COMMONWEALTH of VIRGINIA

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September 19, 2025

TO: The Honorable L. Louise Lucas
Chairwoman, Senate Finance and Appropriations Committee

The Honorable Luke E. Torian
Chairman, House Appropriations Committee

Michael Maul
Director, Department of Planning and Budget

FROM: Scott L. Adams
Comptroller, Department of Accounts

Chapter 725, 2025 Acts of Assembly, Item 246 B.3, requires the State Comptroller to provide a report by October 1, 2025, on 1) the plan to upgrade Cardinal Financials with the latest functional updates, including the cost of upgrades, timeline, and opportunities to deactivate other agency stand-alone accounting systems, and 2) options and cost estimates for restoring a Business Intelligence application for Cardinal Financials.

The **Cardinal Modernization Program (CMP) General Assembly Summary of Findings 2024-2025** report is enclosed. If you have any questions or comments regarding this plan or the enclosed report, please do not hesitate to contact me.

CC: The Honorable Stephen E. Cummings, Secretary of Finance
The Honorable Lyn McDermid, Secretary of Administration
Ms. Anne Oman, Staff Director, House Appropriations Committee
Ms. April Kees, Staff Director, Senate Finance and Appropriations Committee
Ms. Janet Lawson, Director, Department of Human Resource Management
Ms. Sharon Lawrence, Deputy State Comptroller, Department of Accounts
Ms. Stacy Pendleton, Deputy Director, Department of Human Resource Management
Mr. John Lawson, Deputy Secretary of Transportation
Ms. Laura Farmer, Chief Financial Officer, Virginia Department of Transportation
Mr. Jon Howe, Associate Director, Budget Operations and General Government, Department of Planning and Budget
Mr. Robert Osmond, CIO, Commonwealth of Virginia

Preface

This report is provided at the direction of Chapter 725, 2025 Acts of Assembly, Item 246 B.3, which states "The State Comptroller shall report on the plan to upgrade Cardinal Financials with the latest functional updates, including the cost of upgrades, timeline, and opportunities to deactivate other agency stand-alone accounting systems. This report shall also include options and cost estimates for restoring a Business Intelligence application for Cardinal Financials. The State Comptroller shall submit this report by no later than October 1, 2025, to the Department of Planning and Budget and the Chairs of the House Appropriations and Senate Finance and Appropriations Committees."

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Executive Summary

Background

Cardinal is owned, operated and maintained by the Department of Accounts (DOA), and is Virginia's official system of record for Financials (FIN) and Human Capital Management (HCM). Over 280 state agencies and nearly 400 localities rely on it. Originally launched in partnership with the Virginia Department of Transportation (VDOT) in 2011, Cardinal has steadily expanded in both functionality and user base, culminating in the full deployment of Human Capital Management (HCM) in 2022. To guide future modernization efforts, the Cardinal Governance Committee (CGC) was established in 2021, bringing together leadership from Finance, HR, Technology, and Transportation. The CGC oversees major system upgrades, agency adoption strategies, and long-term transformation goals.

Strategic Direction

At the direction of the CGC, the Cardinal team conducted assessments from June 2024 to August 2025 to understand the current state and determine Cardinal's path forward. The goals of this work focused on:

- Software Upgrade and Transformation – Addressing Cardinal's technical debt, upgrading it to the current supported version and preparing for an eventual Cloud migration
- Increased Agency Adoption – Expanding Cardinal functionality to support additional agencies, reducing reliance on standalone agency systems
- Functionality Growth – Adding critical capabilities such as fixed asset management and lease accounting, and restoring Business Intelligence (BI) functionality

To ensure the goals are attainable, the Cardinal team developed a roadmap that targets immediate priorities, sets mid-term milestones, and establishes long-term objectives.

Immediate Priorities (2025–2026)

The immediate priorities for Cardinal are to reduce the risk of having unsupported applications and restoring the previously available Business Intelligence functionality.

- Mitigating Technical Debt and Support Risk – Cardinal FIN and HCM are many versions behind current Oracle PeopleSoft releases, increasing the risk of unsupported systems and functions. Cardinal will be upgraded to the current version as quickly as practical.
- Restoring Business Intelligence (BI) capabilities – The discontinued Cardinal BI solution will be replaced with PeopleSoft Insights, which offers dashboards, reporting, and embedded analytics.
- Completing the Cardinal Upgrade will resolve both immediate priorities.
  - Duration: 13 months (September 2025 – September 2026)
  - Cost: $18.3M (funded by a $9.1M Working Capital Advance and FY2026 and FY2027 Cardinal support budgets)
    - ~$2M of the $18.3M is dedicated to implementing PeopleSoft Insights
  - Outcomes: Continued Oracle support, enhanced BI reporting, streamlined user experience, and strengthened security

Mid-Term Milestones (2026–2028)

The mid-term milestones identify the next steps to be taken once the immediate priorities have been addressed. These include expanding Cardinal functionality while continuing to perform regular Cardinal upgrades to remain current and ensure continued support.

- Modernizing finance operations by replacing FAACS and LAS Plus systems with integrated Cardinal functionality – The Commonwealth's legacy Fixed Asset Accounting and Control System (FAACS) and Lease Accounting System (LAS Plus), in use since 1987, will be replaced using PeopleSoft modules. These systems operate on legacy technology (Cold Fusion) that will be out of extended support by May 2029 and pose risks to statewide financial reporting.
  - Target Window: 2026 to 2028 (i.e., 18 months beginning after Cardinal Upgrade)

- o Estimated Cost: $20.2M total. $4.7M of this cost to be provided out of the Cardinal annual support budget
  - o Outcomes: More efficient business processes, better integration with other financial systems, and improved reporting capabilities
  - o Actions: A budget request in the amount of $15.5M for this project will be submitted as part of the 2026-2028 biennium budget cycle
- Identifying agency financial systems for decommissioning and replacement with Cardinal functionality.
  - o A survey of 247 agencies identified 14 mostly larger agency-based financial systems as decommissioning candidates
  - o With expanded Cardinal functionality, nine agencies remain strong candidates to migrate
  - o After more urgent priorities are addressed, the Cardinal team will assess two options for decommissioning agency systems. Key considerations may include PeopleSoft end-of-life, Cloud readiness, and overall cost:
    - ▪ Option 1: Prior to moving to the Cloud, expand the existing PeopleSoft application and decommission agency systems at that stage
    - ▪ Option 2: Incorporate expanded functionality and agency system decommissioning as part of the move to a Cloud solution
  - o Target Window: 2028 to 2029 to assess the options (post FAACS and LAS Plus replacement project)
- Performing regular Cardinal upgrades to remain on current software releases and ensure continued support. Will be funded through an increase of $3.5M to the annual Cardinal production support budget.

