

Report Title: IT Strategic Plan Summary

Agency: 129 Department of Human Resources Management

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?

Following is DHRM's strategy for managing its existing operational IT investments for the next 6 years. This strategy is broken down by existing operational IT investment.

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1 - PERSONNEL MANAGEMENT INFORMATION SYSTEM (PMIS) – §2.2-1201.(3) of the Code of Virginia requires that DHRM “Design and maintain a personnel information system that shall support the operational needs of the Department and of state agencies, and that shall provide for the management information needs of the Governor, his secretaries, and the General Assembly.”

PMIS is the system that DHRM provides agencies to gather, manage, and communicate critical personnel information and workforce data for salaried and wage employees at most state agencies. It is one of the Commonwealth's most critical systems.

In March 2017, the existing 35+ year old system was migrated off of the Unisys mainframe environment to a Windows Server environment to save the Commonwealth at least \$20M in annual mainframe costs. Although the migrated system runs in a modern technology, the migrated source code requires DHRM staff to constantly fix/enhance it using a proprietary framework.

With the migration DHRM lost three (3) senior support staff who had a combined 80 plus years of experience with the migrated system. The migrated system was intended to produce a “like for like” result. While PMIS is moderately functional, there are significant performance issues including extremely slow response times, very long triage / bug resolution and enhancement time-frames and missing functionality (when compared to its mainframe predecessor). These issues have disrupted business processes for all users, and can translate into inaccuracies in employee pay, inability to submit or late submission of mandated reports and employee/retiree impacting data inaccuracies being transmitted to key, statewide downstream systems like the Commonwealth's payroll system (CIPPS) and the Commonwealth's retirement system.

1a) - Needed IT Funding over the next 6 years - DHRM needs funding to support current operations and to plan for and implement a PMIS replacement.

With regards to supporting current operations, DHRM needs funding for two (2) additional FTEs to

address the issues noted above.

With regards to planning and implementing a PMIS replacement DHRM needs funding to (1) develop and maintain, and (2) pursue a modern, configurable HR solution that provides a suite of functions (e.g., talent management, performance management, recruitment and other functions) that PMIS currently lacks. In its present migrated implementation PMIS realistically could not accommodate such extensive change.

In the absence of this suite multiple agencies either procure their own modern systems, devote resources to internally develop and implement HR solutions that a central agency should provide, or simply cope with existing tools and do what they can to manage workforce data. Additionally, with the implementation of the migrated system DRHM business teams and its client agencies have had to, significantly and repeatedly, alter internal business processes to avoid disruptions to agencies and their employees. These changes have created unanticipated and ongoing IT support service needs that exceed what the current skeleton, IT support team can provide.

Request for funding aligns with DHRMs FY16-18 Agency Strategic plan. In that plan, DHRM notes: "DHRM migrated PMIS and BES from the legacy UNISYS mainframe to a Windows .NET environment. This effort addressed a short-term need but it does not address DHRMs long term need to provide a robust HR solution to Commonwealth agencies. DHRM will need additional monies starting in FY18 to pursue this long-term need." That plan also indicates: "Continued expansion of HR tools available to DHRM customers and modernization of PMIS and its sub-systems. DHRM needs to provide agencies with a modern, affordable, fully-integrated, configurable HR system – DHRM currently provides agencies with a dated HR system that has been migrated to a different platform, while maintaining the same limited functional structure. PMIS and its sub-systems lack the robust, integrated capabilities of modern systems. DHRM believes that a more efficient and effective solution would contribute to drastically increase value in a great number of areas, including improving agency experience, providing new services to constituents, reducing costs through a shared service and enhance the Commonwealths reputation as a well-managed state."

1b) IT Leaderships plan to support the system that no longer meets its business need (either through poor performance or excessive cost) – DHRM IT Leadership recognizes that the migrated PMIS system, as deficient as it is (see above), is the only statewide HR system available for use. IT Leadership plans to keep the migrated system operational. However, each day following this approach is another day not planning for the future and results in a growing list business needs that are not being met.

1c) IT Leaderships plan to fulfill need for staff and/or funding to meet increasing demand for IT services – DHRMs IT Leadership will request additional 2 (two) FTEs to support the migrated PMIS and General Fund (GF) funding of \$488,208 annual full cost (\$976,417 for the biennium) for these two (2) staff positions. DHRMs IT Leadership is fully committed to keeping the migrated system operational, but with existing limited staff, the loss of senior resources and so many malfunctions to address with migrated system, the team currently assigned to support PMIS is daily forced into a reactive, put-out-the-worst-fire-first mode of operations. Additional staff funding is need to break out of this cycle.

