COMMONWEALTH *of VIRGINIA*

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September 30, 2021

MEMORANDUM

TO: The Honorable Ralph S. Northam

CC: The Honorable Luke Torian, Delegate and Chair, House Appropriations
The Honorable Janet Howell, Senator and Chair, Senate Finance and Appropriations
Dan Timberlake, Director, Department of Planning and Budget

THROUGH: The Honorable Daniel Carey, MD
Secretary of Health and Human Resources

FROM: M. Norman Oliver, MD, MA
State Health Commissioner

SUBJECT: Chapter 0001 of the Acts of Assembly of the 2021 Special Session II
VDH Reports Required for ARPA Project Appropriations

As required in Chapter 0001 of the Acts of Assembly of the 2021 Special Session II, the Virginia Department of Health (VDH) is providing implementation plans and schedules for the five projects requiring the submission of these documents. VDH will provide additional details in the quarterly update report that is due by December 31, 2021.

These reports includes the following ARPA project appropriations to VDH:

1. Broadband connectivity at local health departments
2. Electronic Health Records
3. Facility Infrastructure at VDH Central Office and Local Health Departments
4. Modernization of VDH administrative systems and software
5. Records Management System

Our staff has worked diligently since the August special session to turn these appropriations and proposals into detailed plans for implementation. We are excited about the opportunity to use these funds to improve the efficiency and effectiveness of VDH and to improve the lives of the people of Virginia.

If you have any questions or need additional information, please let me know.

VDH VIRGINIA DEPARTMENT OF HEALTH
*To protect the health and promote the
well-being of all people in Virginia.*

ADMINISTRATIVE SYSTEMS

American Rescue Plan Act (ARPA) State Fiscal Fund (SFF) Workplan

9/30/2021

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Context for ARPA Initiatives

The Virginia Department of Health (VDH) is excited about the opportunity presented by the appropriation of ARPA State Fiscal Funds in the August 2021 Special Session II of the General Assembly to improve public health in Virginia. The agency views this as a once in a generation opportunity and we will work tirelessly to maximize use of funds to create and sustain these initiatives. Simultaneously , VDH is fully engaged in responding to COVID-19 and protecting the health of the people of Virginia from that disease. Such emergency response efforts may impact the agency's ability to complete the ARPA initiatives on schedule. At this time, VDH is creating project plans to minimize the impacts of emergencies on local health departments in the first year and will be flexible in our implementation of these initiatives as dictated by the emergency response. When changes or impacts to plans occur, VDH will reflect that in future updates.

Executive Summary

The Virginia Department of Health (VDH) aims to transform and modernize core administrative systems and processes to support a digitally-enabled department. Throughout the COVID-19 pandemic, a significant increase in workflow exacerbated the strain on the department's out of date administrative processes/systems and created a bottleneck that hindered VDH's ability to react and respond effectively to the pandemic.

Through upgrades in VDH's Business Systems, IT Service Management, Product Suite, and Web F&A system among other areas, VDH will increase workflow and operating efficiencies to eliminate these existing bottlenecks. These solutions will help to decrease existing manual and duplicative administrative processes through upgraded automated systems and increase department productivity by providing employees with modernized digital resources, all of which will position the department to deliver more efficient care to Virginians and increase department agility when responding to future outbreaks or health crises.

Objective(s)

VDH aims to assess, upgrade, and/or develop Business systems, IT Service Management systems, Product Suite systems, and Web Finance & Accounting systems among other areas and processes, to:

- Increase the functionally of existing back-office systems to improve customer service while increasing efficiencies

- Integrate existing systems to streamline workflow processes and reduce duplicative efforts

- Develop new systems to automate administrative processes that are currently manual

- Determine and implement consumer products to address the needs of the department and its employees for daily communications, document management, and content sharing

- Introduce Robotic Process Automation (RPA) and Artificial Intelligence (AI) to automate manual processes and to increase both accuracy and efficiency in data entry and delivery of services provided to the Agency and its constituents