Long-Term Objectives (7–8 Years)
The long-term objectives include continuing to stay current on software releases while planning a move from an on-premise PeopleSoft solution to a Cloud-based model and executing the move once the Commonwealth is satisfied such a solution will meet Commonwealth requirements.

- Transitioning to Cloud ERP – While Cloud ERP solutions are advancing, significant functionality gaps remain for statewide adoption (e.g., DOT billing, cash accounting, 1099 adjustments), other states' early implementations have seen significant cost overruns and schedule delays.
  - o Target Window: 2032–2033 (three to five-year phased rollout)
  - o Estimated Implementation Cost: $157M (if done today)
  - o Preconditions: Software maturity, Commonwealth readiness, and alignment of policies with industry standards
  - o Outcomes: Reduced Commonwealth technical burden, large scale integration across the Commonwealth, standardized business processes for efficiency and cost savings, and regularly scheduled maintenance and enhancements
- Performing regular Cardinal upgrades to remain on current software releases and ensure continued support until a successful Cloud solution can be implemented. Will be funded through an increase of $3.5M to the annual Cardinal production support budget.

Key Conclusions
- Short-Term: Upgrade PeopleSoft to maintain Oracle support and restore BI capabilities.
- Mid-Term: Replace FAACS and LAS Plus to reduce operational risk and ensure accurate statewide financial reporting. Keep Cardinal updated to maintain Oracle support.
- Long-Term: While a Cloud SaaS migration is not feasible today, it is projected within the next decade, positioning the Commonwealth to influence vendor development for government ERP needs. Until then, keep Cardinal updated to maintain Oracle support.

This phased strategy balances risk, modernization, and fiscal responsibility, while preparing the Commonwealth for a future enterprise-wide Cloud solution.

1. Background

History of Cardinal
Cardinal serves as the Commonwealth's statewide system of record for FIN and HCM. Over 280 state agencies across all three branches of government and nearly 400 localities use different combinations of Cardinal functionality. Cardinal is built on Oracle's PeopleSoft Enterprise Resource Planning (ERP) suite and Oracle Gov Cloud Infrastructure. PeopleSoft is a web-based application, and includes customizations made by the Commonwealth to meet state business requirements. DOA owns and operates Cardinal and is the business owner for FIN and HCM's Payroll (PY) and Time & Attendance (TA) functional areas. The Department of Human Resource Management (DHRM) is the business owner for HCM's Human Resources (HR) and Health Benefits (BN) functional areas.

In 2008, DOA and VDOT partnered to replace VDOT's aging financial system, a PeopleSoft-based system implemented in 1998, and establish a statewide baseline system, providing core FIN functionality for use by all other Commonwealth agencies. VDOT went live on Cardinal FIN in 2011, with functional areas including General Ledger, Accounts Payable, Accounts Receivable/Billing, Project Accounting, and Procurement. The remaining state agencies were implemented in phases between 2012 and 2016, on a more limited scope which included General Ledger, Accounts Payable, and Accounts Receivable (funds receipt). Expansion for state agencies to use the remaining functional areas was expected to be rolled out shortly after the initial statewide implementation. However, due to an urgent need to replace multiple aging statewide human resource and payroll systems, Cardinal FIN expansion was suspended (see Appendix – History of Cardinal Timeline).

The Cardinal HCM Project, which included the implementation of Human Resources, Benefits, Payroll and Time and Attendance modules, commenced in 2018 and was implemented in three phases, with all participating agencies and localities using the system by October 2022.

Establishment of the CGC
To capitalize on the efficiencies and benefits of Cardinal, the CGC was established per Chapter 552 of the 2021 Acts of Assembly Reconvened Special Session 1, Item 268 C. to evaluate and recommend expansion options for the Cardinal FIN and HCM applications. The CGC analyzes expansion opportunities in both the financial and human resources areas that will most benefit Commonwealth state agencies in meeting their agency missions and core objectives. Additionally, the CGC examines opportunities to decommission agency-based systems in favor of the Commonwealth's enterprise system, aiming to improve efficiency and cost effectiveness. Once these opportunities are evaluated and finalized, the CGC presents recommendations to the Commonwealth's Secretary of Finance and Secretary of Administration for review. Upon their approval of any such recommendations, the Cardinal Program has the authority to proceed with these projects, subject to available funding.

CGC membership includes:
o   Scott Adams* – State Comptroller, Department of Accounts
o   Janet Lawson* – Director, Department of Human Resource Management
o   Sharon Lawrence – Deputy State Comptroller, Department of Accounts
o   Stacy Pendleton – Deputy Director, Department of Human Resource Management
o   John Lawson – Deputy Secretary of Transportation
o   Laura Farmer – Chief Financial Officer, Virginia Department of Transportation
o   Jon Howe – Associate Director, Budget Operations and General Government, Department of Planning and Budget
o   Robert Osmond – CIO, Commonwealth of Virginia

*Committee Co-Chairs

<u>CGC Guidance</u>

From June 2024 to August 2025, the Cardinal team, with the guidance of the CGC, performed a series of in-depth assessments to help determine the future direction of the Cardinal system, with three key development goals: software transformation, agency adoption, and functionality growth. As part of software transformation, the CGC recommended that the Cardinal team assess Cloud-based, or Software-as-a-Service (SaaS) solutions, to determine if moving to the Cloud was a viable alternative to Cardinal. After a detailed assessment, it was determined that significant functionality gaps exist in the leading Cloud products. Cloud ERP solutions are becoming more prevalent at the agency level, however results at the statewide level remain inconsistent. Several other barriers to moving to the cloud currently exist, and as a result, the CGC determined it would be prudent to continue to leverage the Commonwealth's investment in the Cardinal PeopleSoft solution.

