Report Title: IT Strategic Plan Summary

Agency: 841 Department of Aviation   **Date:**   2/6/2017

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 agencys 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 agencys 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 Aviation has several existing operational IT business requirements that are not meeting our business needs and will require enhancement in order to produce the desired business value.

Aircraft Licensing: DOAV utilizes the third-party Airport Services Manager (ASM) application to manage and track Commonwealth aircraft licensing, tax payments and ownership. Business requirements drive the need for enhancements to the application to allow the system to accurately manage dealer and fleet owners, provide a platform for customer interaction and improve payment and reporting functionality. DOAV is currently refining business requirement documents for improvements related to customer experience, request response time, improved access to information, increased service quality, enhanced public relations, and reduced administration costs.

Grants Management: DOAV utilizes the third-party Airport Services Manager (ASM) application to manage several financial assistance programs for the development at airports in the Commonwealth. DOAV has integrated the business process of grant reimbursements into the ASM software tool to provide an automated method of recording, tracking and managing reimbursements from grants allocated to specific Commonwealth airports. DOAV is currently refining detailed business requirements to improve the customer experience, reduce request time, provide betteraccess to information, add new service, increase ease of use, increase service quality, enhance public relations, and reduce personnel costs.

Staff Augmentation: DOAV utilizes staff obtained through the VITA Contingent Labor contract to provide IT services such as on-site AITR/ISO support and related IT tasks that the agency is not staffed to support. Business requirements for these staff augmentation positions include IT technical, business application development and customer service experience. DOAV utilizes these staff augmentation positions to provide daily o ngoing support to Agency staff as well as assist Agency management in development of business applications and upgrades as well as change and incident management.

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

IT Infrastructure Transition

VITA has begun a multi-year effort to transition all services from Northrop-Grumman to a variety of other vendors, most of whom are not currently identified. DOAV expects to be impacted by these changes due to its dependence on VITA-supported services for Infrastructure, Security, Hosting and Internet Bandwidth. The significance of these impacts is dependent upon the details of changes in these areas. At this time, changes in messaging have been announced for early 2017.

This change will require employee training and potential configuration changes to the DOAV laptop population. Future changes as the transition continues may well result in additional expense and Agency resources for testing, training and configuration of equipment and services.

Principal impacts are likely to affect availability, response, problem management and security. The Agency expects these external factors, requirements and mandates will require IT investments by the Agency over the implementation timeline beyond those already described in this document under "Current Operational IT Investments" or "Proposed IT Solutions".

Internet Utilization

Bandwidth is essential to DOAVs business. Ideally, DOAV would like to move all servers to CESC. However, due to bandwidth limitations, one server will remain at DOAV.

Shared Security Services

DOAV has completed all ORIs and is in compliance with Commonwealth Security.

Cloud Hosting

DOAV has VITA approved third party hosted applications. We are in the process of moving these to CESC.

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 agencys 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 agencys 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?

Website Redesign: DOAV currently hosts an outdated HTML-based Agency website that is non-compliant with Commonwealth design and accessibility requirements. In addition, the website does not provide an effective interface with the public, aviation enthusiasts and other parties desiring services of the Agency. DOAV has issued a statement of requirements via the VITA Contingent Labor contract to identify a vendor to work with the Agency in development of an updated website with improved accessibility and a wider array of services to users, providing the Agency with a website that better addresses customer needs and supports Agency outreach, public relations and customer service requirements. DOAV expects to contract for requirements development in 4th quarter 2016, followed by development and implementation of the new website.