Background

As a large state agency overseeing Virginia's public health initiatives, VDH intakes, manages, and processes a significant amount of data as a normal part of its daily processes. Throughout the COVID-19 pandemic, these administrative tasks grew even large as public health resources had to be properly budgeted and allocated across the state. The development of a virtual workforce has required more reliance on HR processes and physical asset tracking. There has been also an increase in coordination with clients and partners, which has highlighted the need for stronger customer relationship management. Several of VDH's outdated administration systems proved to be a bottleneck for the department during the COVID-19 pandemic and increased administrative strain, creating inefficiencies and challenges that slowed the departments' ability to serve Virginia's residents.

VDH's administrative systems and processes span across the entire agency and serves as the core infrastructure for a wide variety of functional areas. In reviewing which systems have caused the largest pain points, the department prioritized systems to upgrade across four categories: Product Suite, Business Systems, Web F&A, and IT Services Management. The following projects for upgrade or modernization were selected because they present the opportunity for greatest impact.

System/Process	Functional Category	Process Overview	Existing Issues
Asset Management	IT Service Management	Track hardware and software assets in the agency	This process is currently done manually in spreadsheets. There is no automated system for tracking, which has become increasingly important with a more mobile/virtual workforce from COVID-19.
VITA Bill Reconciliation	Other Initiatives	Reconcile the monthly VITA Bill	This process is currently conducted monthly through a manual item by item reconciliation. With an increase in contractors to support COVID-19, this process has become increasingly inefficient.
SATRN (Submit a Technology Request Now)	IT Service Management	OIM's application for processing and tracking IT project requests	This application does not currently interface with other systems and is limited in the types of requests it can track, therefore other types of request must be managed separately and/or manually.

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STLAR	IT Service Management	Shared Business Service's application for tracking business requests	This application does not currently interface with other systems and the types of business requests are limited, therefore other types of request must be managed separately and/or manually.
Cardinal HCM Integration	Business Systems	Integration with Virginia's new HR system	The Commonwealth's statewide implementation of a Cardinal HCM system does not fully serve the needs of VDH, and as a result there will need to be an effort to reconcile the state system with VDH to allow for integration.
Contracts Management	Business Systems	Tracking contracts throughout entire lifecycle	Currently the permissions, procurement, and finance components of each contract are tracked separately. This creates significant inefficiencies and reconciliation efforts throughout the contract lifecycles.
Budget Management	Business Systems	Department wide budgeting	Budgeting throughout the department is currently conducted through spreadsheets, resulting in manual efforts and reconciliation amongst the different health districts, presenting an increased propensity for manual error.
Time Tracker	IT Service Management	Contractor Time & Effort Tracking	There is currently an existing system in place for tracking contractor hours for a limited purpose. It requires enhancements to capture essential information and processing/reporting of that information, so that it can be expanded to other areas.
Product Suite	Product Suite	Main product for email and chat communications and document sharing	The contract for the existing product suite is expiring in several months. With an increase in virtual/remote work, it is important that the department determine and acquire the system that best meets the workforce's needs. This includes not only a product suite, but collaboration and work management platform as well.
CRM Software	Business Systems	Customer Management	There is currently no centralized system for tracking customer requests for IT support, services, and incidents. The main communication and tracking are currently