As a result of this decision, several goals were established for the Cardinal Program. The immediate goal was to address Cardinal's "technical debt" by upgrading the system to the current release for both PeopleSoft FIN and HCM to maintain Oracle support. In conjunction with this goal, the CGC strongly recommended that Cardinal replace the BI solution, which was previously available to end users but was discontinued because the product had become unsupported by Oracle.

Mid-term goals established for Cardinal included expanding Cardinal FIN functionality with the expectation that by providing broader functionality some agencies could decommission, or retire, their agency-based financial systems and use Cardinal as their primary system. This approach will reduce costs and risks associated with these applications. As part of expanding the Cardinal functional footprint, the CGC recommended that Cardinal begin with the replacement of the state's aging fixed asset and lease accounting systems, FAACS and LAS Plus. Both systems operate on legacy technology (Cold Fusion) that will be out of extended support by May 2029. It is essential that these applications get replaced with supported technology, as these systems provide critical information into the state's financial statements and having them in an unsupported state is an unacceptable risk to the Commonwealth. By providing state agencies with a new, more robust solution, users will have more efficient business processes, better integration with other financial systems, and much improved reporting capabilities including, but not limited to, reducing the risk of Annual Comprehensive Financial Report (ACFR) restatements currently experienced regularly because of poor system integration. Agencies that have their own system to record fixed assets and leases may be able to retire those standalone systems in favor of the Cardinal solution.

The Cardinal team will continue to evaluate agency functional needs and look for other such opportunities. Further expansion of statewide financial functionality will be revisited to determine whether it is more effective to expand the existing PeopleSoft application and decommission agency-based systems where feasible, or to pursue expansion and decommissioning as part of a move to Cloud. PeopleSoft end-of-life, Cloud readiness, and cost will all be considered in this analysis. During this mid-term period, regular Cardinal upgrades will be performed to remain on current software releases and ensure continued support.

The long-term goal is to replace Cardinal with a Cloud-based solution. Although the current market for Cloud solutions does not meet critical Commonwealth requirements, the plan is to work with the software suppliers to address functionality gaps that will facilitate a move to Cloud. The Cardinal team is actively working with the leading software and implementation companies to ensure the state's requirements are known and understood, such that they can be incorporated into software development roadmaps. The suppliers understand that the Commonwealth of Virginia is one of the more complicated states from an operational, and therefore, an accounting perspective. If the suppliers can build products that meet Virginia's requirements, the product will most likely meet the needs of many other states as well. DOA will continue to monitor other states that are serving as early adopters for Cloud migration. Doing so will

provide the team with best practice strategies, lessons learned, and other critical information required to prepare for a system transformation project. Figure 1 below depicts the current availability of Cardinal modules as well as expected availability with Cardinal expansion/Cloud migration.

Cardinal System Availability

FIN Functional Areas	Current State VDOT	Current State Statewide	Future State Statewide	HCM Functional Areas	Current State VDOT	Current State Statewide	Future State Statewide
General Ledger	✓	✓	✓	Human Resources	✓	✓	✓
Accounts Payable	✓	✓	✓	Benefits	✓	✓	✓
Accounts Receivable - Funds Receipt	✓	✓	✓	Time & Attendance	✓	✓	✓
Full Accounts Receivable	✓		✓	Payroll	✓	✓	✓
Procurement	✓		✓	Potential Other Modules			✓
Project Accounting	✓		✓				
Fixed Assets			✓				
Potential Other Modules			✓				

✓ Depicts system availability, not system usage. Agencies have access to use the areas indicated, but may opt out based on business need. Agencies can use Cardinal online, via interface, or a combination of both.

Figure 1: Current State vs. Anticipated Future State of the Cardinal System

Figure 2 below depicts the Commonwealth's proposed model to ERP modernization. In the short term, the Cardinal team will upgrade the Cardinal PeopleSoft system to ensure Oracle support. As agencies come forward and request new ERP applications, DOA will work with DHRM and VITA to evaluate these requests to determine if Cardinal can meet their business needs. If so, these agencies will migrate to the Cardinal platform. For agencies with a compelling argument for a new ERP (e.g., the current Cardinal functional scope cannot meet their needs, the agency cannot wait for Cardinal expansion/Cloud migration due to critical audit findings or cyber-security risks) an exception may be granted for them to pursue a new agency-based solution. Even with these exceptions, agencies are advised that the Commonwealth is planning to move to a more robust Cloud solution in the future. When that occurs, Executive Branch agencies will be required to retire their agency-based systems in lieu of a comprehensive enterprise solution. In addition, agencies adopting their own Cloud solution will still need to undergo a standard vetting process with the CGC to ensure that the Commonwealth Accounting Policies and Procedures (CAPP) manual and other state accounting and reporting requirements will be met on an ongoing basis.
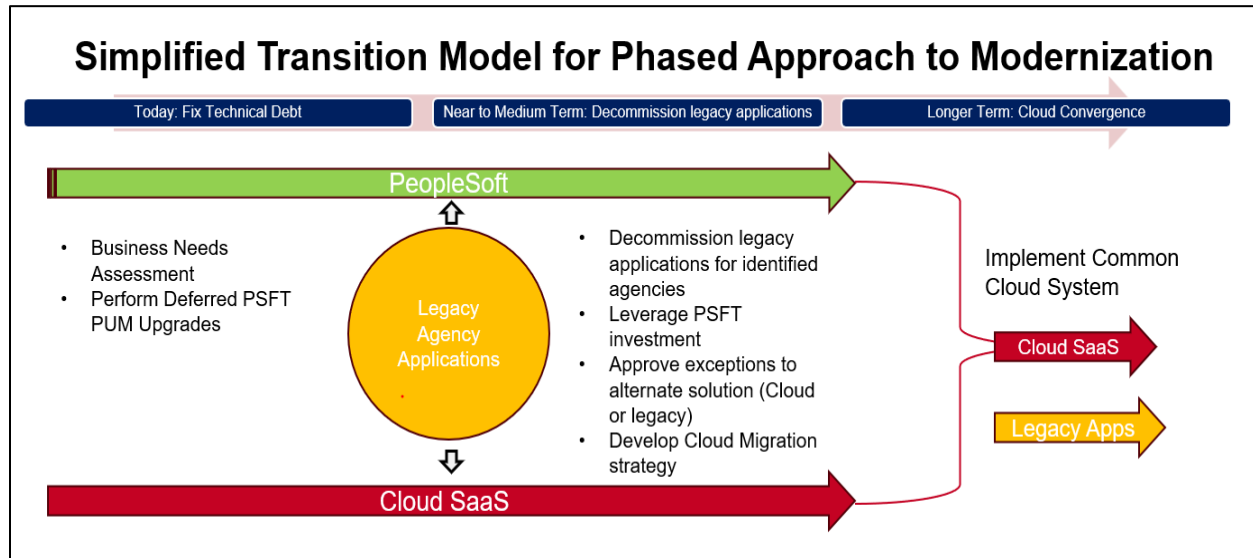
Figure 2: Simplified transition model for a phased approach to Cardinal modernization