ASM Application Security Enhancements - DOAV utilizes the third-party Airport Manager Services (ASM) application for both aircraft licensing and grant processing/management operations. The current VITA SEC

501 security standards exceed the applications current security functionality in multiple areas. DOAV is mitigating these risks by working with both VITA and the ASM Vendor (GCR, Inc.) to mitigate these issues. With VITA,, DOAV has implemented a work request to integrate the External Authentication Domain Service (EADS) software tool with the ASM application to bring user ID and password controls into compliance. The Agency is also transitioning the ASM application server from the current hosting environment (Cyberdata) to CESC to improve infrastructure security controls. Upon completion of those efforts, DOAV will be working with the vendor (GCR, Inc.) to mitigate residual risk areas that require application code changes. It is expected that DOAV will incur some expenses as these remaining mitigation efforts are completed.

Enterprise Content Management: The Department is transitioning most of its communications from pape r to electronic format. There is a need to manage all agency data consistently to support ease of use, compliance with data retention and destruction policies, and prompt response to Freedom of Information Act (FOIA) requests for information. This will include hardware and software configuration, setup, training, operational support and policy development. The solution will increase constituent service by reducing processing time and providing better access to information, and will improve operational efficiency by reducing personnel cost in responding to FOIA requests. A limited portion of this work will be completed as part of the Website Redesign project.

Report Title: Strategic Plan

Agency: Department of Aviation **Date:** 2/6/2017

Current IT Services

Category	Costs Year 1 GF	Costs Year 1 NGF	Costs Year 2 GF	Costs Year 2 NGF
Projected Service Fees	$0	$413,043	$0	$414,270
VITA Infrastructure Changes	$0	$14,103	$0	$12,875
Estimated VITA Infrastructure	$0	$427,146	$0	$427,146
Specialized Infrastructure	$0	$0	$0	$0
Agency IT Staff	$0	$0	$0	$0
Non-agency IT Staff	$0	$528,898	$0	$419,334
Cloud Computing Service	$0	$0	$0	$0
Other Application Costs	$0	$60,500	$0	$0
Total	$0	$1,016,545	$0	$846,481

Proposed IT Investments

Category	Costs Year 1 GF	Costs Year 1 NGF	Costs Year 2 GF	Costs Year 2 NGF
Major IT Projects	$0	$0	$0	$0
Non-Major IT Projects	$0	$0	$0	$0
Agency-Level IT Projects	$0	$140,000	$0	$220,000
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	$140,000	$0	$220,000

Projected Total IT Budget

Category	Costs Year 1 GF	Costs Year 1 NGF	Costs Year 2 GF	Costs Year 2 NGF	Total Costs
Current IT Services	$0	$1,016,545	$0	$846,481	$1,863,026
Proposed IT Investments	$0	$140,000	$0	$220,000	$360,000
Total	$0	$1,156,545	$0	$1,066,481	$2,223,026

Report Title: Business Requirements For Technology

Agency:	Department of Aviation (DOAV)	**Date:**	2/6/2017

Automated Weather Observing System Service BReT

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	5/18/2016
Mandate:	No
Mission Critical:	Yes

Description:

This service will involve network communication services for the interface, collection and dissemination of AWOS (Automated Weather Observing System) data elements and transmission of the resulting sequences for existing public use airports to the Federal Aviation Administration Weather Message Switching Center through the National Airspace Data Interchange Network.

BReT 841 DOAV End User Computing

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

Description:

As part of the transition to new vendors, DOAV will need to be migrate approximately 50 laptops as well as a 4 desktops as well as network printers, routers, switches and other IT infrastructure.

BReT 841 DOAV Aircraft Licensing Enhancements

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/23/2016
Mandate:	Yes
Mission Critical:	

Description:

DOAV utilizes a web-based purchased application (Airport Services Manager ASM) to manage and track Commonwealth aircraft licensing, tax payments and ownership. Business requirements for enhancements to tracking and reporting and aircraft owner-facing tools have been identified. DOAV is currently evaluating the various options available for addressing this business need. In addition, DOAV is currently migrating this application to CESC to improve security controls over data. Future security enhancements will focus on application-specific controls as needed.