			handled through emails which cannot be tracked or easily queried for quality assurance or performance metrics. Emails are time consuming and do not provide the transparency required to provide a consistent level of service and meet the increased demand of services as a result of the pandemic.
Web F&A UI/UX	Web Finance & Accounting	VDH's main backend system, for HR and financial management	As a 15+ year old internally built system, Web F&A has a significant opportunity for a modernized user interface. Given this is a central system used by employees on a daily basis, improvements would help to increase efficiencies across the department.
HR Grievances (DCSTS)	Business Systems	Human Resources Grievances Tracking	There is no current system for human resources grievances tracking and the process is manual.
On-Boarding Support	Business Systems	Onboarding new contractors or employees to VDH	There is currently no main system for onboarding new contractors and employees – this is done manually using spreadsheets and other resources. Creating a centralized system would greatly reduce the effort and time needed to onboard new employees.
Travel Vouchers	Business Systems	Reimbursement for VDH Employee Travel	The current travel reimbursement process is manual and takes significant time and burden. Automating this process would create operational efficiencies
IT License Management	IT Service Management	IT Software License Tracking	There is currently no centralized system to manage and track the department's IT software licenses, which results in time intensive research and multiple emails to track licenses.
Analytics Reporting & Dashboards	Web F&A	Reporting financial and workforce analytics	All financial reporting and other analytics currently must be done manually. There is limited capability to quickly capture timely reports and/or track finance and workforce analytics for process improvement.

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Security Improvements	IT Service Management	IT and Admin Systems Security	To remain strong and in compliance with federal and state standards, VDH's security needs to be maintained and adjusted with system upgrades and additions.
Other Manual Processes	Other Initiatives	-	There are several smaller manual processes throughout the department that would benefit from process automation through RPA.

Addressing the existing system issues highlighted above will greatly increase VDH's operational efficiency and effectiveness, while simultaneously positioning the department to best respond to future public health emergencies and serve the Commonwealth's residents.

Problem Definition

Outdated administrative, back-office systems and processes were a bottleneck to VDH's response and operations during the pandemic. The current administrative environment includes use of disparate systems, spreadsheets, and documents that are not transparent or conducive to a collaborative workforce, making the actual work and management of processes difficult to execute, manage, report, and improve. Upgrading and modernizing administrative systems is essential to improve response capacity for future public health emergency situations. VDH's response time to the pandemic was often delayed due to the time required for manual processes results in service delays and degradation in quality of those services to the Commonwealth's constituents. Efficiencies in the current management, execution, automation, and systems will increase the quality and timeliness of services delivered internally to VDH, and externally to constituents and other agencies.

Executive Sponsors, Key Stakeholders, and Initial Stakeholder Management Plan

Executive Sponsor(s)

- Executive Sponsor: Tiffany Ford, *Deputy Commissioner, Administration*

- Initiative Owner: Suresh Soundarajan, *Chief Information Officer, Virginia Department of Health*

Initial Stakeholder Management Plan

Each project will be assigned a project manager and business analyst to support the lifecycle of the project. The admin systems team will meet bi-weekly for status updates, risk tracking, and dependencies. Stakeholders will be engaged in selecting product owners, providing priorities, and overseeing the progress of projects through project status and budget reports on a scheduled cadence based on project duration and criticality criteria defined.

Proposed Solution, Feasibility, and Approach

The funding from ARPA state fiscal fund will be used to upgrade priority projects identified. Projects have been prioritized based on impact and the time required for completion. The anticipated upgrades are listed by project below.

System	Project Bucket	Fiscal Years	Plan
Asset Management	IT Service Management	FY22	Develop a system dedicated to tracking hardware and software assets.
RPA (VITA Bill Reconciliation)	Other Initiatives	FY22	Leverage RPA to automate the VITA Bill reconciliation process.
SATRN	IT Service Management	FY22	Integrate SATRN with the STLAR system. Increase SATRN functionality and intake ability of different types of technology requests (software, development, enhancements, solutioning, etc)
STLAR	IT Service Management	FY22	Enhance to allow interoperability with existing systems and improved processing /request tracking, provide reporting, and create templates for item requests by business office area.
Cardinal HCM Integration	Business Systems	FY22	Ensure integration between new and existing VDH systems and the new Virginia-wide Cardinal HCM system.
Contracts Management	Business Systems	FY22/23	Integrate the contract permission, procurement, and finance processes into one centralized contracts management system. Requirements gathering will begin in fall/winter of 2021, the planning stages will begin in spring of 2022, and the development will begin towards the summer of 2022 and last approximately 1 year.
Budget Management	Business Systems	FY22/23	Develop a system devoted to department budget management. Requirements gathering will begin in fall/winter of 2021, the planning stages will begin in spring of 2022, and the development will begin towards the summer of 2022 and last approximately 1 year.
Time Tracker	IT Service Management	FY22/23	Develop a system to track contractor time and effort. Requirements gathering and a needs

