. The COV Security Standards require upgrades to the agency's computing environment and require that controls be put in place in the development process. These requirements add to the project timelines, cost and resource allocation, which need to be considered in the agency planning. VDACS is managing the requirements internally.

****Security Shared Services****

VDACS is not using the shared security services and is managing the requirements internally. The Centralized Information Security Officer (ISO) Service and Centralized IT Security Audit Service offerings from VITA are being completed by the agency ISO and Internal Auditor. VDACS has a successful rating each year in the Commonwealth of Virginia Information Security Annual Report.

****Broadband and SD-WAN****

VDACS is actively working with VITA and Network Providers to expand broadband capabilities in the regional labs and offices with a goal of ensuring all sites have a minimum download speed of 30Mb. VDACS will need resources to increase the bandwidth to resolve the performance issues.

****Cloud Computing Services and Application Hosting****

Software as a Service (SaaS) is an attractive option for application requests that can be solutioned in the Cloud. VDACS will need to purchase ECOS services from VITA to ensure vendor compliance. ECOS costs have not been budgeted for any cloud applications.

****Data Strategies****

As data strategies evolve and citizens require more ready access to public data VDACS will enhance our publicly

accessible data to support our data journey. This will require additional resources as we expand citizen access to data.

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?

The changes necessary in IT affect many agency lines of business, especially in the regulatory areas. IT initiatives are important because they will increase operational efficiencies and add value to the Commonwealth by improving services to citizens. The changes must meet federal, state and regulatory mandates while incorporating an easy to use Internet facing experience for our customers in addition to providing faster turnaround for services offered by the agency. The improvements will allow the agency to maximize the effectiveness of the agency's human capital.

The agency uses an IT Investment Management (ITIM) process through the Business Investment Group (BIG) to prioritize IT projects from an agency business perspective. IT projects will be addressed in several ways. Some of these projects will be to migrate existing a new regulatory processes to a new regulatory program platform. Some enhancements will be handled using the new MS .NET development environment. Some new systems will be implemented using outside vendors to implement COTS applications that will be configured by vendors and housed in the cloud. New systems may be implemented as SaaS or Regulatory Platform. Enhancements will also be addressed using outside vendors that focus on niche applications or staff augmentation contract developers to enhance internal applications.

VDACS portfolio of applications is significant with over 60 unique applications in production. Funding is available through select non-general fund programs for several initiatives. Funding for projects related to general fund programs may be limited, and the funding disparity between program areas complicates IT project prioritization. The Department of Agriculture and Consumer Services' diverse programs are supported by a variety of funding sources including general fund support (50 percent), user fees (9 percent), commodity grading fees (10 percent), commodity board self-assessments (14 percent) and federal grants (17 percent). Internal staff will be assigned to all projects in progress. Contract staff will be used based on the individual project needs and available funding through a project-based procurement or via staff augmentation services. System Integrators may be leveraged for assistance with new Regulatory Platforms.

IT staff require additional training to create applications using the new Regulatory Platform and the .NET Framework development tools. In addition to IT staff and agency subject matter experts, contract staff will be used to support the agency initiatives as needed. Other systems will be acquired using VITA contracts or Requests for Proposal processes.

The solutions critical to the agency include the following new systems and system enhancements:

1. Online CP OCRP Charitable Solicitations Regulatory System
2. Online OPS Pesticide Product Registration, Business Licensing and Applicator Certification Tool
3. Enhancements to AFS Agency Access Request and AFS Access Review System

4. AFIS VIPRS Upgrade to remove back end database technologies approaching end of life
5. CP OARS Charitable and Regulatory Programs enhancements
6. New systems supporting hemp and hemp intoxicating product registration and inspection
7. Cloud initiatives, including the Oracle Cloud Infrastructures with disaster recovery as this is out of scope for VITA provided DR services
8. Oracle Business Intelligence Publisher
9. Electronic signature workflow solution
10. Security awareness training and phishing platform
11. Modernization of conference room audio, visual, and web conferencing equipment for headquarters and regional labs
12. Modernization of broadband in regional offices to support SD-WAN and 30Mb minimums

Business Requirements For Technology

Agency:	301 Department of Agriculture & Consumer Services	
Date:	12/28/2023	
301 Application Modernization & Reports Migration		
BRT Type:	Business Requirement for Existing Technology	
Requested Start:	5/17/2021	
Mandate:		
Mission Critical:	Yes	
Description:		
<p>Upgrade the agency's Oracle Forms and Reports applications to .NET framework using server to a new version of the development tools, migrate 35 applications and test an additional 15 applications.</p> <p>Re-engineer and rewrite the Oracle applications that currently exist in older technology and move them to a .NET framework environment. The new environment will provide for mobility of staff and a responsive design that should have a live of over 10 years. The move to this environment is expected to take the agency approximately 5 years to complete because the 50 applications listed above must all be rewritten in the new environment. This is a significant endeavor for the agency but will position the technology environment for the future and will position the agency to more efficiently deploy additional on-line services to customers. VDACS expectation is to spend \$150,000 per year on this initiative.</p>		
301 Application Re-engineering & Enhancements		
BRT Type:	Business Requirement for Existing Technology	
Requested Start:	5/17/2021	
Mandate:		
Mission Critical:	Yes	
Description:		

Several existing systems are slated for replacement or significant enhancements which are necessary to ensure that the applications are in compliance with the Commonwealth Policies and Standards and that audit requirements are met. The applications in line for enhancements and modifications include the following systems.