2. Cardinal Upgrade and BI Replacement Assessment

From an operations and maintenance perspective, Oracle continues to provide ongoing functional and technical updates to PeopleSoft to keep the base software compliant and current. Oracle provides a rolling 10-year commitment to the PeopleSoft product and is currently committed to providing support through at least 2036. The Cardinal team performs frequent technical updates/upgrades to ensure the application meets all state security requirements and the components that make up the technical architecture of the solution are supported.

The Cardinal team has not deployed Oracle's functional enhancements, as resources have been dedicated to the critical priority of the HCM implementation and stabilization. Oracle requires customers to stay reasonably current with updates to maintain Oracle support. Currently, Cardinal HCM and FIN are numerous versions behind the latest PeopleSoft releases (Cardinal HCM is on v9.2 Image 29 vs. Image 52; Cardinal FIN is on v9.2 Image 31 vs. Image 54). Having the Commonwealth's FIN or HCM systems in an unsupported status is an unacceptable risk which must be addressed.

To begin to address this technical debt, the Cardinal team performed the Cardinal Upgrade and BI Replacement Assessment. The objectives for the Cardinal FIN and HCM upgrade and BI replacement assessment included:

- Identifying system updates required to ensure Oracle support of the system
- Identifying new features to implement
- Evaluating PeopleSoft Insights dashboards for BI capability replacement
- Assessing training material and change impacts based on new features
- Providing inputs to refine the original upgrade estimate and timeline, to include implementation of BI capabilities
- Determining and implementing an approach to keep current on PeopleSoft releases

The approach for assessing the new PeopleSoft upgrade features and BI replacement options was a multi-step process. The Cardinal team evaluated the PeopleSoft product release notes through the current images, researched the functionality of new features, and provided feedback on feature disposition and justification. The team then reviewed feedback and prioritization with team leaders,

estimated the effort for the new features, reviewed the change management and training impacts, and presented the results to DOA leadership.

The Cardinal team evaluated 2,730 new functional and technical features available in the upgraded application. With a guiding principle of thrift and sound financial management of taxpayer money, the team dispositioned all features and prioritized "Required" and "Suggested Adoption" items. "Required" features focused on confirming unsupported functionality and reducing customization. "Suggested Adoption" features focused on an improved user experience and better reporting. Of the 2,730 features analyzed, over 1,400 features will be included in the Upgrade Project across Cardinal FIN, HCM, and related technology. The remaining features were deemed as not needed or potential future use (i.e., not essential to conducting Commonwealth operations).

The list of items below summarizes the key outcomes that will be realized with the Upgrade Project.

- **Continued Oracle Support**
  Oracle is currently providing 10 years of support for all PeopleSoft applications. The application support duration operates on a rolling cycle. Each year Oracle extends PeopleSoft product support for an additional year such that the support window never shrinks to nine years. The Commonwealth must stay near current on the latest PeopleSoft functional releases to benefit from this support. Cardinal continually applies all technical/security patches to ensure security compliance.

  Additionally, Oracle is migrating PeopleSoft pages from "Classic" to "Fluid" page functionality, which supports adaptive screens and devices and improved navigation. Once a page has been migrated to Fluid, the support of the Classic page format ends after two years. The Upgrade Project includes transitioning pages to Fluid; this is a significant effort for Cardinal FIN, while much of HCM is already using Fluid pages.

- **Data Analytics and Reporting**
  Cardinal FIN will use PeopleSoft Insights to replace the Cardinal BI functionality. The capabilities (e.g., dashboards, visualizations, data grids) will be embedded in the Cardinal FIN application and provide embedded analytics and proactive notifications to facilitate core business activities. PeopleSoft Insights allows for quick data filters, facets for online interaction, download to Excel, nightly or near-real-time data loads, and will use three years of rolling historical data for reporting.

  Thirty-three dashboards/reports for General Ledger, Accounts Payable, and Employee Expenses that were previously available in Cardinal BI will be implemented using Insights, which requires the PeopleSoft upgraded technology.

- **Enhanced User Experience**
  User experience and efficiency will be enhanced, including:
  o WorkCenters deployed across applications for streamlined navigation
  o Related Actions available on transactions for quick links to associated functions
  o A streamlined GL Journal posting process with less user intervention
  o Direct Report Tile enabled in HCM to provide easier access to review time and attendance activities
  o Standardization for global addresses throughout FIN and HCM
  o Increased availability of transaction attachments throughout FIN and HCM
  o An updated approval framework with a holistic delegation process to improve the cohesiveness of the applications

- **Strengthened Security**
  - NACHA encryption for additional data security for storing bank account information in FIN and HCM will be implemented

Based on a comprehensive analysis of project work efforts, the Cardinal team has determined that the Upgrade project will take 13 months to complete, including one month of stabilization effort. The Upgrade project began in September 2025 and will conclude in September 2026 (see Figure 3 below). Much of the work will be completed by the existing Cardinal Production Support team, with the continuation of regular maintenance and agency support already factored into the schedule. DOA will supplement the team with additional resources as necessary, and will rely heavily on DOA's implementation partner, Accenture, to lead this effort and be responsible for the project deliverables.

		Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26
				MTP1			MTP2		MTP3					MTP4	MTP5
PUM Upgrade	**PM/Change Leadership**													
	Plan													
	Analyze													
	Design													
	Build													
	Test													
	Performance Test													
	Deploy													
	Go-live													⭐
	Environment Support													
	Post Go-live Support													
PPS	**FIN Fiscal YE**													
	1099 Processing													
	ACA													
	PY Year End Activities													
	Open Enrollment													
Image#	**FIN (Image 31)**				9.2.055									
	HCM (Image 29)	9.2.053				9.2.054								
	IHUB (Image 8)													

Color Index:
- Upgrade Activities
- PPS Activities
- PUM Image In-Scope
- PUM Image Out-of-Scope

Figure 3: Proposed Cardinal Upgrade Project schedule
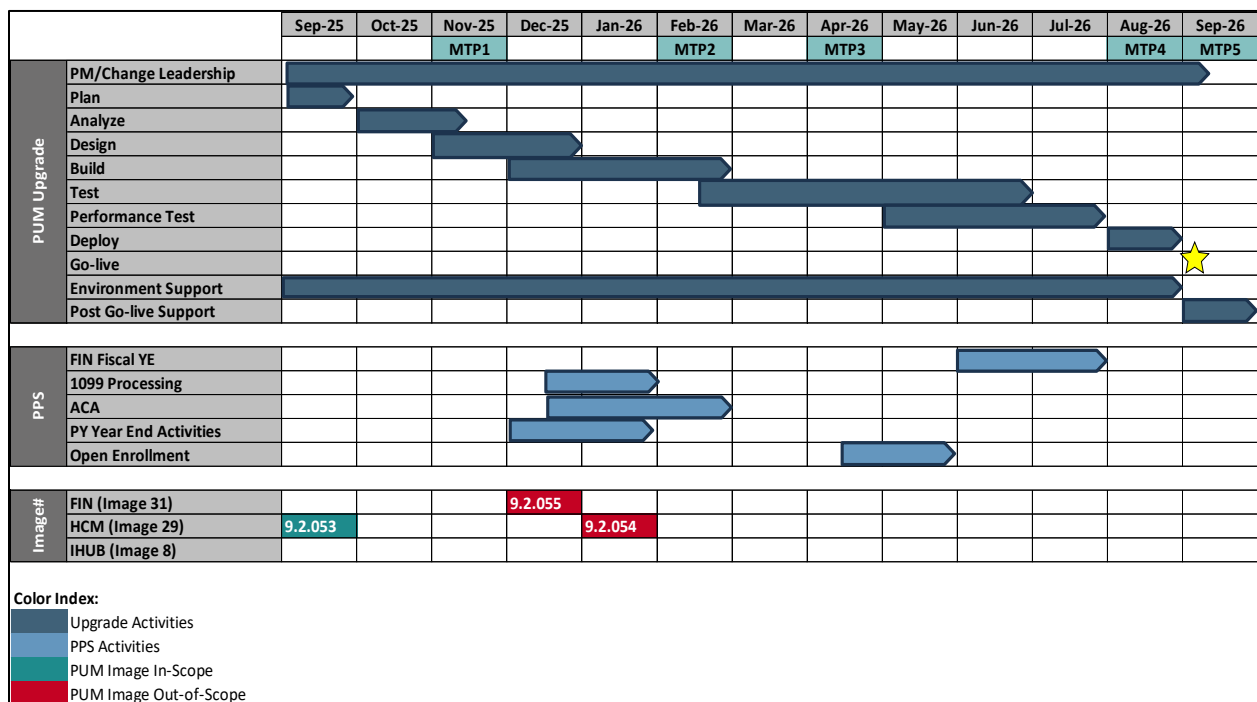
The cost of the Upgrade Project is anticipated to be $18.3M and primarily consists of staffing costs. The project will be paid for using two funding sources. There is an existing Working Capital Advance with a balance of $9.1M that will be authorized for use, and the remaining costs will be paid for by the FY2026 and FY2027 Cardinal production support budget (see Table 1).

PUM Estimate for Cardinal Financials and HCM	
Existing Cardinal PPS Resources (DOA and Accenture)	$ 5,700,000
Additional DOA Project Resources Required	$ 1,500,000
Additional Accenture Project Resources Required	$ 7,800,000
Estimated DOA Overhead Allocation Charges	$ 670,000
Contingency	$ 2,600,000
Total Cost Estimate	**$18,270,000**

Table 1: Cardinal FIN and HCM Upgrade Project estimate and source of funding

Approach for Staying Current on Support
Moving forward, the Cardinal team will conduct annual reviews to determine necessary updates to maintain Oracle support and warranties, as well as to assess additional features and enhancements that meet select criteria (e.g., improve user experience, increase operational efficiencies, reduce current customizations). This approach will require expanding the current Cardinal staffing and investing in robust regression testing tools, which will be used to verify software changes (e.g., defect fixes, updates, new features) do not compromise existing functionality. These annual assessments and applicable updates will be funded through an increase of $3.5M to the annual Cardinal production support budget.

3. Cardinal Expansion and Agency-Based Financial System Decommissioning Analysis

The Cardinal Financial system (FIN) is the official accounting system of record for the Commonwealth. Functional areas include General Ledger, Accounts Payable, Accounts Receivable/Billing, Procurement, and Project Accounting. However, only VDOT has implemented the broader functionality available in FIN (see Figure 1). Other agencies use only the General Ledger, Accounts Payable, and Accounts Receivable (Funds Receipt) functionality, as originally implemented in 2016. Because of the limited functionality available, many agencies use agency-based systems and tools to meet their financial operational needs.