			analysis will begin in fall/winter of 2021, and the development will begin in the spring of 2022.
Product Suite	Product Suite	FY22/23	An outside contractor will be hired in the Fall of 2021 to conduct a needs assessment to identify which product suite option best serves VDH's needs at a beneficial cost. If a new product suite is chosen, an implementation and change management strategy will need to be developed and executed through 2022.
CRM Software	Business Systems	FY22/23	Procure a commercial-off-the-shelf commercial CRM solution that best serves VDH's needs at an efficient cost. Initial requirements and vendor platforms will be discovered and documented in the Fall of 2021, and the implementation will begin towards the Spring of 2022.
Web F&A UI/UX Updates	Web F&A Modernization	FY22/23	Update the User Interface and User Experience on the existing Web F&A administrative system. Development will start in the spring.
HR Grievances (DCSTS)	Business Systems	FY22/23	Implement a system to track Human Resource Grievances, moving this process to an internal system.
Supporting On-Boarding	Business Systems	FY23	Streamline and automate the onboarding process by standardizing processes and integrating into administrative systems. Develop process/system improvements in the summer of 2022 and implement in subsequent months. Specific emphasis on creating a role-based onboarding system and entry point process to SATRN and STLAR.
Travel Vouchers	Business Systems	FY23	Develop a system to manage travel vouchers and expedite the reimbursement process.
IT License Management	IT Service Management	FY23/24	Develop a system to track and manage IT Software licenses across the department and Agency for enterprise licenses. Create integration to STLAR and SATRN.

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Analytics Reporting & Dashboards	Web F&A Modernization	FY23/24	Develop analytics dashboards and reporting that are both built-in and available through a third party application (Tableau for example) reporting capabilities for the updated Web F&A system.
Security Improvements	IT Service Management	FY22/23/24	Ongoing piece of all implementations, updates, and modernizations.
RPA (Additional Projects)	Other Initiatives	FY24	Assess manually processes in the department that would benefit from automation through RPA. Use remaining funds to automate these processes. RPA will be embedded in multiple projects as a component of the overall solutions and process design.

Proposed Solution Team

Name	Title	Department	Area of Focus	Project Role
Suresh Soundararajan	Chief Information Officer	Office of Information Management	All Solutions	Responsible for all IT infrastructure, solutions, procurements, and projects introduce, developed, maintained, and supported by the Agency
Product Development and Maintenance	Team	Office of Information Management	All Solutions	Responsible for the design, development, implementation, training, and support of the developed or enhanced applications
Enterprise Architecture and Solutions	Team	Office of Information Management	All Solutions	Responsible for the overall enterprise architecture of the solutions and their integrations

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Data and Quality Management	Team	Office of Information Management	All Solutions	Responsible for application testing, change management, and data related aspects of solutions
Information Security Office	Team	Office of Information Management	All Solutions	Responsible for all proposed solution security compliance, ECOS, and security reporting
IT Infrastructure Services and Support	Team	Office of Information Management	All Solutions	Responsible for the procurement of hardware and software, support of solutions, ITSM, Asset Management, Onboarding, and other solutions
IT Portfolio Management	Team	Office of Information Management	All Solutions	Responsible for VITA project compliance, CTP, PGR, project management, project reporting, business analysis of solutions

Initial Risks and Risk Management

Initial Risks Identified

- Broadband upgrades to provide sufficient bandwidth are required for the successful operation of the upgraded administration systems may be impacted.