- Charitable Solicitation Registration System
- Market News Constituency Notification
- Agency Access Request
- Pesticide Product Registration
- Pesticide Business Licenses
- Pesticide Applicator Certification
- Dairy Services System enhancements
- Food Safety VIPRS Document Upload
- Office of Product and Industry Standards (feed, fertilizer, lime, seed systems)
- Charitable Gaming online registrations/licenses
- VDACS Web Application Components

Web application components that are being developed include Authentication/Registration Module, Forms/Screens Module, Communications Module, Documents Module, Online payment processing module, Workflow process module and integration module. These components are individual projects being developed for agency-wide use in other applications.

New functionality is required to enhance the customer experience, improve employee processes, increase efficiencies and provide more services for constituents.

Some applications are currently hosted through eGov vendors. Either eGov or staff augmentation vendors will update some of the applications.

VDACS is streamlining their internal processes, creating .NET shared components for all applications and form submissions, allowing for data sharing, providing GIS data for applications and creating standard operating procedures for FOIA and public datasets. The COOP/DR coordination and planning is being updated as part of the organizations projects for streamlining internal technology processes and project governance.

301 Industrial Hemp Licensing and Registration

BRT Type:	Business Requirement for New Technology
Requested Start:	5/19/2021
Mandate:	
Mission Critical:	
Description:	

The amendments to the Virginia Industrial Hemp Law became effective on March 21, 2019 and eliminate the requirement that hemp be grown for research purposes and permit the commercial production of industrial hemp. To legally possess hemp plants, viable hemp seed, hemp microgreens, hemp leaves, or hemp flowers in Virginia, you must be a registered Industrial Hemp Grower, Dealer, or Processor or an agent of one of these registrants for the purpose of growing, dealing or processing. A new system is necessary to process the registrations, licenses and inspections associated with this program.

301 Online Payment Processing for Customers

BRT Type:	Business Requirement for Existing Technology
Requested Start:	5/17/2021
Mandate:	
Mission Critical:	
Description:	
<p>Provide customers and constituents with online services to perform licensing, registration, permitting and bill paying activities with VDACS. VDACS currently provides some on-line services including the ability for customers to pay their invoices online but this function needs to be expanded to many programs in the agency. The following are examples of areas that are planned to be included in this initiative. In addition, the payment function needs to be enhanced to allow for partial payments where appropriate.</p> <ul style="list-style-type: none"> - Charitable Solicitation - Pesticide Services - Feed, Fertilizer, and Lime 	

301 Online Personnel Evaluation System

BRT Type:	Business Requirement for New Technology
Requested Start:	5/1/2021
Mandate:	
Mission Critical:	
Description:	
<p>VDACS' decentralized and hybrid remote workforce make it difficult to route hard copies of employee self-evaluations, supervisor evaluations, and reviewer approvals, during the performance evaluation process. This need was augmented even more during the COVID-19 pandemic. In addition, VDACS Human Resources staff needs to ability to generate reports and view data on employee evaluation ratings. VDACS seeks an online solution to store Employee Work Profiles and performance evaluations for electronic submission, review, and approval.</p>	

301 Oracle Modernization and Cloud Readiness

BRT Type:	Business Requirement for Existing Technology
Requested Start:	5/17/2021
Mandate:	Yes
Mission Critical:	Yes

Description:

VDACS must move its current Oracle based Applications and the supporting Oracle Databases to Oracle OCI, via the Unisys' Virtual Cloud Network Service. VDACS must replace deprecated Oracle technologies with new solutions in order to move to the latest releases of Oracle Database. VDACS will replace the dependency of Oracle Advanced Replication and implement a replacement solution for Oracle Reports.

301 Payroll and Employee Data Interfaces Cardinal

BRT Type:	Business Requirement for New Technology
Requested Start:	5/17/2021
Mandate:	Yes
Mission Critical:	Yes

Description:

The Cardinal Human Capital Management (HCM) Project will integrate payroll (CIPPS), BES, PMIS and TAL with Cardinal. VDACS uses data from these systems to populate the agency Employee System. The Commonwealth will now expand the Cardinal footprint to include the additional PeopleSoft modules necessary to meet the core human resource, benefits administration, time and attendance, and payroll business process requirements. This will result in the decommissioning of several legacy systems, including the state's Personnel Management Information System (PMIS), Benefits Eligibility System (BES), Time Attendance and Leave (TAL) system, and the Commonwealth Integrated Payroll/Personnel System (CIPPS).

