Report Title: IT Strategic Plan Summary

**Agency:** 181 Department of Labor & Industry

#### **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 Labor and Industry operates and supports five separate program areas that supply services to the Commonwealth as mandated by the Code of Virginia. They include Virginia Occupational Safety and Health (VOSH) Services, Registered Apprenticeship, Labor and Employment Law, Boiler and Pressure Vessel Safety Services, and Administrative and Support Services. The Headquarters Office for the Department is located in Richmond. The Department operates another seven locations with four regional offices located in Manassas, Norfolk, Richmond (Henrico), and Roanoke and an additional three field offices in Abingdon, Lynchburg and Verona.

The above mentioned programs currently depend on the Commonwealth of Virginias Information Technology program/network provided by Virginia Information Technologies Agency (VITA) and their partners. Increasing technology costs present critical challenges to meeting program and security standard requirements including staff support, infrastructure, equipment, software, development and ongoing maintenance costs. Technological advances would assist in most of the program areas but are not presently utilized due to lack of agency resources (funding/staff). The Department currently has inadequate Information Technology resources to address the critical agency concerns listed below. The Agency has expanded services to a continually increasing number of customers with fewer employees and diminished financial resources. These diminishing resources continue to present challenges in all agency programs. The Departments FY2018 Legislative Appropriation is \$17.02 million dollars with 190 authorized Maximum Employment Level (MEL) classified positions. The Departments MEL allocation has declined from 227 in 1998 to its current level of 190. Due to state and federal budget reductions, 28 positions out of our current MEL of 190 are left unfunded.

Agency federal grants are not keeping pace with increased costs. Virgi nias Federal Fiscal Year 2018 U.S. Department of Labors 23(g) State Plan Grant Base Award level has not been increased since Federal Fiscal Year 2015 and still reflects a 3.2% FY2013 sequestration reduction in federal funding. The core of DOLI funding is related to public safety and health compliance.

In September 2012, VITA granted an exception allowing the Department to use U.S. Department of Labors federal network as the underlying infrastructure for servers, PCs and other relevant network devices associated with the Virginia Occupational Safety and Health (VOSH) Program. The exception was granted due to support and hosting requirements which were at the time unique to the VOSH program and therefore could not adequately be addressed via Partnership support of services. This effectively removed over 65% of our employees from the VITA Partnership network and infrastructure. In September 2016, the Department was required to convert all federal grant employees back onto the VITA Partnership network at the request of U.S. Department of Labor due to concern of multiple security breaches occurring at the federal level without adequate federal security staffing. This federal grant staff

transfer and related information technology infrastructure resulted in a 58% increase in the Departments monthly VITA Infrastructure Costs from August 2016 (\$29,476) to August 2017 (\$46,447). No funding has been provided to address this increase.

Current legacy software systems are vulnerable due to the inability to update to a current supported platform. Most of the Agencys unique legacy software systems are currently on out of date Oracle platforms no longer supported by the software vendor. As a result, five unique computer systems that support the Agencys primary business functions are in jeopardy of potential failure. Associated Operational Risk Issues have been identified by VITA related to the servers that house the legacy software systems. The Agency has been working over the past several years to install newer software systems to upgrade to a supported Oracle platform. Once the upgrade is completed, additional ongoing maintenance costs and license fees will be incurred. Lack of resources (staffing and funding) has delayed the upgrade. This also results in the inability to implement more on-line transactions for the programs and services we provide due to the Agencys legacy software systems inability to perform to current software platforms.

The transition away from VITAs partnership with Northrup Grumman over to a multi-vendor environment is likely to cost the agency additional funds to cover replacing current computer hardware and network equipment with new vendors resources. Additional staff resources will also be required to help support this transition. The computer staff in the agency today consists only of an Information Technology Director and an Internet Webmaster. Currently, supplemental staffing must come from contractors to help support any transition of computer hardware and updating agency software. Contractor costs are not permanently funded within the agency budget.

The Commonwealth Information Security requirements have increased dramatically. This change has required that agencies dedicate a full time employee (FTE) to the Information Security Officer position. This position is critical to complying with the security requirements of the Commonwealth. In order to meet this challenge, the agency was required to modify duties of a Technical Business Analyst/Oracle Administrator position to those of an Information Security Officer.