- Resource constraints on the department's technical staff from the ongoing Cardinal HCM integration with Web F&A Time & Effort reporting may impact ability to have sufficient personnel to architect and develop the administrative systems updates discussed.

- The day to day administrative tasks, such as time reporting and document storage, may be interrupted by the development and eventual implementation of the updated systems.

- Hardware infrastructure (cloud storage, processing power) may not meet the needs of the proposed software upgrades and additions.

- Staff may be slow to adopt the new set of systems and processes for many of their day to day tasks.

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- VITA's approval for infrastructure (such as ECOS approval) is needed to support the implementation timeline.
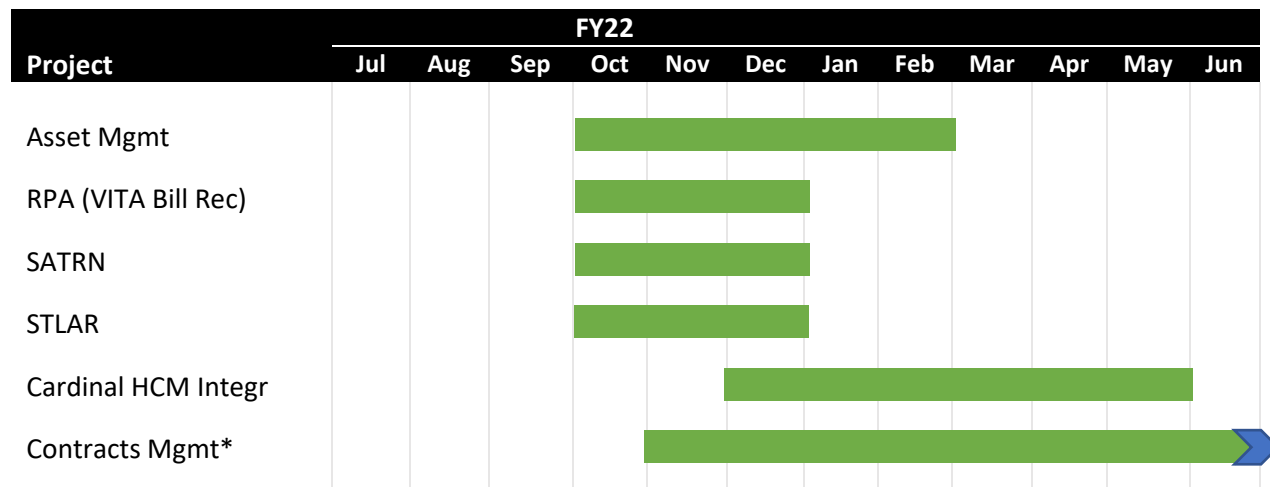
Initial Risk Management and Governance Plan

- Project risks, actions, issues, and decisions (RAID) will be documented, assessed, and assigned on bi-weekly basis.

- Governance meetings will be conducted to review: impact, urgency, priority, likelihood, and mitigation plans.

