

# Report Title: 2018 - 2020 IT Strategic Plan

Agency: 245 State Council of Higher Education for Virginia (SCHEV)

Date: 9/10/2020

## 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?**

SCHEV's mission is to advocate and promote the development and operation of an educationally and economically sound, vigorous, progressive, and coordinated system of higher education in the Commonwealth of Virginia and to lead state-level strategic planning and policy development and implementation based on research and analysis. The Council shall also seek to facilitate collaboration among institutions of higher education that will enhance quality and create operational efficiencies and shall work with institutions of higher education and their boards on board development.

SCHEV has four primary applications that support its mission. The first consists of the public websites, specifically research.schev.edu which houses the most expansive collection of state higher education data in the nation. The second application is the data collection system that is used by Virginia's public and private, nonprofit colleges to provide student-level data to the agency, continuing a collection that began in 1992. The third application is the Private and Out-of-State Public Education (POPE) Certification (to operate in Virginia) web application to process institutional applications to operate and annually certify their ability to operate in the Commonwealth. The fourth application is web application supporting the GEAR-UP Scholarship program which manages the distribution of funds to a cohort of students identified as seventh graders in 2005. SCHEV has just recently been awarded a new GEARUP grant which will create new opportunities and data responsibilities.

By act of General Assembly in 2016, SCHEV now administers the Virginia Longitudinal Data System with eight current partner agencies and two more scheduled to join in FY2017.

## 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 affect IT in other Commonwealth agencies, or in other states? If so, how?**

SCHEV has a gubernatorally-appointed board consisting of 13 members who provide guidance and oversight to the agency director and specify changes or additions in reporting and research. SCHEV also receives multiple legislative mandates in any given session of the General Assembly. As a national leader in higher education data policy and analysis, the agency

also responds to changes in national policy discussions by creating reports and research that few other states can duplicate. SCHEV is a founding partner in the Virginia Longitudinal Data System and thus has additional responsibilities for managing data and research across agency lines. Finally, SCHEV is aggressive in responding to constituent needs to balance the ever-growing thirst for data and information against institutional burden in reporting to SCHEV and other agencies.

Please address the following:

#### IT INFRASTRUCTURE TRANSITION

We have the largest, most detailed higher education data resource in the world that is publicly available. It is a resource relied up on by the governor's office, money committees,, institutional leadership, and tens of thousands of citizen users. The infrastructure transition has gone well for us thus far. Most notably, NG had been unable to successfully our SQL Server 2008 R2 installation, but Unisys was able to complete the upgrade in a single try.

#### SECURITY SHARED SERVICES

SCHEV has engaged an MOA with VITA for shared security services. The services, while helpful, are not adequate. We are requesting, once again, a full-time, dedicated ISO.

#### CLOUD APPLICATION HOSTING

We requesting Unisys migrate our sole hardware server to VM before the end of calendar year 2019, once completed, our applications will be cloud-ready. Only two applications do not contain PII or other data that must be kept secure.

#### INTERNET UTILIZATION

SCHEV needs improved networking and migration to a UCaaS phone system.

### **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?**

SCHEV has one physical server that it anticipates converting to VM in Fall of 2020.

SCHEV's POPE section has contracted with Virginia Interactive to move from their current agency-housed application to a custom-built application as a "non-major category" of IT investment.

SCHEV is considering a move of its public website to a cloud-based hosting solution.

SCHEV will maintain its current environment,. SCHEV has also taken over the Virginia Longitudinal Data System, this will affect our ongoing IT posture

No other initiatives are planned, unless funding is provided by the General Assembly or through grant-funded activities.

Under possible consideration are:

1) FAFSA completion project to receive data from USED on high school students completing the Free Application for Federal Student Assistance and inform high schools and LEAs of the rate of FAFSA completion on a periodic basis.

Funding for this initiative is requested of the governor's budget.

2) Stand-up of a separate domain controller. If the FAFSA completion project is ever funded, this will be a part of that project to allow maintenance of accounts for non-COV personnel, specifically those in high schools, divisions, and working with college access providers. There are broader impacts for SCHEV's services as well, as we currently manage over 400 accounts of institutional data providers.

3) We have again requested funding for a dedicated full-time Information Security Officer. Because of its size, SCHEV has been able to operate with a very informal, lateral structure, and has been able to do so effectively. However, this is not consistent with Commonwealth policy or with the ideal model for IT security. Therefore we are requesting 1.0 FTE dedicated as an Information Security Officer and nonpersonal services to create a more robust and secure IT infrastructure. We are also requesting additional funding to support software used by SCHEV supporting our traditional data work and the Virginia Longitudinal Data System.

