

Report Title: IT Strategic Plan Summary

Agency: 423 Department of Historic Resources

Date: 4/17/2017

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?

DHR, as an executive branch agency, is supported by the VITA/Northrop Grumman Partnership at the main office in Richmond and two other locations in Salem and Stephens City. Infrastructure support includes file servers, staff computers, VoIP telephones in Richmond, network and security services.

In 2013, DHR completed an IT project to rewrite the application which is the authoritative source for architectural and archaeological survey data for the agency. This application (V-CRIS) is built with the current generation of web mapping and database software and addresses customer web application expectations, increased workflow oversight and enhanced security for the data. The platform supports openly available mapping applications to include generalized queries of surveyed architectural resources. The highway marker application allows for queries and download of highway marker data (including coordinates) or the use of the freely available map service to view in other geographic information systems (GIS).

DHR continues to build on V-CRIS by funding prioritized enhancements to improve the customer experience, reduce barriers to use of real-time geospatial data for our customers and address security requirements. User fees support the costs for operations and maintenance to include external hosting through the eGov services, annual software maintenance costs, and IT Staff Augmentation to support break/fix activities. Enhancement costs will be supported in part by mixed funding of non-general funds from agency revenue (user fees) and federal funds.

Recently, DHR upgraded the existing website to address the Virginia Information Technology Agency's Enterprise Technical Architecture Website Topic Report v. 4.0 (12/23/2015). The overall look and feel has been streamlined with the ability to support mobile devices at the current time. This will enable an easier transition to a content management system. The website is currently being converted from predominantly static webs managed by one person to a content management system (CMS) to allow for greater flexibility. The new website will have a database driven component to allow customer to search dynamically for Virginia Landmarks Register and National Historic registers properties. This replaces a series of web pages which require multiple links to find a specific nomination. Currently, the process to post the information is time intensive and limited to one or two individuals.

Each program area within DHR has one or more workgroup databases developed using personal desktop productivity tools (Access and Excel) to track key pieces of information for workflow. However, the databases were developed independently and have not been updated as workflow requirements change. The agency is currently reviewing and developing high level workflow documents for each program area to document key data assets and their sensitivity. This will allow for realistic assessment of costs for integration of modules into the current V-CRIS environment. Funding for the development of applications and integration of data into the DHR infrastructure will most likely be funded through non-general funds from agency revenue.

The environmental review program partnered with VITAs Workforce Productivity Solutions group in 2009/2010 as a pilot project for the Microsoft Dynamics shared services model. The application, ePIX (Environmental Project Information Exchange), has a web portal for customers to submit initial application information and enables DHR staff to review and return comment on the projects through the web portal.

Basic operations and maintenance, to include security updates, are implemented by Workforce Productivity Solutions. The agency does not currently have a contract for enhancements to the application. Funding to support ePIX infrastructure and application support is anticipated to be through general fund appropriations. The agency will need to address the infrastructure change during disentanglement with the current contract. Within the last year, DHR has received funds from the Department of Planning and Budget and signed agreements with Commonwealth Security and Risk Management to support information security audit and security activities. DHR proactively consolidates and streamlines operations to balance costs and efficiencies and continues to look for ways to realize maximum impact for monies spent.

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?

At this time, the agency is not aware of any external factors, requirements or mandates that will require IT investments by the agency in the foreseeable future.

SECURITY SHARED SERVICES

The Department of Planning and Budget has funds for audit and information security services for the agency. This money is meant to supplement existing information security activities for the agency which are increasing as the overall cybersecurity oversight steadily increases to maintain current alignment with security requirements. There is insufficient resources to support cyber security activities for the agency due to lack of dedicated personnel resources.

INTERNET UTILIZATION

Agency currently has over 95% bandwidth utilization at its Richmond location for twelve to fourteen of twenty workdays during the month. This is prior to the consolidation of the Petersburg office with the Richmond office which will onboard an additional three staff. As the agency becomes more dependent on resources external to physical sites, such as the commonwealth private cloud and new external hosting partners for applications and data, the need for bandwidth will only increase as more bandwidth intensive technologies become prevalent. The agency current is looking at increasing the current bandwidth at the Richmond office utilizing the monies saved by closure of the Petersburg office.

CLOUD/EXTERNAL APPLICATION HOSTING

The agency currently uses infrastructure hosting services for the application which is the primary authoritative source of survey data. Currently, DHR is investigating available options to move the accounts receivable function to a cloud hosting environment that will meet the requirements for security as outlined by Commonwealth Security and Risk Management. This may be a cost savings for the agency if security requirements are met.