The Department has a critical need for permanent funding of two additional information technology positions (Application Support Engineer and Project Manager/Systems Analyst) to support agency information technology demands. A related information technology decision package has been submitted in the 2018-2020 biennial budget.

#### **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?

Increasing technology costs present critical challenges to meeting program and security standard requirements including staff support, infrastructure, equipment, software, development and ongoing maintenance costs. Technological advances would assist in most of the program areas but are not presently utilized due to lack of agency resources (funding/staff). The Department currently has inadequate Information Technology resources to address critical Agency concerns. Budget Decision Package submissions have been completed by the agency during the budget process for items

specifically identified in the IT Strategic Plan including existing Operational Risk Issues, Business Requirements for Existing Technology, and Business Requirements for New Technology.

# **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?

In the current biennium, in order to address current COV Security standards and existing operational risk issues as well as other Central Agency mandated changes (eVA), the following is required: (1) Agency server and application upgrades/modifications will continue in order to meet anticipated program business needs; (2) The Agency has entered into a Memorandum of Understanding with VITA for IT Security Audit Services and Information Security Officer Services to address security requirements; (3) The Agency has diverted an existing IT position for a full time ISO Apprentice position; (4) Address Agency IT Infrastructure Transition and required changes; (5) Budget Decision Packages have been submitted for additional IT support staff; and (6) A Registered Apprenticeship System evaluation is being performed in order to support Expansion of the Apprenticeship Program. (EXISTING PROJECTS)

As funds allow, future IT initiatives include the following: (1) e-Commerce Lead and Asbestos Permitting System; (2) eGov Labor and Employment Payment of Wage Claim System; and (3) Web based Electronic Credit Card processing. (NEW PROJECTS)

IT infrastructure Transition: At this point in time, the agency does not anticipate use of cloud hosting or an increase in internet usage. Legacy applications have been identified and run independently of other systems. Infrastructure and databases reside in the COV. Application testing may be required for the transition.

**Report Title: Strategic Plan** 

Agency: Department of Labor & Industry

# **Current IT Services**

# Costs Year 1

# **Costs Year 2**

Category	GF	NGF	GF	NGF
Projected Service Fees	\$326,940	\$142,802	\$341,735	\$147,086
VITA Infrastructure Changes	\$78,581	\$189,748	\$63,786	\$185,464
Estimated VITA Infrastructure	\$405,522	\$332,551	\$405,522	\$332,551
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Specialized Infrastructure	\$49,500	\$22,000	\$49,500	\$22,000
Agency IT Staff	\$0	\$500,000	\$0	\$500,000
Non-agency IT Staff	\$0	\$85,000	\$0	\$85,000
Cloud Computing Service	\$0	\$0	\$0	\$0
Other Application Costs	\$12,000	\$3,000	\$12,000	\$3,000
Total	\$467,022	\$942,551	\$467,022	\$942,551

# **Proposed IT Investments**

# **Costs Year 1**

# **Costs Year 2**

Category	GF	NGF	GF	NGF
Major IT Projects	\$0	\$0	\$0	\$0
Non-Major IT Projects	\$0	\$0	\$0	\$0
Agency-Level IT Projects	\$48,195	\$84,405	\$48,195	\$84,405
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	\$48,195	\$84,405	\$48,195	\$84,405

# **Projected Total IT Budget**

# Costs Year 1

# Costs Year 2

Category	GF	NGF	GF	NGF	<b>Total Costs</b>
Current IT Services	\$467,022	\$942,551	\$467,022	\$942,551	\$2,819,146
Proposed IT Investments	\$48,195	\$84,405	\$48,195	\$84,405	\$265,200
Total	\$515,217	\$1,026,956	\$515,217	\$1,026,956	\$3,084,346

# Report Title: Business Requirements For Technology

Agency: Department of Labor & Industry (DOLI)

## **BReT - Commonwealth Security Program**

BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	9/30/2016	
Mandate:	Yes	
Mission Critical:	Yes	