# Report Title: Business Requirements For Technology

Agency: 245 State Council of Higher Education for Virginia (SCHEV)

Date: 9/10/2020

<b>245 SCHEV BRet Cloud Readiness Assessment 2018 SCHEV Data Warehouse</b>	
<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	1/14/2019
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	Yes
<b>Description:</b>	
<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> <ul style="list-style-type: none"><li>Started the process of creating a cloud services model</li><li>Begun obtaining information about agency systems that can be migrated to a cloud environment</li><li>Provided an overview of the process at the recent agency information technology resources (AITR) meeting</li><li>Planned additional announcements to AITRs regarding remaining steps</li><li>Included cloud-related services and migration to the new data center in the recently awarded infrastructure contracts</li></ul> <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 servicers at CESC to prepare for the move. This means migration to the cloud must be completed by that time. It is imperative to start planning now.</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.</p> <p>To identify which existing solutions can be migrated to the cloud and ensure all new IT solutions proposed be cloud-enabled, VITA will issue a hosting standard in the coming weeks. This standard will define terminology and identify requirements agencies must consider when implementing cloud-based IT solutions.</p>	
<b>245 SCHEV BRet Cloud Readiness Assessment 2018 SCHEV GEAR-UP Site</b>	
<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	1/14/2019
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	Yes
<b>Description:</b>	
<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> <ul style="list-style-type: none"><li>Started the process of creating a cloud services model</li><li>Begun obtaining information about agency systems that can be migrated to a cloud environment</li><li>Provided an overview of the process at the recent agency information technology resources (AITR) meeting</li><li>Planned additional announcements to AITRs regarding remaining steps</li><li>Included cloud-related services and migration to the new data center in the recently awarded infrastructure contracts</li></ul> <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 servicers at CESC to prepare for the move.</p>	

This means migration to the cloud must be completed by that time. It is imperative to start planning now.

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

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

#### **245 SCHEV BRet Cloud Readiness Assessment 2018 SCHEV Research Website**

<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	1/14/2019
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	Yes

#### **Description:**

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

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

Started the process of creating a cloud services model

Begun obtaining information about agency systems that can be migrated to a cloud environment

Provided an overview of the process at the recent agency information technology resources (AITR) meeting

Planned additional announcements to AITRs regarding remaining steps

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

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

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

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

#### **245 SCHEV BRet Cloud Readiness Assessment 2018 Virginia Longitudinal Data System**

<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	1/14/2019
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	Yes

#### **Description:**

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

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

Started the process of creating a cloud services model

Begun obtaining information about agency systems that can be migrated to a cloud environment

Provided an overview of the process at the recent agency information technology resources (AITR) meeting  
 Planned additional announcements to AITRs regarding remaining steps  
 Included cloud-related services and migration to the new data center in the recently awarded infrastructure contracts

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

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

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

**BReT - FAFSA Completion Project**

<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	8/4/2020
<b>Mandate:</b>	No
<b>Mission Critical:</b>	

**Description:**

A possible project to receive student data from the US Education Department on a weekly basis of students/families completing the Free Application for Federal Student Assistance and reporting that information back to high schools and LEAs to assist them in encouraging students to complete the FAFSA and apply to college.

**BReT Security Compliance**

<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	8/4/2020
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	

**Description:**

Implementation Corrective Action Plan for security audit

**BRnT - Management Application for POPE Section**

<b>BRT Type:</b>	Business Requirement for New Technology
<b>Date Submitted:</b>	8/2/2020
<b>Mandate:</b>	No
<b>Mission Critical:</b>	Yes

**Description:**

The Private and Out-of-state Public Education (POPE) section is planning to replace its existing custom-coded ASP.NET application with a cloud-based service.

**Virginia Longitudinal Data System (VLDS) BReT**

<b>BRT Type:</b>	Business Requirement for Existing Technology
<b>Date Submitted:</b>	7/10/2020
<b>Mandate:</b>	Yes
<b>Mission Critical:</b>	Yes

**Description:**

The Virginia Longitudinal Data System (VLDS) provides state policy makers, authorized researchers and citizens with access to educational and workforce training data from multiple sources while protecting the privacy of Virginia students.

VLDS supports critical reporting on the quality of public education - such as accurate graduation and dropout rates for high schools and school divisions - while providing information that can help policy makers improve programs that prepare and connect Virginians with employment opportunities.