- Project risks, actions, issues, and decisions will be escalated to stakeholders and product owners for awareness through status reporting and regularly scheduled meetings
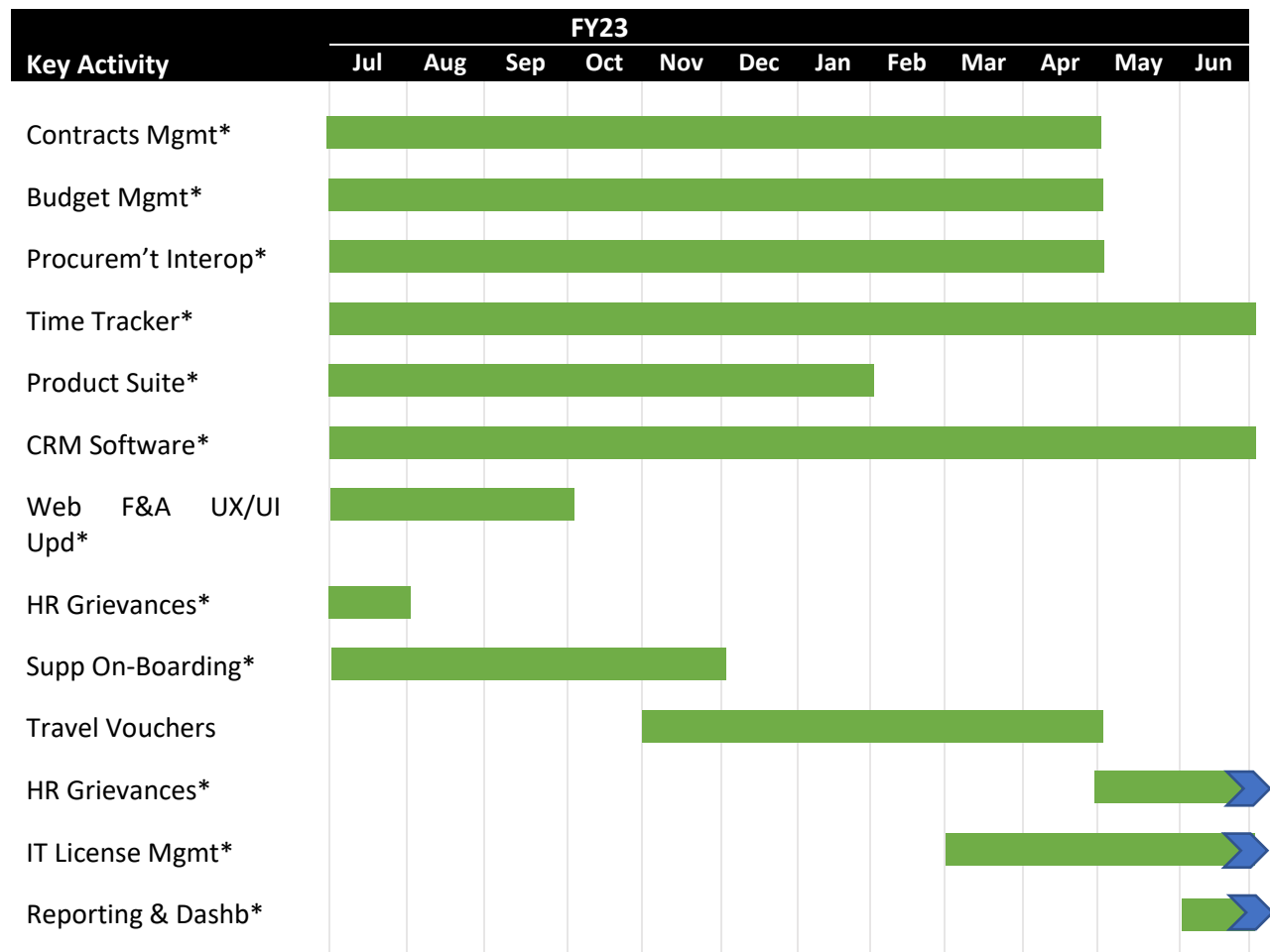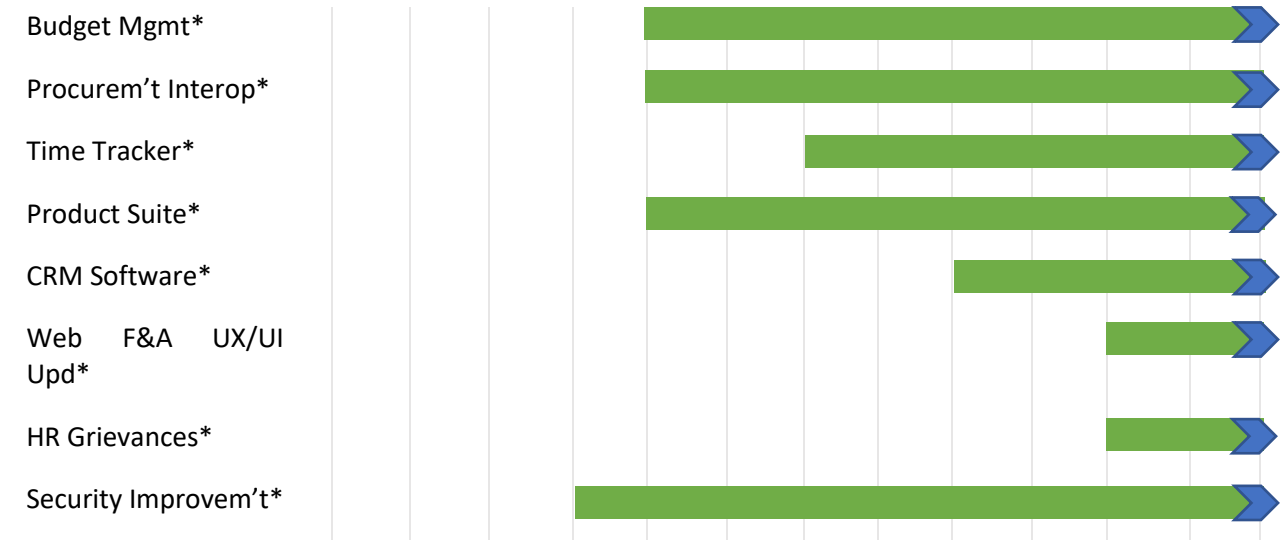
Change Management Considerations