The agency-based financial system decommissioning analysis identified opportunities to expand Cardinal FIN functionality to additional state agencies, with an emphasis on decommissioning agency systems with Cardinal expansion. The primary objectives included:
• Evaluating Cardinal FIN functionality expansion and decommissioning of agency systems
• Determining what agency systems could be candidates for retirement by expanding the functionality offered in Cardinal
• Determining the statewide business needs for the proposed expanded functionality

The Cardinal team distributed a survey to 99 Fiscal Officers representing 257 agencies. Of the 99 Fiscal Officers, 90 Fiscal Officers representing 247 agencies responded to the survey. Survey results were analyzed and follow-up conversations with agencies were conducted as necessary to resolve any discrepancies noted. The team developed an inventory which documented each agency's existing financial systems/tools as well as what functionality was needed in Cardinal to decommission the agency's systems/tools. Based on the data gathered, 14 agency-based systems were selected as

potential decommissioning candidates. One-on-one agency sessions were held between the Cardinal team and agency representatives at each of the 14 agencies.

<u>Expanded Functionality Needs</u>
Through the agency survey feedback and subsequent one-on-one agency information sessions, the Cardinal team identified the eight areas below that present the largest challenge to agencies with the current business process and/or related systems. All these challenges can be addressed with expanded Cardinal functionality.

Fixed Assets: All agencies will benefit from the replacement of FAACS and LAS Plus. Many report a pain point of identifying fixed assets and SBITAs from the procurement lifecycle which could be improved if linked to the procurement transactions. This is the most urgent need for Cardinal to address.

Procurement Integration: All agencies will benefit from eVA Procurement integration with Cardinal for automated three-way matching and the automated identification of the "in service" date – a key accounting requirement for fixed asset identification/integration.

P-Card: All agencies have concerns about Small Purchase Charge Card processing. Some currently use "BOA Works" implemented by Bank of America with a lot of manual intervention for maintaining Chart of Accounts (COA), tracking PO usage, end user reconciliation, manual allocation journals for cost redistribution, eVA confirming order entry, etc.

Employee Expenses: Most agencies manually track employee expenses, and review, approve, and reconcile employee expense reports outside of their financial systems; expenses are then manually entered for employee payment.

Accounts Receivable: All agencies need full accounts receivable functionality (e.g., customer maintenance, AR open items, payments, dunning, collections, DOA Quarterly reporting).

Billing: All agencies need billing/invoice integration and/or online system functionality. Many agencies have business needs to be citizen/customer-facing for statements, payment transmission, etc.

Project Accounting/Grants: Most agencies are using manual spreadsheets to track project/grant transactions for billing/reimbursement. They do not have an automated, robust, end-to-end process for contract term entry/adjustments, cost collections across multiple funding sources/types, and reporting; most agencies need automated allocation routines for cost redistribution (e.g., fringe, space, administration).

General: All agencies have offline spreadsheets and manual processes to support financial transaction entry, calculations, audit, reconciliation, and/or reporting across business functions; expanding Cardinal's scope will help automate their processing and reporting.

<u>System Decommissioning Candidates</u>
The 14 agencies with agency-based systems that were candidates for potential decommissioning included:

- Virginia IT Agency (VITA)
- Department of Motor Vehicles (DMV)
- Virginia State Police (VSP)
- Department of Housing and Community Development (DHCD)
- Virginia Employment Commission (VEC)
- Department of General Services (DGS)

- Department of Conservation and Recreation (DCR)
- Department of Education (DOE)
- Department for Aging and Rehabilitative Services (DARS)
- Department of Agriculture and Consumer Services (VDACS)
- Jamestown-Yorktown Foundation (JYF)
- Virginia Department of Health (VDH)
- Department of Medical Assistance Services (DMAS)
- Department of Social Services (DSS)

Of the 14 agencies originally identified, 3 agency systems were deemed low potential fits (DMV, VEC, DMAS), 2 agencies made requests to replace their existing systems due to critical needs (VITA and VDH), and 9 agency systems remain as candidates for decommissioning with expanded Cardinal FIN scope.

The Cardinal team assessed the cost of Cardinal expansion and the related decommissioning of agency systems. With Cardinal expansion, additional modules (full Accounts Receivable and Billing, Project Accounting, and Purchasing) would be configured for use by all agencies, integration with eVA would be added, and Fixed Asset and Lease Accounting modules would be implemented to replace FAACS and LAS Plus. The cost was estimated at over $50M. This approach was ultimately set aside to address more immediate needs. Further expansion of statewide financial functionality will be revisited to determine whether it makes more sense to expand the existing PeopleSoft application and decommission agency-based systems where feasible, or whether expansion and associated system decommissioning should take place as part of a move to Cloud. PeopleSoft end-of-life, Cloud readiness, and cost will all be considered in this analysis.

Until expanded functionality is available in Cardinal, DOA will continue to work with DHRM and VITA to monitor agency needs and system replacement requests. Currently, several agencies are moving forward with select agency-based financial system replacements, including:

- Department of Environmental Quality (DEQ)
- Department of Behavioral Health and Disability Services (DBHDS)
- Virginia Department of Health (VDH)
- Virginia IT Agency (VITA)
- Department for the Blind and Visually Impaired (DBVI)
- Supreme Court of Virginia (SCV)

4. Expand Cardinal to Replace FAACS and LAS Plus

The Commonwealth's FAACS and LAS Plus systems, both in service since 1987, operate on legacy technology (Cold Fusion) that will be out of extended support by May 2029. It is essential that these applications are replaced with supported technology. Their archaic design and lack of proper interfaces result in frequent manual process errors during annual reporting and close processes, which has repeatedly led to restatements of the ACFR, as documented in DOA's quarterly compliance report.

DOA will expand Cardinal to implement PeopleSoft's Asset Management and Leasing Administration modules to meet the Commonwealth's requirements; doing so will be the most efficient means of replacing these legacy systems, while keeping risks minimized. PeopleSoft is functionally rich in these areas and will meet mandatory requirements for GASB 87 (capitalized lease requirements) and GASB 96 (SBITAs – software subscriptions) without system modification. Such functionality does not exist in the newer Cloud solutions.

These new functional areas will be part of an expanded Cardinal solution and will be fully integrated with other Cardinal FIN modules. The new functionality will be implemented for all current scope agencies and will integrate with eVA, the state's procurement system, to capture the necessary asset information at the time the asset is received by the Commonwealth (in service date, correct budgetary coding for assets and leases), which will result in more efficient data processing, reduction in data entry errors, and better reporting.