VDOE & the Virginia Longitudinal Data System - Improving Student Outcomes & Protecting Privacy (PDF) - More on how VLDS protects student privacy, including answers to frequently asked questions about data available through the system.

Data are provided by VDOE, the State Council of Higher Education for Virginia, the Virginia Community College System and the Virginia Employment Commission.

The development of VLDS was funded through a Longitudinal Data Systems Grant awarded to the commonwealth under the American Recovery and Reinvestment Act of 2009. The federal grant allowed Virginia to build on VDOE's state-funded Educational Information Management System and put additional high quality data into the hands of teachers, administrators, researchers, policymakers and the public - while safeguarding the privacy of students and adults.

# Report Title: IT Strategic Plan Budget Tables

Agency: 245 State Council of Higher Education for Virginia (SCHEV)

Date: 9/10/2020

<b>Current IT Services</b>				
	<b>Costs Year 1</b>		<b>Costs Year 2</b>	
<b>Category</b>	<b>GF</b>	<b>NGF</b>	<b>GF</b>	<b>NGF</b>
<b>Projected Service Fees</b>	\$292,892.73	\$75,479.46	\$301,679.51	\$77,743.84
<b>VITA Infrastructure Changes</b>	\$120,000.00	\$0.00	\$120,000.00	\$0.00
<b>Estimated VITA Infrastructure</b>	\$412,892.73	\$75,479.46	\$421,679.51	\$77,743.84
<b>Specialized Infrastructure</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Agency IT Staff</b>	\$185,000.00	\$0.00	\$185,000.00	\$0.00
<b>Non-agency IT Staff</b>	\$250,000.00	\$0.00	\$250,000.00	\$0.00
<b>Cloud Computing Service</b>	\$6,000.00	\$0.00	\$6,000.00	\$0.00
<b>Other Application Costs</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total</b>	\$853,892.73	\$75,479.46	\$862,679.51	\$77,743.84
<b>Proposed IT Investments</b>				
	<b>Costs Year 1</b>		<b>Costs Year 2</b>	
<b>Category</b>	<b>GF</b>	<b>NGF</b>	<b>GF</b>	<b>NGF</b>
<b>Major IT Projects</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Non-Major IT Projects</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Agency-Level IT Projects</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Major Stand Alone IT Procurements</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Non-Major Stand Alone IT Procurements</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Agency-Level Stand Alone IT Procurements</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Procurement Adjustment for Staffing</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Projected Total IT Budget</b>				
	<b>Costs Year 1</b>		<b>Costs Year 2</b>	
<b>Category</b>	<b>GF</b>	<b>NGF</b>	<b>GF</b>	<b>NGF</b>
<b>Current IT Services</b>	\$853,892.73	\$75,479.46	\$862,679.51	\$77,743.84
<b>Proposed IT Investments</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total</b>	\$853,892.73	\$75,479.46	\$862,679.51	\$77,743.84

# Report Title: IT Strategic Plan Projects

Agency: 245 State Council of Higher Education for Virginia (SCHEV)

Date: 9/10/2020

<b>Projects</b>			
<b>EO19_SCHEV_Aggregate_Rehost</b>			
<b>Oversight and Governance Category: Category 4: Low/Medium, Low/Low</b>		<b>Investment Business Case Approval</b>	
<b>EO19_SCHEV_Aggregate_Rehost</b>			
Planned Project Start Date: 12/1/2019		Planned Project End Date: 12/1/2020	
<b>Estimated Costs:</b>	<b>Total</b>	<b>General Fund</b>	<b>Nongeneral Fund</b>
Project Cost	\$30,000.00	\$0.00	\$0.00
Estimated project expenditures first year of biennium:	\$0.00	\$0.00	\$0.00
Estimated project expenditures second year of biennium:	\$0.00	\$0.00	\$0.00
<b>Project Related Procurements</b>			
There are no procurements for this project			

# Report Title: IT Strategic Plan Procurements

Agency: 245 State Council of Higher Education for Virginia (SCHEV)

Date: 9/10/2020

Stand Alone Procurements:	
Procurement Name:	VLDS O&M
Procurement Description:	Statement of Work # SCHEV-190615-01-CAI, submitted by TSI-VA, LLC as subcontractor to computer Aid, Inc for contract number VA 130620-CAI between the Commonwealth of Virginia and Computer Aid Inc. Contract through June 30, 2021. This is for Operations and Maintenance support of the Virginia Longitudinal Data System, a multi-agency data-sharing partnership assigned to SCHEV as a general duty of the Council.
Procurement Date:	7/1/2020