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2) BENEFITS ELIGIBILITY SYSTEM (BES) - DHRM provides agencies and certain local entities with access to the Benefits Eligibility System to elect and manage state employee (including employee dependent) and retiree health benefits. This system was one of two (PMIS being the other) mission-critical systems migrated off of the Unisys mainframe in March 2017. BES tracks health benefits information for most employees in PMIS. When PMIS and BES were first implemented many years ago, BES only served PMIS employees. That makeup has dramatically changed. Now, PMIS employees represent only 1/3 of the participants that are managed in the BES system. BES has experienced significant post-migration issues. These issues include the ones experienced by PMIS (see PMIS Description section above) as well as significant other issues including:

I - The loss of a self-service health benefits enrollment capability that resulted from the migration – The loss of this online capability now requires agencies to manually process thousands of forms that were formerly handled electronically by employees. This step back in capability significantly increases benefit

administrator and health benefit participant workloads particularly during the annual open enrollment periods.

II - The need to respond to new mandates has become increasingly difficult and potentially very costly – BES requires HIPAA (Health Insurance Portability and Accountability Act) and ACA (Affordable Care Act) compliance. The penalties to the Commonwealth for failing to file returns on time or filing incorrect information can be in the millions of dollars. DHRM is working diligently to meet ACA reporting mandates but the migration and subsequent loss of knowledgeable technical BES staff is severely impacting, if not jeopardizing, DHRM's efforts on this front.

III - The need to respond to ever increasing new requirements (e.g., in cases where employees can enroll in more than one health benefits program) – DHRM is expending a significant amount of effort by business and technical resources to make BES capture data that due to its antiquated design, it is not set up to accommodate.

2a) Needed IT Funding over the next 6 years – DHRM needs funding to support current operations and to implement a BES replacement.

With regards to supporting current operations, DHRM needs Non-General Fund funding appropriation increase and two (2) additional FTEs to address the BES issues noted above.

With regards to implementing a BES replacement DHRM needs to implement a new, more maintainable, efficient and configurable Health Benefits Eligibility solution that will integrate the different health benefits plans available to the state and locality employees (e.g., The Local Choice [TLC] and the Local Option Health Insurance Plan to support SB364) and to other important groups (e.g., Line of Duty Act [LODA] participants). The system must also accommodate complex reporting initiatives (e.g. Affordable Care Act [ACA] reporting as well as effectively exchange information with health care providers doing business with the state. This integrated solution must be available 24/7 to all participants through secure and reliable web portals. These requirements do not appear to be easily compatible with any packaged offerings.

Rather than request new funding or an NGF appropriation increase, DHRM will first investigate if the system that it will build to satisfy Senate Bill 364 (SB364) will provide a foundation on which DHRM can add a BES replacement. DHRM's findings in this research will determine whether DHRM will need future funding for a BES replacement.

2b) IT Leadership's plan to support the system that no longer meets its business need (either through poor performance or excessive cost) – DHRM IT Leadership recognizes that the migrated BES application, as deficient as it is (see above), is the only statewide Health Benefits Eligibility system available for use. IT Leadership plans to keep the migrated system operational until a replacement is implemented. However, each day following this approach is another day not planning for the future and results in a growing list of business needs that are not being met.

2c) IT Leadership's plan to fulfill need for staff and/or funding to meet increasing demand for IT services – DHRM's IT Leadership will request additional 2 (two) FTEs to support the migrated BES and Non-General Fund (NGF) funding appropriation of \$488,208 annual full cost (\$976,417 for the biennium) for these two (2) staff positions. DHRM's IT Leadership is fully committed to keeping the migrated system operational, but with existing limited staff, the loss of senior resources and so many issues to address with the migrated system, the team currently assigned to support BES is daily forced into a reactive, put-out-the-fire-first mode of operations. Additional staff funding is needed to break out of this cycle.

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3) TIME, ATTENDANCE and LEAVE (TAL) - TAL is a time/leave keeping system DHRM built for under \$1M in FY2013-14. TAL is currently used by sixty-two (62) state agencies and nearly 18,000 users. With the statewide implementation of Cardinal time keeping and absence management capability, TAL will be phased out of operational use by October/November 2018 (FY19). Some form of backup or query capability must be preserved for record retention purposes.

3a) Needed IT Funding over the next 6 years – No new funding is needed. Funding should remain at existing levels until Cardinal replaces TAL and TAL operations can be subsequently closed out.

3b) IT Leaderships plan to support the system that no longer meets its business need (either through poor performance or excessive cost) – n/a

3c) IT Leaderships plan to fulfill need for staff and/or funding to meet increasing demand for IT services – n/a

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4) IT HELP DESK - DHRM has managed to pull together parts of certain staffs time (less than 1.5 FTE total) to provide a much-needed IT Help Desk for the systems that need support. This IT Help Desk provides support for a number of DHRMs most critical systems (e.g., PMIS and BES) as well as both of DHRMs employee / agency facing portals (EmployeeDirect and HuRMan) that serve tens of thousands of employees as well as HR professionals at most state agencies. As staff can make time this IT Help Desk fields requests from system users, agency HR professionals, agency Health Benefits administrators and others. Unfortunately, disruptions and loss of functionality resulting from migration has significantly impacted turnaround time for the helpdesk since March 1, 2017, the date that the migrated systems went live. Helpdesk requests for PMIS and BES have tripled since then. DHRM does not have enough staff to devote to supporting the migrated systems and their associated end-user portals. As a result, requests to resolve user access or other issues can take weeks to understand, triage and address. Creation of documentation for systems, processes and procedures that would enable employees and HR professionals to self-service their own needs and DHRM to better support its systems, goes undeveloped.