This new project will begin around October 2026, once the Upgrade project is completed. This plan is subject to the inclusion of the requested funding in the to-be-introduced budget, and ultimately supported and appropriated. The project schedule is anticipated to be 18 months (see Figure 4 below), which includes a three-month analysis phase to gather input from user agencies, confirm statewide requirements and document new business processes. The project will follow the standard system development life cycle (SDLC) methodology and will include the necessary interface, conversion, configuration, security, reports, and workflows. Additionally, there will be a comprehensive change management effort that focuses on educating users on not only the system, but also on the required state policies and procedures for recording fixed assets and leases.
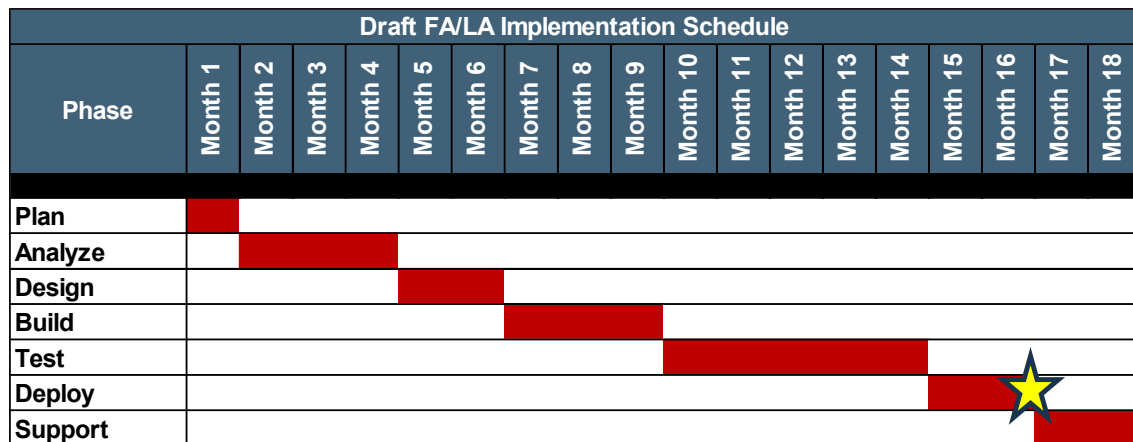
Draft FA/LA Implementation Schedule																		
Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18
Plan	■																	
Analyze		■	■															
Design				■														
Build					■	■												
Test								■	■	■	■							
Deploy															■	★		
Support																	■	■

Figure 4: Proposed fixed assets and lease accounting implementation schedule

The estimated cost for this project is $20M. Existing Cardinal team resources, comprised of Commonwealth and Accenture resources, will be leveraged to complete this project, reducing the funding need by $4.7M (see Table 2 below). DOA plans to submit a budget request for the 2026-2028 biennium.

FA/LA Implementation Estimate for Cardinal	
Leverage Existing Cardinal PPS Resources	$ 4,700,000
Additional DOA Project Resources	2,300,000
Additional Accenture Project Resources	9,100,000
PeopleSoft Licensing Costs (Lease Administration)	1,000,000
Estimated DOA Overhead Allocation Charges	1,300,000
Contingency ~10%	1,840,000
Total Cost Estimate	**$ 20,240,000**
Less Offset to Cardinal PPS Budget	4,700,000
Additional Budget Forecast	**$ 15,540,000**

Table 2: Cost estimate to implement fixed assets and lease accounting modules in Cardinal

5. Cardinal FIN Fit-Gap Against Oracle Cloud ERP Software

Leading software providers are developing and investing in Cloud-based enterprise resource planning (ERP) applications. These solutions are designed to standardize business processes while allowing flexible configuration to meet organizational needs. In a Cloud ERP model, the supplier is responsible for maintaining, securing, and periodically enhancing the system, thereby reducing the customer's technical burden while increasing the need for regular testing. As a result, many public and private organizations are transitioning away from standalone on-premise systems in favor of standardized Cloud solutions. According to Gartner, Oracle is recognized as a leader in the Magic Quadrant Cloud-Based ERP for U.S. Local Government. Since Oracle is already on state contract, the CGC determined that assessing Oracle's Cloud software was a logical and appropriate next step. Since Cardinal FIN has been operating in a steady state for many years, the Cardinal team completed a detailed analysis to determine if the Oracle Cloud ERP software could meet the Commonwealth's financial business needs.

The primary objectives of conducting a fit-gap analysis using Oracle Cloud software included:
- Conducting a fit-gap analysis of the Cloud software against the Commonwealth's current financial business needs/requirements to determine how closely delivered Cloud software met the state's needs
- Assessing business process changes, enhancements, and/or third-party products required to address current needs in a Cloud environment
- Determining the viability and risks of moving from an on-premise PeopleSoft solution to an Oracle Cloud ERP solution
- Creating an approach and budget proposal for an Oracle Cloud ERP statewide financials implementation

The fit-gap assessment took a bottom-up approach to evaluate the Commonwealth's financial business needs and associated business processes. Cardinal subject matter experts partnered with Oracle Cloud ERP software specialists from Accenture and other industry experts to review current state requirements and determine how the software would address each function. The team received input on standard industry practices, reviewed example solutions from other public and private entities implementing Oracle

Cloud, and mocked up Commonwealth data to visualize real-life scenarios in accounts payable, employee expenses, accounts receivable, billing, general ledger, project accounting, and procurement processing.

Each business requirement was dispositioned as a "fit", meaning that the delivered software would meet the intended functionality, or a "gap", which would require a custom report, interface data exchange, extension (i.e., custom work around), or business process change. The major challenge with the assessment was for the team to leverage the software's delivered best practices and not recreate the current solution in the cloud software. Additionally, although extensions are possible with Oracle Cloud, industry implementation experts advise limiting software modifications nearly completely. The team captured process improvements, issues, risks, and technical considerations.