VDACS will work with DOA and DHRM to meet the state deadlines and to develop processes that share data with these systems and VDACS systems. VDACS will also find opportunities to reduce data duplication and integration between agency systems and commonwealth systems.

301 Security Training Implementation

BRT Type:	Business Requirement for New Technology
Requested Start:	2/1/2021
Mandate:	Yes
Mission Critical:	Yes

Description:

VITA Security Standard SEC-527 requires all executive branch agencies establish a standard information security awareness training program using a curriculum defined by Commonwealth Security and Risk Management as well as offer a simulated phishing campaign at least each year. The agency must enroll, train, and track employee, contractor, and vendor security awareness training through an online learning management system to satisfy SEC-527 requirements.

Regulatory Platform

BRT Type:	Business Requirement for New Technology
Requested Start:	9/15/2023
Mandate:	
Mission Critical:	

Description:

VDACS is investigating a SaaS based regulatory platform to consolidate up to 20 stove pipe systems onto a single platform.

VDACS SD-WAN Upgrade

BRT Type:	Business Requirement for Existing Technology
Requested Start:	3/1/2023
Mandate:	Yes
Mission Critical:	Yes

Description:

Configure existing routers to support SD-WAN capability across all agency locations. This approach prepares agency location(s) with the ability to add additional network capabilities (multiprotocol label switching (MPLS), broadband, wireless (i.e., Cradlepoint)) to take advantage of application -aware routing over private and public networks.

Three step process:

Remote internetwork operating system (IOS) software upgrade on the router.

Remote SD-WAN deployment

Circuit deployment as needed

VDACS Website Modernization

BRT Type:	Business Requirement for New Technology
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Requested Start:	6/15/2023
Mandate:	
Mission Critical:	Yes
Description:	
The primary objective of the COV Website Modernization and the CMS Virginia.gov projects are to ensure all state sites are on a single common platform and are following required VITA, COV and 508 standards	

IT Strategic Plan Budget Tables

Agency:	301 Department of Agriculture & Consumer Services			
Date:	12/28/2023			
Current IT Services				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Projected Service Fees	\$2,437,530.48	\$1,011,070.03	\$2,510,656.40	\$1,041,402.13
VITA Infrastructure Changes				
Estimated VITA Infrastructure	\$2,437,530.48	\$1,011,070.03	\$2,510,656.40	\$1,041,402.13
Specialized Infrastructure				
Agency IT Staff				
Non-agency IT Staff				
Cloud Computing Service				
Other Application Costs				
Total:	\$2,437,530.48	\$1,011,070.03	\$2,510,656.40	\$1,041,402.13
Proposed IT Investments				
	Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF
Major IT Projects:				
Non-Major IT Projects:				
Agency-Level IT Projects:				

Major Stand Alone IT Procurements:					
Non-Major Stand Alone IT Procurements:		\$130,680.00		\$130,680.00	
Agency-Level Stand Alone IT Procurements:					
Procurement Adjustment for Staffing:					
Total:	\$0.00	\$130,680.00	\$0.00	\$130,680.00	
Projected Total IT Budget					
		Costs Year 1		Costs Year 2	
Category	GF	NGF	GF	NGF	
Current IT Services	\$2,437,530.48	\$1,011,070.03	\$2,510,656.40	\$1,041,402.13	
Proposed IT Investments	\$0.00	\$130,680.00	\$0.00	\$130,680.00	
Total	\$2,437,530.48	\$1,141,750.03	\$2,510,656.40	\$1,172,082.13	

Commonwealth Projects >= \$250,000.00

Agency:	301 Department of Agriculture & Consumer Services		
Date:	12/28/2023		
EO19_VDACS_Aggregate_Replatform			
Investment Business Case Approval			
In order to move to the cloud, VDACS is awaiting an agreement between the COV and Oracle for an appropriate cloud solution for production, test, development database and application environment. In addition, three Windows/SQL Server applications must be moved off of physical servers and placed on virtual servers. Some hardware, application and software changes may be needed to accomplish this goal.			
Project Start Date	9/16/2019	Project End Date	10/1/2021
Estimated Costs:	Total	General Fund	Non-General Fund
Project Cost	\$965,000.00		
Estimated first year of biennium:	\$0.00	\$0.00	\$0.00
Estimated second year of biennium:	\$0.00	\$0.00	\$0.00

Project Related Procurements

There are no procurements for this project

Commonwealth Procurements \geq \$250,000.00

There are no stand alone procurements for this agency.