4a) Needed IT Funding over the next 6 years – DHRM needs IT Funding for two (2) help desk/documentation specialists.

4b) IT Leaderships plan to support the system that no longer meets its business need (either through poor performance or excessive cost) – n/a – Though, systems are more quickly not meeting business needs for lack of support staff.

4c) IT Leaderships plan to fulfill need for staff and/or funding to meet increasing demand for IT services – IT Leadership will prepare and submit an estimate budget request of \$169,242 (\$338,484 for the biennium) of GF (50%) and NGF (50%) for 2 FTE to staff the IT Help Desk

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5) INFORMATION TECHNOLOGY SECURITY - DHRM engaged in a Memorandum of Understanding (MOU) with VITA Security Services, to receive Information Security Officer (ISO) services to perform and document DHRM's Business Impact Analysis (BIAs) and System Security Plans /Risk Assessments for DHRM's 40 total applications of which 30 are sensitive systems. However, many of DHRMs security needs for ensuring compliance are mainly out-of-scope for this MOU. Those needs include:

I - Developing, implementing, overseeing, and maintaining the agency's IT Security Program that meets or exceeds the requirements of COV IT security policies and standards in a manner commensurate with risk.

II – Preparing and revising continuity plans, policies and procedures, IT security plans, and disaster recovery plans.

III - Verifying and validating that all agency IT systems and data are classified for sensitivity for confidentiality, integrity, and availability.

IV - Developing and maintaining information security awareness and training program for agency staff, including contractors and IT service providers.

V - Implementing and maintaining the appropriate balance of preventative, detective and corrective controls for agency IT systems commensurate with data sensitivity, risk and systems criticality.

VI - Mitigating and reporting all IT security incidents in accordance with §2.2-603 of the Code of Virginia and VITA requirements and take appropriate actions to prevent recurrence.

5a) Needed IT Funding over the next 6 years – One (1) FTE and GF and NGF IT funding is needed to support and to perform all the activities referenced above. Without the ability to perform those activities, DHRM will not be able to be fully compliant with the VITA Security requirements. A non-compliance will penalize DHRM management with inevitable audit points.

5c) IT Leaderships plan to fulfill need for staff and/or funding to meet increasing demand for IT services – To support and perform these activities DHRM IT Leadership will prepare and submit a budget request for one (1) FTE and \$140,768 (\$281,535 for the biennium) of GF (50%) and NGF (50%) to fund one (1) position to perform in an information and systems security expert role capacity.

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6) - CRM (Customer Relationship Management) System

6) - CRM (Customer Relationship Management) System - DHRM is in need of a solution to manage customer service activities, related to PMIS and its subsystems, the data warehouse and data analytics tools, the EmployeeDirect self-service portal and the HuRMan web tools portal.

Currently, DHRM Office of Health Benefits (OHB) is using Microsoft Dynamics CRM for health benefits case management and reporting purposes. This solution is currently an on-premise installation. Going forward, DHRM intends to leverage this solution to increase visibility and control of DHRM help desk and service activities in a configurable and easy-to-use solution through the creation of a new customer service tenant open to participation by all DHRM office areas.

6a) Needed IT Funding over the next 6 years – No new funding is needed at the moment. Funding needs should be re-evaluated once the solution has been extended to all the DHRM Office Areas.

6b) IT Leaderships plan to support the system that no longer meets its business need (either through poor performance or excessive cost) – n/a

6c) IT Leaderships plan to fulfill need for staff and/or funding to meet increasing demand for IT services – DHRM will re-evaluate the need for staff and/or funding once the solution has been extended to all the DHRM Office areas.

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7) DHRM has additional IT Operational investments that it supports that include the following:

- Data Warehouse and Agency File Repository
- External Internet Websites and internal Intranet documents sharing
- CVC (Commonwealth of Virginia Campaign) System
- CommonHealth Employee Wellness Program
- Commonwealth of Virginia Learning Center (COVLC)

DHRM does not anticipate needing additional funding for these investments in the current biennium.