IT INFRASTRUCTURE TRANSITION

Due to the disentanglement with Northrop Grumman, the IT baseline for the entire agency will be undergoing a change to a multi-supplier environment. The goal is to allow greater flexibility for each agency. Rough order of magnitude costs have not been addressed at this time. The agency has continued to reduce its IT footprint and will likely need additional funds to change to the new model and not disrupt current agency operations.

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 primary focus will be disentanglement activities from the current partnership through 2019.

Longer term strategic plans continue to focus on digital conversion of data and enabling access externally to publically available information. To allow for readily available data for our customers, DHR will determine the scope of digitizing recorded survey data housed at the Richmond office. Survey data consists of black and white photographs, negatives, slides, paper survey forms and bound survey reports. The current shelving units account for approximately 1500 linear feet of records for the survey folders, 150 linear feet of shelves containing negatives, 230 linear feet of slides in folders and 300 linear feet of bound survey reports. In recent years, DHR has received or created a significant amount of information in digital form from born-digital documents. Part of the discovery process will be to determine the true volume of backlogged information to be digitized and account for current best practices in archival records conversion and storage. Funding for this initiative would most likely be through non-general funding sources such as federal grants. It is not anticipated that this initiative will take place in the upcoming budget biennium. To support this initiative, the agency would need to hire subject matter experts on digital archival methods to work with the agency subject matter experts and develop a plan and workflow going forward.

Report Title: Strategic Plan

Agency:

Department of Historic Resources

Date:

4/17/2017

Current IT Services

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Projected Service Fees	\$213,782	\$102,744	\$212,390	\$102,075
VITA Infrastructure Changes	\$0	\$0	\$0	\$0
Estimated VITA Infrastructure	\$213,782	\$102,744	\$212,390	\$102,075
Specialized Infrastructure	\$34,520	\$45,066	\$34,520	\$45,066
Agency IT Staff	\$87,196	\$0	\$87,196	\$0
Non-agency IT Staff	\$0	\$25,000	\$0	\$25,000
Cloud Computing Service	\$0	\$0	\$0	\$0
Other Application Costs	\$0	\$14,780	\$0	\$13,712
Total	\$335,498	\$187,590	\$334,106	\$185,853

Proposed IT Investments

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Major IT Projects	\$0	\$0	\$0	\$0
Non-Major IT Projects	\$0	\$0	\$0	\$0
Agency-Level IT Projects	\$0	\$25,000	\$0	\$25,000
Major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
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	\$0	\$25,000	\$0	\$25,000

Projected Total IT Budget

Category	Costs Year 1		Costs Year 2		Total Costs
	GF	NGF	GF	NGF	
Current IT Services	\$335,498	\$187,590	\$334,106	\$185,853	\$1,043,049
Proposed IT Investments	\$0	\$25,000	\$0	\$25,000	\$50,000
Total	\$335,498	\$212,590	\$334,106	\$210,853	\$1,093,049

Report Title: Business Requirements For Technology**Agency:** Department of Historic Resources (DHR)**Date:** 4/17/2017**BReT: Enhancements to Virginia Cultural Resources Information System (V-CRIS)****BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/30/2014**Mandate:** No**Mission Critical:** Yes**Description:**

The initial V-CRIS project was completed in late 2014. In keeping with best practices for software development lifecycles and to customer needs, new functionality will be integrated in small stages as funds allow. The enhancements will address outstanding needs and augment current functionality within the application. Agency has compiled and prioritized a list of enhancements based on customer input and agency staff.

The application framework will require an upgrade of the ArcGIS services to improve distributed map services. This will allow compatible web applications for other customers, including local, state and federal governments, to directly incorporate the architectural and archaeological feature data as additional layers in their systems.

BReT: Operations and Maintenance for Virginia Cultural Resource Information System (V-CRIS)**BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/30/2014**Mandate:** No**Mission Critical:** Yes**Description:**

With the upgrade to the new application, V-CRIS, the agency has established an annual operations and maintenance contract with a vendor to assure that an established level of functionality is maintained for our customers. Part of the operations and maintenance is to address patching/security update specific to the V-CRIS testing and production environments. The contract will also address any break/fix issues as they occur.