### **Description:**

This BRT Addresses Operational Risk Issues related to Commonwealth Security Program requirements. ISO Services-DOLI has entered into a MOU agreement with Virginia Information Technologies Agency (VITA) providing Centralized IT Security Services supporting the implementation and management of the DOLI security program. This MOU includes the update/development of agency BIA, sensitive IT systems risk assessments, and additional program needs. As such, the agency is making substantial progress toward the implementation of their security program. IT Audit Services- DOLI has entered into a MOU agreement with Virginia Information Technologies Agency (VITA) providing IT Security Audit Services for the scheduled audits of agency-defined sensitive IT systems. This MOU includes the identification of specific systems to be audited, and each agency has been scheduled for system audits during the MOU period of performance. The Department currently has inadequate Information Technology resources to address operational risk issues. The Agency has a critical need for permanent funding of additional Information Technology positions to support security requirements. A related budget decision package has been submitted for the 2018-2020 biennial budget.

#### BReT - eVA Central Agency mandated changes.

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/30/2016
Mandate:	Yes
Mission Critical:	Yes

#### **Description:**

Implement application changes required to meet eVa mandates.

#### BReT- Agency Infrastructure Impact

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/30/2016
Mandate:	Yes
Mission Critical:	Yes

#### **Description:**

The Department of Labor and Industry operates and supports five separate program areas that supply services to the Commonwealth as mandated by the Code of Virginia. They include Virginia Occupational Safety and Health (VOSH) Services, Registered Apprenticeship, Labor and Employment Law, Boiler and

Pressure Vessel Safety Services, and Administrative and Support Services. The Headquarters Office for the Department is located in Richmond. The Department operates another seven locations with four regional offices located in Manassas, Norfolk, Richmond (Henrico), and Roanoke and an additional three field offices in Abingdon, Lynchburg and Verona.

The above mentioned programs currently depend on the Commonwealth of Virginia's Information Technology program/network provided by Virginia Information Technologies Agency (VITA) and their partners. Increasing technology costs present critical challenges to meeting program and security standard requirements including staff support, infrastructure, equipment, software, development and ongoing maintenance costs. Technological advances would assist in most of the program areas but are not presently utilized due to lack of agency resources (funding/staff). The Department currently has inadequate Information Technology resources to address the critical agency concerns listed below. In September 2012, VITA granted an exception allowing the Department to use U.S. Department of Labor's federal network as the underlying infrastructure for servers, PCs and other relevant network devices associated with the Virginia Occupational Safety and Health (VOSH) Program. The exception was granted due to support and hosting requirements which were at the time unique to the VOSH program and therefore could not adequately be addressed via Partnership support of services. This effectively removed over 65% of our employees from the VITA Partnership network and infrastructure. In September 2016, the Department was required to convert all federal grant employees back onto the VITA Partnership network at the request of U.S. Department of Labor due to concern of multiple security breaches occurring at the federal level without adequate federal security staffing. This federal grant staff transfer and related information technology infrastructure resulted in a 58% increase in the Department's monthly VITA Infrastructure Costs from August 2016 (\$29,476) to August 2017 (\$46,447). No funding has been provided to address this increase.

The transition away from VITA's partnership with Northrup Grumman over to a multi-vendor environment is likely to cost the agency additional funds to cover replacing current computer hardware and network equipment with new vendors' resources. Additional staff resources will also be required to help support this transition. The computer staff in the agency today consists only of an Information Technology Director and an Internet Webmaster. Currently, supplemental staffing must come from contractors to help support any transition of computer hardware and updating agency software. Contractor costs are not permanently funded within the agency budget.

The Department has a critical need for permanent funding of two additional information technology positions to support agency information technology demands.

BRT Type:	Business Requirement for Existing Technology	
Date Submitted:	9/30/2016	
Mandate:	No	
Mission Critical:	Yes	
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#### **Description:**

The Agency's Registered Apprenticeship division will evaluate the existing application and technology (CAAS) to determine feasibility of transition to the Federal Department of Labor's Registered Apprenticeship system (RAPIDS).

## **BReT Server and Software Upgrade**

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/30/2016
Mandate:	Yes
Mission Critical:	Yes

### **Description:**

Scheduled server and software upgrades will be completed during the current biennium.