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

There are a number of changes in the business environment that have mandated changes to agencies' current IT investments and significant increases in the DHRM's IT costs are expected due to:

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1 - PMIS/BES MIGRATION off of UNISYS - The most notable change was the mandate to migrate DHRM's mission critical systems off the mainframe into a server environment. This migration in March 2017 saved DHRM (and the Commonwealth) at least \$20M annually that would have been charged for continued Unisys mainframe use. However, the 35+ year old systems that were migrated merely had a different technology platform (servers instead of a Unisys mainframe) put in place while functionality and look and feel of the systems remained unchanged.

Although the migration had a short-term win in terms of cost savings, it did not provide a long-term solution. In fact, it has created a new set of problems. Shifting technology platforms removed the ability of current mainframe staff who had 80+ years of experience with the migrated systems to provide responsive support. Knowledge of the new technology underlying the migrated solution is only a small part of the operational support equation. A much larger and more significant portion involves the knowledge of how these systems work and how to maintain them.

Though DHRM was allowed to hire two (2) new staff of the six (6) initially requested to support the migrated systems, there were only three months once the systems went live before the positions of the mainframe staff were eliminated by amendment to the 2016-2018 biennial budget. This elimination of positions without hiring should have been delayed to allow longer overlap of new and existing staff for a change of the significance introduced by the migration. What would have taken minutes or hours to fix (pre-migration) can now take days or weeks (post-migration).

The migrated systems (PMIS and BES) need to be replaced. In a number of ways, the current implementation of these systems is impeding rather than enabling the business of state government. DHRM continues to look for ways to improve on migrated systems, but any gains would not be on the level that the Commonwealth needs.

Though not a change (yet) in the business environment, Affordable Care Act (ACA) reporting requirements are an external factor that create a mandate that DHRM must fulfill with data from one of its migrated, mission critical systems (BES). The fines for improper / failed reporting can be over \$3M per agency. DHRM creates ACA documentation on behalf of agencies and submits this documentation to the federal government to needing ACA documents. DHRM is working diligently to leverage programs converted in the migration. However, it remains to be seen if these migrated programs will work properly. DHRM must submit these reports to the federal government early in CY2018 and produce preliminary reports for agency review in October 2017.

Additionally, new mandates continue to emerge. These mandates are often the result of the passage of legislation or the issuance of executive orders. They can require significant changes to be made to DHRM systems within very tight timeframes.

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2 - INADEQUATE STAFFING LEVELS - DHRM has a skeleton workforce and lacks IT staff. DHRM has consistently endeavored to "do more with less". However, this prolonged approach without a return to adequate funding levels has taken a toll on the ITech division. Not only is there no overlap in job functions, but key staff members perform functions that should typically be performed by several individuals. This fact has been exacerbated by the post-migration loss of functionality and requirement

to re-build or reinvent critical system tools, both for internal maintenance and customer transactions that now require significant manual intervention.

In FY16, DHRM requested funding for four (4) FTE positions to operate and maintain the migrated legacy systems in the Windows .NET C# environment, and two (2) positions to provide technical help desk to DHRM IT systems. DHRM was given approval for only two (2) positions.

This staffing model does not allow for adequate system support/documentation and severely limits planning efforts and efforts for new initiatives. Since there is not enough staff over which to spread the operational workload, cross-training of existing resources and thorough documentation of systems cannot occur. As a result, if an ITech staff leaves DHRM employ, DHRM will lose significant operational / business knowledge and system support will suffer. ITech staff takes great pride in the systems they support and the work they deliver. However, the prolonged and reduced funding has negatively impacted staff morale.

DHRMs IT staff have consistently taken on more in an attempt to help the agency, but the demands have surpassed what they can realistically deliver. An increase in key staff positions would communicate to the existing employees that Commonwealth leaders see and believe that DHRMs systems can and do provide real value and are worth investment.

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3 - ACA (Affordable Care Act) Reporting - requires annual changes to existent systems to satisfy IRS reporting requirements.

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4 - LODA (Line Of Duty Act) Code change - will require DHRM to create a new health benefits program with specific eligibility and enrollment rules. Automated systems need to be developed and/or changed, implemented and operated to satisfy this code change.

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5 - SB364 (2016 General Assembly Session, Chafin) - creates the opportunity for a new health benefits program for local governments, local school divisions and other political subdivisions. This new program will require new automated systems to be developed, implemented and operated to satisfy the SB requirements. DHRM has received funding for this development.

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6 - IT INFRASTRUCTURE TRANSITION - DHRM actual environment includes 103 desktops which 93 are fully encrypted, 71 laptops, 232 email boxes, 15 printers, 7 physical servers, 25 virtual servers and 18 Terabyte of storage providing support to 40 applications of which 30 are sensitive systems. In a situation of transition to a different provider DHRM will need funding and resources to support this initiative.

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7 - SECURITY SHARED SERVICES - DHRM is engaged with VITA Security Shared Services and signed a MOU for ISO Services from VITA and a MOU for IT Security Audit Services from VITA. This engagement increased cost with IT security and did not provide all the IT security services that DHRM needed.