BReT 841 DOAV Airport Grant Reimbursement Enhancements

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/24/2014
Mandate:	Yes

Mission Critical:	
Description:	

DOAV utilizes a web-based vendor application (ASM) to manage several financial assistance programs for the development of airports in the Commonwealth. DOAV is integrating the business process of grant reimbursements into the ASM software tool to provide an automated method of recording, tracking and managing reimbursements from grants allocated to specific Commonwealth airports. DOAV is currently refining detailed business requirements for future enhancements to this application. In addition, DOAV is currently migrating the application to CESC to improve security controls over data. Future security changes will also focus on application-specific controls.

BReT 841 DOAV Aviation Accounting System Replacement

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/23/2016
Mandate:	No
Mission Critical:	
Description:	

DOAV's current Aviation Accounting System was updated in 2015 to provide an effective interface with DOA's new Cardinal system as well as encumbrance accounting capability not supported by Cardinal. Additional work is currently underway via a support contract to refine data collecting, interpretation and reporting issues as well as improve the reporting capabilities within the application.

BReT 841 DOAV Data Network

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/9/2016
Mandate:	
Mission Critical:	
Description:	

DOAV has both a wired MPLS and a wireless network that will need to migrated as part of the services transition

BReT 841 DOAV Internet Useage

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

DOAV projects that internet useage will increase significantly as the Agency implements a business strategy of operating as many Agency applications as possible via the internet (through website links). The Agency also has strong interest in software as a service (SaaS) applications to support business processes and enhance customer service capabilities.

BReT 841 DOAV Managed Security

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

Description:

DOAV is not currently utilizing the VITA managed security services offering but may contract for specific managed security services as needed in the future.

BReT 841 DOAV Messaging

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

Description:

VITA is initiating from NG messaging services in 2016. Messaging Services for email, enterprise collaboration services, directory services and authentication, and mobile device management are required for approximately DOAV 50 users.

BReT 841 DOAV Server and Storage

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

Description:

VITA is initiating disentanglement from NG Servers and storage. DOAV has 5 virtual servers at CESC which will need to be migrated and tested during the transition. 3 Agency applications (AAS, ASM and the DOAV website) will be affected by this move and will require testing.

BReT 841 DOAV Staff Augmentation

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/23/2016
Mandate:	No
Mission Critical:	

Description:

DOAV utilizes staff obtained through the VITA CAI contract to provide IT services such as on-site AITR support and related IT tasks that the agency is not staffed to support. Business requirements for these staff augmentation positions include IT technical, business application development and customer service experience. DOAV utilizes these staff augmentation positions to provide daily ongoing technical support to Agency staff as well as assist Agency management in development of business applications and upgrade, security, change management and incident response.

BReT 841 DOAV Voice Network

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

Description:

DOAV will need to migrate the Agency's UCaaS system to the new voice vendor as part of the services transition.

BReT 841 Executive Aircraft WiFi

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/23/2016
Mandate:	No
Mission Critical:	No

Description:

The Department of Aviation provides executive flight services for the Commonwealth leadership and state agencies. Traveling on state aircraft equipped to meet the business needs of its customers can significantly increase productivity by enabling employees the ability to use their time onboard more effectively. This wifi connectivity ensures continuity of government operations, day-to-day and in times of emergency.The product is designed with light jets and turboprops in mind, and effectively provides a rich, fully-connected internet and voice experience for up to five WiFi connected devices. Its broadband internet and voice lets one surf the internet while talking on the phone, and send and receive emails with attachments using their laptop, tablet or smartphone.