The Department currently has inadequate Information Technology resources to address operational risk issues. The Agency has a critical need for permanent funding of additional Information Technology positions to address business requirements for technology. A related budget decision package has been submitted for the 2018-2020 biennial budget.

## **BRnT - Asbestos/Lead Application**

BRT Type:	Business Requirement for New Technology	
Date Submitted:	9/30/2016	
Mandate:	No	
Mission Critical:	Yes	

## **Description:**

The Department's Asbestos/Lead Notification and Permit Program's vision is to web-enable the contractor permitting process. The Agency anticipates utilizing a java based infrastructure.

The Department currently has inadequate Information Technology resources to address program business requirements for new technology. The Agency has a critical need for permanent funding of additional Information Technology positions to support this new technology service. A related budget decision package has been submitted for the 2018-2020 biennial budget.

# **BRnT - Labor Law Wage Complaint Application Migration**

BRT Type:	Business Requirement for New Technology	
Date Submitted:	9/30/2016	
Mandate:	No	
Mission Critical:	Yes	

#### Description:

Migrate the Labor Law Wage complaint application functionality away from the current Oracle application to Java. This process would consolidate both payment of wage AND child labor back into a single application that would be hosted on the web utilizing newer more cost efficient technology. The Department currently has inadequate Information Technology resources to address program

business requirements for new technology. The Agency has a critical need for permanent funding of additional Information Technology positions to support this new technology service. A related budget decision package has been submitted for the 2018-2020 biennial budget.

#### **BRnT - On-Line Credit Card Payments**

BRT Type:	Business Requirement for New Technology
Date Submitted:	9/30/2016
Mandate:	No
Mission Critical:	No

## **Description:**

The Department would like to make available to Agency customers on-line credit card payments for all Agency revenue types.

The Department currently has inadequate Information Technology resources to address program business requirements for new technology. The Agency has a critical need for permanent funding of additional Information Technology positions to support this new technology service. A related budget decision package has been submitted for the 2018-2020 biennial budget.

#### **DOLI IT Sourcing BReT**

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	3/28/2017
Mandate:	No
Mission Critical:	Yes

## **Description:**

#### 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 180 users in our agency. We also have 0 applications with hooks into messaging services which will need to be tested. Workplace Collaboration Services (VITA provided SharePoint) DOLI does not use WCS SharePoint. We have 0 applications provided via AirWatch applications serviced via AirWatch which will need remediation.

#### IBM Mainframe BReT:

VITA is initiating disentanglement from NG IBM Mainframe services in 2016. DOLI has 0 applications on the IBM which will need to be migrated and tested during this transition.

### Server/storage (including housing of equipment) BReT:

VITA is initiating disentanglement from NG servers and storage. DOLI has 6 servers which will need to be migrated and tested during this transition. 5 applications will be affected by this move and will need to be tested.

## Authentication/directory services BReT:

DOLI has 0 applications which will need to be migrated and tested during the authentication/directory services transition. Number of users (internal and external) are 0 internal and 0 external.

# End user computing BReT:

DOLI has 32 number of desktops and 147 number of laptops and 16 network printers which will need to be migrated.

#### Data networks BReT:

DOLI has 8 office networks that are not mpls which will need to be migrated.

### Voice Networks BReT:

DOLI has 65 UCaaS phone lines and 40 other phone lines which will need to be migrated.

## Cloud Computing BReT:

DOLI is investigating moving 0 number of applications to a Cloud services vendor. The business reason for the move is to <reduce costs; increase efficiencies; reduce IT agency footprint; etc.>. Applications <are/are not> cloud ready. Agency <will/will not> 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, Department of Labor and Industry will engage VITA's

Shared Security Services/procure outside security services from an outside vendor utilizing DPB funds.

# Internet Usage BReT:

DOLI projects that internet usage will increase by 50% due to Agency program use being migrated to web based services and patching for Agency applications. Some examples of why internet usage might increase are as follows: an increase use of video streaming, an increase in user access to the internet, etc.

Report Title: Appendix A 18 - 20 Report

**Agency:** Department of Labor & Industry (DOLI)

Agency Head Approval:

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

Report Title: Appendix A 18 - 20 Report

**Agency:** Department of Labor & Industry (DOLI)

Agency Head Approval: No

There are no stand alone major procurements for this agency.