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8 - CLOUD APPLICATION HOSTING - While not using it presently, DHRM might need to consider it a viable option in the near future. DHRM does not have funding to support any anticipated costs with this initiative. One of DHRMs main concerns with cloud hosting is the security of its very sensitive data.

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9 - INTERNET UTILIZATION - More applications and automated processes will be available to a larger audience that use DHRM programs and services. The internet utilization will increase considerably this upcoming biennium. The Local Choice (TLC) entities that are starting their participation and the future participation of schools in the State Health Plan managed by DHRM will contribute to a higher volume of web traffic. DHRM does not have funding to support anticipated costs with this increase.

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10 - AUTHENTICATION/DIRECTORY SERVICES - DHRM has 40 total applications of which 30 are sensitive systems. They will need to be migrated and tested during the authentication/directory services transition. Number of users (internal and external) are 1,500 internal and 100,000+ external.

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?

With regards to new IT investments DHRM's high-level strategy over the next 6 years is to plan, develop and implement new solutions that replace PMIS and BES. This is now the highest priority assignment related to new IT investments that business sponsors have communicated to DHRM's IT Division (ITECH). It is consistent with the following vision that DHRM management has communicated in its FY16-FY18 Agency Strategic Plan: "DHRM needs to provide agencies with a modern, affordable, fully-integrated, configurable HR system – DHRM currently provides agencies with a dated HR system that has been migrated to a different platform, while maintaining the same limited functional structure. PMIS and its sub-systems, and BES lack the robust, integrated capabilities of modern systems. DHRM believes that a more efficient and effective solution would contribute to drastically increase value in a great number of areas, including improving agency experience, providing new services to constituents, reducing costs through a shared service and enhance the Commonwealth's reputation as a well-managed state." In order to address this highest priority, DHRM will explore possible options (buy vs. build) and then pursue the chosen option. DHRM needs to explore and evaluate options in the current biennium and in fact, has already begun to do so. In July 2017, DHRM released a RFI (Request for Information) to vendors. In this RFI, DHRM sought information from vendors to assess the viability of a talent management systems modernization project. Based on RFI responses, DHRM has developed a high-level estimate for a project involving a vendor solution. DHRM will submit a budget request for this amount. DHRM has developed a high-level estimate for technical / project resources (refer to BES portion in the CURRENT OPERATIONAL IT INVESTMENTS section above) for a BES replacement. DHRM would have different groups of subject matter experts (SMEs) involved in these replacement initiatives. The systems needing to be replaced share a common set of employees for which they manage information so there could be times that same SME could be called upon to participate in work on both systems. DHRM anticipates this overlap of SME by both initiatives will be limited. If DHRM is not funded to pursue replacements for its mission critical systems, it will not be able to perform multiple core aspects of its mission, despite tremendous efforts by its business and technical staff. Other central agencies (e.g., DOA & VRS) have been funded to undertake systems modernization efforts. Before they were migrated in 2017, DHRM's two mission critical systems had been in service for over 35 years and served one of the Commonwealth's most important resources – the state and local workforce and its retirees. DHRM's systems have served the Commonwealth well, but are no longer keeping pace with demands put on them. The recent migration has only exacerbated efforts to try to support the aging

systems. DHRM would have pursued options other than a migration, but was limited to this option due to a tight time frame for moving its systems off the Unisys mainframe. In pursuing the migration option, DHRM and VITA did not consider the resulting migrated solution as a viable long-term solution. . If these mission critical systems are not replaced, there are very real and significant risks to DHRM, the Commonwealth and to current state employees and retirees. . .===== . Following is a list of