BRnT 841 DOAV Cardinal Migration and Integration

BRT Type:	Business Requirement for New Technology
Date Submitted:	9/24/2014
Mandate:	No
Mission Critical:	

Description:

DOAV will be migrating to the DOA's Cardinal system from the present CARS system as a Wave II Agency in first quarter 2016 (currently scheduled for February 1 , 2016). This system is totally new to the agency, and will require a complete reorganization of financial accounts (chart of accounts changes, accounting changes etc.) as well as user training on the new system. As with the CARS platform, Cardinal will not handle accounting transactions related to managment of encumbrances. DOAV is developing a separate replacement Aviation Accounting System to provide this functionality and interface with Cardinal. Currently, DOAV's work on Cardinal is on hold as the Wave I agencies migrate to the new system Oct 1, 2014. Once that implementation is complete, DOAV will be working directly with the Cardinal Project team to develop migration plans for accounting functionality. Concurrently, the vendor DOAV has contracted to build the replacement Aviation Accounting System will work with the Cardinal Project team to integrate and test interface files provided by Cardinal for use in performing grant encumbrance accounting at DOAV. DOAV requires the availability of both Cardinal and an operational Aviation Accounting System to complete mandated accounting tasks at the Agency.The Cardinal technology is a PeopleSoft platform while the Aviation Accounting System is being built as a Windows 7 business application utilizing SQL database

management and an internal COV web interface. The Aviation Accounting System will, upon implementation, be hosted at CESC to meet COV security requirements. No external access or non-COV data will be required for this system once it is in production.

BRnT 841 DOAV Enterprise Content Management

BRT Type:	Business Requirement for New Technology
Date Submitted:	9/25/2014
Mandate:	No
Mission Critical:	

Description:

DOAV needs to identify a business strategy and related technology tools to assist the agency in managing the organization, storage, retrieval, retention and disposal of documents and records related to Agency business. Current manual processes do not provide an effective solution for ensuring compliance with COV storage, retention and disclosure requirements. The Agency realizes the need to effectively shift to virtual storage technology and needs to develop both appropriate technology tools and a business strategy for conversion to the new storage management system. Funding for this activity is not yet in place.

BRnT 841 DOAV Server Upgrade 2014

BRT Type:	Business Requirement for New Technology
Date Submitted:	9/30/2014
Mandate:	
Mission Critical:	

Description:

Server operating system (MS Server 2000) on current DOAV server is no longer supported. In addition, DOAV is running out of useable storage space on the server. DOAV took action to resolve both of these issues by replacing the server in May 2014. The operating system was upgraded to Windows Server 2012, and the space was increased. The new server was configured, tested and moved into production on 5/13/2014.

BRnT 841 DOAV Telephone System Replacement

BRT Type:	Business Requirement for New Technology
Date Submitted:	9/24/2014
Mandate:	No
Mission Critical:	

Description:

DOAV's telephone system is outdated and failing. Repairs are increasingly necessary and replacement equipment is difficult to obtain and expensive. DOAV has initiated a work request with VITA to install a Voice-Over-Internet-Protocol (VOIP) telephone system throughout the agency campus. Requirements for the project include upgrading the agency's network circuit bandwidth (completed earlier in 2014) and upgrading in-wall wiring and wall-mounted connections for the VOIP system (repairs currently underway). The agency has selected equipment and is working with the VITA/NG UcaaS team to develop system configuration and arrange for equipment purchase and installation. Current estimated implementation of the new telephone system is late November - December 2014.

BRnT 841 DOAV Website Redesign

BRT Type:	Business Requirement for New Technology
Date Submitted:	8/23/2016
Mandate:	No
Mission Critical:	
Description:	

DOAV's current website technology is outdated and does not provide adequate information and services to Agency customers and other citizens of the Commonwealth. In addition, changes needed to meet VITA website design and Federal ADA requirements cannot be implemented within the current website. The Agency wants to upgrade website capabilities and improve the appearance and operation of website tools. DOAV is interviewing vendors now for a technical requirements development project to be followed by a website build project. Funding for this activity is in place.

Report Title: Appendix A 16 - 18 Report

Agency: Department of Aviation (DOAV)

Date: 2/6/2017

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 Aviation (DOAV)

Agency Head Approval:

Date: 2/6/2017

No

There are no major procurements for this agency.