VDH understands that transformation initiatives are successful not only with the right technology, processes, and resources, but also with people who are properly equipped for the changes. Successfully navigating transformation in a highly complex environment requires effective managing business process changes and the way people accomplish work, communications, and stakeholder management to create buy-in at the early stages. VDH will develop and implement an effective change management and communications strategy to establish employee understanding of the initiatives and any impacts to their individual jobs. The strategy will include communication of the goals of the upcoming changes, preparation and alignment of the changes, and an overall building of confidence in the benefits of the changes.

Initiative Timeline, Key Activities, and Milestones

Projects with asterisks and arrows indicate a project timeline that occurs over two or more fiscal years.

	FY22											
Project	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Asset Mgmt				████	████	████	████	████				
RPA (VITA Bill Rec)				████	████	████						
SATRN				████	████	████						
STLAR				████	████	████						
Cardinal HCM Integr					████	████	████	████	████	████	████	
Contracts Mgmt*				████	████	████	████	████	████	████	████	███▶

Key Activity	Budget Mgmt*	Procurem't Interop*	Time Tracker*	Product Suite*	CRM Software*	Web F&A UX/UI Upd*	HR Grievances*	Security Improvem't*

FY23											
Key Activity	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Contracts Mgmt*												
Budget Mgmt*												
Procurem't Interop*												
Time Tracker*												
Product Suite*												
CRM Software*												
Web F&A UX/UI Upd*												
HR Grievances*												
Supp On-Boarding*												
Travel Vouchers												
HR Grievances*												
IT License Mgmt*												
Reporting & Dashb*												

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Security Improvem't*

Key Activity	**FY24**											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
IT License Mgmt*												
Reporting & Dashb*												
Security Improvem't*												
RPA (Add'l Projects)												

Project Budget

Total Budget: $50,000,000

Project Group	FY22	FY23	FY24
Product Suite	$435,000	$3,135,000	$3,395,000
Business Systems	$6,775,000	$8,710,000	$12,930,000
IT Service Management	$745,000	$1,160,000	$990,000
Web F&A Improvements	$1,675,000	$2,920,000	$3,180,000
Other Initiatives	$370,000	$420,000	$3,160,000
Total	**$10,000,000**	**$16,345,000**	**$23,655,000**

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