functions that DHRM performs with the migrated PMIS system and the risks associated with continuing to performing these functions with the migrated systems. . 1 - Provides critical data feeds to external agencies and third parties: . 1.1 - Dept. of Accounts (DOA) data feed could result in payroll errors. 1.2 - Virginia retirement System (VRS) data feed could result in retirement-related errors. 1.3 - Agencies with local HR systems driven by PMIS could result in local agency HR errors. 1.4 - Data integration with TAL (and soon with Cardinal) could result in errors in TAL timesheets and leave accounting functionality. 1.5 - Freedom of Information Act (FOIA) Requests and Other Ad-hoc Requests - DHRM is required to respond quickly and accurately to information requests from various constituents, such as the Governor, the General Assembly, agency management, employees, the public, and the press. DHRM must respond to FOIA requests in accordance with the provisions of the Freedom of Information Act. Depending on the type of request, the number of days to respond is stringent at times, even with the extension that is allowed by law. The delivery of accurate and timely FOIA information can be impacted by the limitations of the migrated systems. . . 2 - Fulfills statutory mandated requests / executive orders: The current migrated systems are making reporting and adjustments to reports more challenging than the pre-migration processes. . 2.1 - DHRM is required by the Code of Virginia to respond to statutorily mandated requests and Executive Orders. 2.2 - Frequently, the General Assembly imposes statutory mandates on DHRM that in turn rely on technological responses. 2.3 - According to the Code of Virginia, DHRM is required to submit reports to the members of the General Assembly on or before September 30 of each year showing current and historical employment levels, changes in the level, as well as terminations in the previous fiscal year. . . 3 - Provides accurate Employee Positions Report (EPR) information . 3.1 - DHRM is required by statute to report accurately to the General Assembly and executive branch agencies. DHRM could be in violation of this mandate. Counts could be affected, leading to questions/complaints from the legislative money committees, the Department of Planning and Budget, and possibly from the Joint Legislative Audit and Review Committee. 3.2 - Additionally, counts could be unavailable / inaccurate and could negatively impact Department of Accounts figures for the Statewide Indirect Cost Recovery Plan as well as Department of Treasury figures used by its Risk Management Division actuary. . . 4 - Provides assistance to employees through the Employee Loan Program (ELP) - Incorrect PMIS data could disable or disrupt the Employee Loan Program if the PMIS employment status could not be validated. . . 5 - Provides EEO-4 Federal Reporting - Inaccurate PMIS data could result in errors and possibly move DHRM out of compliance with federal EEO-4 reporting obligations. . . 6 - Provides EEO Assessment, EEO Summary Reporting, and EEO Compliance Calculator - The EEO web-enabled applications assist the Commonwealth agencies in the monitoring and proactive review of their employment practices to avoid adverse or disparate impact against protected classes, as well as ensure fairness, equity and compliance with relevant Equal Employment Opportunity (EEO) laws and regulations. This functionality is possible due to the inclusion of the statistical applications that are authorized by the US Supreme Court and the federal Equal Employment Opportunity Commission (EEOC). Additionally, these tools perform statistical analysis that provides information to reduce liability exposure by identifying where training and corrective actions are needed. PMIS is the primary data source for these tools. Without accurate, timely, consistent and complete HR data, the statistical results that are produced and reported by these tools would not be reliable. . 6.1 - Inaccurate reporting would be highly visible by agency management throughout the Commonwealth. Due to the nature and sensitivity of this application, the failure would be reported at the highest level of government. 6.2 - Agencies could be reprimanded if the statistical analysis revealed that the agency was non-compliance in its employment practices. If the analysis was based on degraded or incomplete data, corrections would have to be applied. Agencies can easily lose faith in the application when situations of this nature occur. 6.3 - Training needs and corrective actions would not be identified accurately due to statistics based on degraded data. . . 7 - Provides Agency HR professionals with Workforce Query Applications - Using the query tools to access the central data repository, agencies are accustomed to querying and transforming their PMIS data into information on their agency desktops. Two web-enabled query tools are available for this purpose. These tools provide current and historical human resource data to the Commonwealths HR management and customers. The tools allow the query of demographic attributes and employment activity, such as hiring, terminations, and salary changes of the Commonwealths workforce. PMIS is the primary data source for the e480 tool and the