BReT: Operations and Maintenance of ePIX**BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/30/2014**Mandate:** No**Mission Critical:** No**Description:**

As a federal requirement, DHR's environmental review program consults with federal agencies and/or their designated consultants regarding impact of projects on historic resources. To assist with information exchange between parties, DHR in partnership with VITA Workplace Productivity Solutions, developed a web portal and workflow application. The web portal allows applicants to submit initial project information and receive information from agency staff. For the agency staff, the workflow application assists review and documentation of communications and additional information regarding the project.

BRnT: DHR website upgrade**BRT Type:** Business Requirement for New Technology**Date Submitted:** 9/30/2014**Mandate:** No**Mission Critical:** No**Description:**

DHR has a website that has not significantly changed since it was originally developed. The current site is predominantly static web pages and it is time intensive to update. An upgrade to a content management system will allow program areas to change content as needed without updating web page structure directly. A large portion of the website is devoted to information on properties and sites listed on historic registers, both state and national. This data should be readily available to customers by allowing selection of properties through a map or customizable queries of the V-CRIS database.

BRnT: Digitize agency survey records**BRT Type:** Business Requirement for New Technology**Date Submitted:** 9/30/2014**Mandate:** No**Mission Critical:** No**Description:**

DHR was originally formed in 1966 as the Virginia Historic Landmarks Commission and has archives containing survey information on buildings, districts and sites. The materials include photographs, slides, survey forms and cultural resource management reports. To make the data more accessible and aid in dissemination of historic records to our customers, the agency will require expertise in assessing, planning and implementing this conversion to include IT application and system requirements.

DHR IT Sourcing BReT**BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 2/10/2017**Mandate:****Mission Critical:****Description:****ITSP 16 18 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 upwards of sixty users in our agency. Agency has two applications that have hooks into messaging services which will need to be tested. Two staff utilize the standard AirWatch service and applications (inbox, contacts and calendar) which will need remediation.

VITA Workforce Productivity Solutions:

Agency has one application utilizing MS Dynamics CRM with a web portal that is supported by VITA's Workplace Productivity Solutions. Virginia Department of Historic Resources does not use WCS SharePoint. DHR is also dependent on the VITAShare large file transfer service.

IBM Mainframe BReT:

VITA is initiating disentanglement from NG IBM Mainframe services in 2016. Virginia Department of Historic Resources is part of the Cardinal Payroll project to replace CIPPS.

Server/storage (including housing of equipment) BReT: VITA is initiating disentanglement from NG servers and storage. Virginia Department of Historic has two servers which will need to be migrated and tested during this transition. One COTS application (QuickBooks Enterprise) and four workgroup databases (MSAccess) will be affected by this move and will need to be tested.

Authentication/directory services BReT: Virginia Department of Historic Resources has three applications which will need to be migrated and tested during the authentication/directory services transition. Number of users (internal and external) are sixty internal and estimated 550 external.

End user computing BReT : Virginia Department of Historic Resources has three desktops and fifty seven laptops and tablets with and three network printers which will need to be migrated.

Data networks BReT : Virginia Department of Historic Resources has one network connection that is not mpls which will need to be migrated.

Voice Networks BReT: Virginia Department of Historic Resources has forty-eight UCaaS phone lines and ten other phone/fax lines which will need to be migrated.

Cloud Computing BReT: Virginia Department of Historic Resources is investigating moving two applications to a Cloud services vendor. The business reason for the move is to reduce costs and reduce agency IT footprint. Applications are not verified cloud ready. Agency will need to bring in outside consulting to assess what needs to be done to the applications and supporting infrastructure in order to become cloud ready.

Security Services BReT: To meet Commonwealth Security requirements, Virginia Department of Historic Resources will engage VITA's Shared Security Services/procure outside security services from an outside vendor utilizing DPB funds.

Internet Usage BReT: Virginia Department of Historic Resources projects that internet usage will increase by 50% or more due to reliance on resources located external to the commonwealth private cloud to include relocation of storage, video conferencing and external data sources needed for inclusion in workflow.

Report Title: Appendix A 16 - 18 Report

Agency: Department of Historic Resources (DHR)

Date: 4/17/2017

Agency Head Approval:

No

There are no Category 1, 2, or 3 IT Projects and no Budget Category: Major IT Projects for this agency.

Report Title: Appendix A 16 - 18 Report

Agency: Department of Historic Resources (DHR)

Date: 4/17/2017

Agency Head Approval:

No

There are no major procurements for this agency.