only source for the eTrans tool. . Without accurate and timely data, the benefit of these tools would be severely diminished. DHRM would need to respond to negative feedback from the HR community. Degraded data would affect the day-to-day work activities of the HR offices and DHRM. . . 8 - Provides state employees with accurate Employee Direct portal information - This key DHRM portal for state employees could show incomplete/incorrect employee data resulting in employee questions coming into DHRM to address. . . 9 - Provides data to the State Employee Directory - Without accurate information from PMIS this directory, published on Virginia.gov website and used by hundreds of state entities and general public would show incorrect employee contact data resulting in confusion to employees and the public. . . ===== . Following is a list of functions that DHRM performs with the migrated BES system and the risks associated with continuing to performing these functions with the migrated systems. 10 - Provides the ability to capture and transmit health care enrollment and change information - If BES does not provide this capability reliably and accurately, it could result in health care vendors not receiving enrollment data, which in turn could result in: . 10.1 - Insurance coverage not being established with health care carriers 10.2 - Insurance cards not being issued 10.3 - Flexible spending accounts not being established 10.4 - Flexible spending cards not being issued 10.5 - Vendor questions/complaints for DHRM staff to answer 10.6 - Employee/Participant questions/complaints for DHRM staff to answer 10.7 - If system issues not corrected before benefits effective date (generally July 1) 10.8 - Participants would be directly affected with problems using their health care, dental care and flexible spending account benefits. 10.9 - Incorrect payroll deductions for health care and flexible spending accounts would occur. . . 11 - Provides regular data feeds to health care vendors - Failing to transmit these daily benefit change files or transmitting files with erroneous data could result in health care carriers having missing and outdated benefits data for participants and dependents. Insurance coverage issues could occur, such as: . 11.1 - Insurance coverage not being established with health care carriers. 11.2 - Insurance cards not being issued. 11.3 - If not corrected before benefits effective date, participants would be directly affected with problems using their health care and dental care benefits. 11.4 - Insurance carriers would be missing health care coverage changes and plan changes. Inaccurate/outdated data on their systems could cause claims to be delayed and possibly denied. 11.5 - Delays in receiving mailed items for participants with address changes. 11.6 - Vendor questions and complaints for DHRM staff to answer. 11.7 - Employee/Participant questions and complaints for DHRM staff to answer. . . 12 - Provides regular data feeds to the Department of Accounts (DOA) that updates DOAs payroll system (CIPPS, but soon to be Cardinal) - Inaccuracies could result in CIPPS having missing and outdated data and in turn cause payroll errors including: . 12.1 - Incorrect payroll deductions for health care. 12.2 - Incorrect payroll deductions for flexible spending accounts. 12.3 - CIPPS being unable to reconcile their participant health plan coverage data against BES data. 12.4 - DOA questions and complaints for DHRM staff to answer. . . 13 - Provides Virginia Retirement System (VRS) a regular, accurate data feed - Inaccurate data could result in: . 13.1 - VRS system having inaccurate information for retiree plan or address changes. 13.2 - VRS questions and complaints for DHRM staff to answer. . . 14 - Provides flexible spending accounts vendor a regular, accurate data feed - Inaccurate data could result in: . 14.1 - New flex participants flexible spending accounts (FSAs) not being established and FSA cards not being issued. 14.2 - If errors are not corrected before flex benefits effective date, participants would be directly affected with problems using their flexible spending account. 14.3 - Changes to flex account amounts not being updated in the flex vendor files. 14.3.1 - Amount available in account would not be what the participant desired. 14.3.2 - Flex vendor could get out of synch with payroll deductions . 14.4 - Changes to address and personal information not being updated in the flex vendor files. Delayed mailings when participants change address as vendor would still have old mailing address. 14.5 - Employee/Participant questions and complaints for DHRM staff to answer. . . 15 - Runs automated batch updates to process and update BES data - If these processes do not run properly, then this could result in: . 15.1 - Failure to remove ineligible dependents with dependent age 26 termination processing. 15.2 - Failure to remove terminated participants and dependents with monthly purge processing. 15.3 - Failure to convert age 65 participants to Medicare plan with monthly Medicare update processing. . . 16 - Provides agencies with date underlying files and reports in their agency folders in the HuRMan portal that DHRM provides agencies. This could result in agency issues, such as: . 16.1 - Open enrollment and monthly enrollment files not being available. Colleges that use these files to load benefits data into their payroll systems would be unable to do so. 16.2 - Monthly Enrollment reports not being available. Agencies would not be able to easily verify who is enrolled in their agency. 16.3 - Agencies would be missing enrollment counts needed for reconciliation processing. 16.4 - Daily turnaround documents would not be available for keying verifications. 16.5 - Monthly exception report would not be available to correct problems and do reconciliations. 16.6 - Monthly premium reward discrepancies report for CIPPS agencies would not be available. Agencies

would be unable to include this in the required monthly DOA health care reconciliation certification process. 16.7 - Annual value-of-health-care file would not be available for processing onto employees W-2s. 16.8 - Agency questions and complaints for DHRM staff to answer. . 16.8.1 - Semi-monthly extract of non-PMIS participants for Knowledge Center (KC) application failing to be produced: 16.8.2 - Non-PMIS participant data in KC would become inaccurate or outdated. 16.8.3 - Monthly extract used for load into Customer Relationship Management (CRM) Contacts database failing to be produced. CRM Contacts list of agency benefits and payroll contacts would become inaccurate or outdated.

Report Title: Strategic Plan

Agency: Department of Human Resources Management

Current IT Services

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Projected Service Fees	\$747,590	\$816,205	\$897,108	\$979,446
VITA Infrastructure Changes	\$0	\$0	\$0	\$0
Estimated VITA Infrastructure	\$747,590	\$816,205	\$897,108	\$979,446
Specialized Infrastructure	\$0	\$0	\$0	\$0
Agency IT Staff	\$2,179,084	\$2,650,172	\$2,179,084	\$2,650,172
Non-agency IT Staff	\$0	\$0	\$0	\$0
Cloud Computing Service	\$0	\$0	\$0	\$0
Other Application Costs	\$815,390	\$553,692	\$978,468	\$664,431
Total	\$3,742,064	\$4,020,070	\$4,054,660	\$4,294,049

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	\$0	\$0	\$0
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	\$0	\$0	\$0

Projected Total IT Budget

Category	Costs Year 1		Costs Year 2		Total Costs
	GF	NGF	GF	NGF	
Current IT Services	\$3,742,064	\$4,020,070	\$4,054,660	\$4,294,049	\$16,110,845
Proposed IT Investments	\$0	\$0	\$0	\$0	\$0
Total	\$3,742,064	\$4,020,070	\$4,054,660	\$4,294,049	\$16,110,845

Report Title: Business Requirements For Technology**Agency:** Department of Human Resources Management
(DHRM)**BReT - DHRM - Authentication/directory services****BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/29/2017**Mandate:** No**Mission Critical:****Description:**

DHRM has 40 total applications of which 30 are sensitive systems. They will need to be migrated and tested during the authentication/directory services transition. Number of users (internal and external) are 1,500 internal and 100,000+ external.

BReT - DHRM - Cloud Computing**BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/29/2017**Mandate:** No**Mission Critical:****Description:**

DHRM is investigating moving some applications to a Cloud services vendor. The business reason for the move is to reduce costs and increase efficiencies. Applications are not 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.

BReT - DHRM - Commonwealth Audit Compliance**BRT Type:** Business Requirement for Existing Technology**Date Submitted:** 9/29/2017**Mandate:****Mission Critical:****Description:**

Compliance with the overall audit program requirements - DHRM is engaged with VITA Security Shared Services and signed a MOU for ISO Services from VITA and a MOU for IT Security Audit Services from VITA.

BReT - DHRM - Commonwealth Risk Compliance**BRT Type:** Business Requirement for Existing Technology

Date Submitted:	9/29/2017
Mandate:	
Mission Critical:	
Description:	
Compliance with the overall risk program requirements - DHRM is engaged with VITA Security Shared Services and signed a MOU for ISO Services from VITA and a MOU for IT Security Audit Services from VITA.	
BReT - DHRM - Data networks	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
DHRM does not have networks outside MPLS	
BReT - DHRM - End user computing	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
DHRM actual environment includes 103 desktops which 93 are fully encrypted, 71 laptops, and 15 network printers which will need to be migrated.	
BReT - DHRM - Internet Usage	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
DHRM projects that internet usage will increase by 35% to 50% due to the increase of users using DHRM applications exposed to the web.	
BReT - DHRM - Messaging	

BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
<p>VITA is initiating disentanglement from NG messaging services in 2016. Messaging Services for email, enterprise collaboration services, and mobile device management are required for 113 users and 232 email boxes in our agency. We also have 40 applications that have hooks into messaging services which will need to be tested.</p> <p>Workplace Collaboration Services is not VITA provided SharePoint. DHRM uses its own WCS SharePoint 2013.</p> <p>We have no applications serviced via AirWatch.</p> <p>DHRM uses CRM Dynamics fully integrated with Microsoft Exchange and Outlook email Client.</p>	
BReT - DHRM - Server/storage including housing of equipment	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
<p>VITA is initiating disentanglement from NG servers and storage. DHRM has 7 physical servers, 25 virtual servers and 18 Terabyte of storage providing support to 40 applications of which 30 are sensitive systems. These applications will be affected by this move and will need to be tested thoroughly.</p>	
BReT - DHRM - Voice Networks	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/29/2017
Mandate:	No
Mission Critical:	
Description:	
<p>DHRM has 120 UCaaS phone lines which will need to be migrated.</p>	
BReT End of Life 2008 Server DHRM	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	8/30/2017
Mandate:	
Mission Critical:	
Description:	

Agency will create a mitigation plan to address End of Life 2008 servers.

BReT OS and DB version updates - DHRM 2014 MS Server 2003

BRT Type: Business Requirement for Existing Technology

Date Submitted: 9/24/2014

Mandate: No

Mission Critical:

Description:

DHRM needs to update the OS and DB software versions on several servers

Commonwealth HR System of Record evaluation

BRT Type: Business Requirement for Existing Technology

Date Submitted: 9/24/2014

Mandate: No

Mission Critical:

Description:

DHRM anticipates conducting a study to assess the Commonwealth's HR system of record and identify an appropriate HR systems strategy.

DATA WAREHOUSE upgrade

BRT Type: Business Requirement for Existing Technology

Date Submitted: 9/24/2014

Mandate: No

Mission Critical:

Description:

Upgrade DHRM data warehouse to enable more data storage and provide enhanced business analytics tools

HEALT BENEFITS ELIGIBILITY - The Local Choice (TLC) Portal

BRT Type: Business Requirement for Existing Technology

Date Submitted: 9/24/2014

Mandate: No

Mission Critical:

Description:

Create a new portal for localities that can interface with DHRM's Benefits Eligibility System (BES)	
Increase the NGF Appropriation for the COVKC	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	9/10/2015
Mandate:	No
Mission Critical:	No
Description:	
Refer to decision package "Increase the NGF Appropriation for the Commonwealth of Virginia Knowledge Center (COVKC)"	

Report Title: Appendix A 18 - 20 Report

Agency: Department of Human Resources Management
(DHRM)

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 18 - 20 Report

Agency: Department of Human Resources Management
(DHRM)

Agency Head Approval: No

There are no stand alone major procurements for this agency.