The team also identified approximately 80 high priority gaps in which the business process required to meet the solution was considered too cumbersome, required staff increases, created significant impacts on other central agencies, or compromised internal controls. For these cases, the team developed detailed narrative documentation to explore alternative solutions, capture concerns for vendor review, or outline potential business impacts.

Following completion of the fit-gap analysis, the Cardinal team prepared an implementation strategy, project schedule, and effort estimates across application development, change management, training, technology, and overall project management.

Figure 5 provides the fit-gap assessment results across approximately 4,400 requirements. Delivered Oracle Cloud functionality appears to address 70% of Commonwealth requirements, but significant functionality gaps for statewide and agency processing exist. For example, the solution for FHWA billing for VDOT's daily bill processing was still being developed and had not been successfully implemented. Functionality did not exist for standard state processing (e.g., cash accounting, 1099 adjustments, pre-noting supplier bank accounts, P-Card, Subscription Based Information Technology Arrangements (SBITAs), employees with jobs in multiple agencies, Treasury Offset Program (TOP) integration at the federal level, separation of duties for budget entry/approval). Major challenges existed with financial integration with other statewide systems (e.g., eVA procurement, Treasury payment processing, Cardinal HCM for employees, Chart of Accounts (COA), budget checking data exchange)

Figure 5: Oracle Cloud fit-gap results

given standardized file format assumptions of the Cloud product. Interface and report development are expected with any system implementation. However, many of the Cloud gaps are resolved with reports, interfaces, and/or manual business processes, when they should be met by delivered functionality. Accenture recommended further reduction of extensions during the Discovery phase of the implementation since risk increases to maintain the extension (i.e., customization) and execute regression testing with each quarterly Cloud service update.
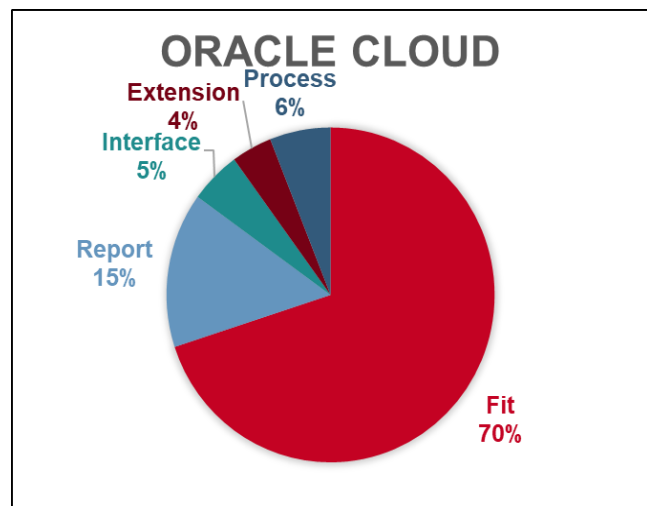
Although this assessment was focused on a fit-gap for Commonwealth requirements against the Oracle Cloud software, anecdotal evidence suggests that states who are "first movers" to the Cloud are

experiencing cost overruns, de-scoping, removal of the DOT agency from project scope, and implementation delays.

Accenture's high-level budgetary estimate to implement Oracle Cloud ERP is $157 million over a three-year period. Like Cardinal's other successful implementations, the approach has multiple phases rolled out by agency groupings. This allows a failback to the existing Cardinal PeopleSoft as the system of record, thus reducing operational and reporting risks. The rollout strategy pilots the new system with a smaller group of agencies rather than all 280, enabling the support organization and central agencies to refine processes based on initial feedback.

The fit-gap findings provided evidence of high cost, high risk, and lower functionality. To extend the assessment beyond the fit-gap functionality considerations, the CGC determined that additional evaluation and discussion with the vendor community were needed prior to pursuing a Cloud SaaS solution to replace PeopleSoft (see RFI on Readiness of Cloud Software and Services for Transition to Cloud section.)

6. RFI on Readiness of Cloud Software and Services for Transition to Cloud

To continue the evaluation of software transformation and test the Oracle fit-gap results shown in Figure 5, the Cardinal team engaged the market through a Request for Information (RFI). The DOA RFI 2025-01 invited Cloud software and service suppliers to evaluate key Commonwealth financial processing business needs and provide input on the current state of the market with their experiences and implementation information.

The objectives for the RFI included:
- Gaining insights into implementation strategies, methodologies, and real-world experiences
- Exploring the current state and future roadmap of Cloud ERP software
- Assessing key financial business needs through software demonstrations and collaborative discussions
- Establishing relationships with suppliers by engaging with key personnel, aligning expectations, and understanding business needs
- Facilitating mutual learning for both the Commonwealth and suppliers regarding needs, challenges, and advantages

In terms of approach, the Cardinal team built on the 80 high priority gaps referenced in the Cardinal FIN Fit-Gap Against Oracle Cloud ERP Software section and expanded it to include high priority needs and requirements unique to the Commonwealth. The assumption was that most Cloud-based ERPs would meet 70% of the financial business needs and that the focus would be on the most challenging areas to address concerns.

DOA received 13 RFI submissions with varying degrees of details. The Cardinal team reviewed all submissions for completeness, comparable references and qualifications to the Commonwealth, and considered Gartner's Magic Quadrant for ERP Cloud Service-Centric suppliers. Using these categories, eight suppliers (SAP, Workday, Oracle, CGI, Accenture, Deloitte, Guidehouse, and KPMG) were invited to present at in-person evaluation sessions with the Cardinal team and additional state experts.

Cardinal subject matter experts further evaluated each RFI requirement response to confirm and question the supplier's understanding of each need. Functionality and business intent were assessed for fit across the FIN application. When major misunderstandings and issues were perceived, follow-up requests and

additional explanations were provided to the suppliers to review and answer prior to the in-person session.

To prepare for the sessions, detailed agendas were provided for each supplier. The agenda sections and demonstration requests were similar for each supplier to create comparison points; however, probing questions were added unique to the supplier's response. The software suppliers focused on demonstrating and discussing a subset of business requirements from the RFI. For services suppliers, the in-person session focused on implementation experience, including preparing organizations to move to the Cloud, implementation project best practices, public sector/statewide considerations, implementation approach considerations, approach to customizations, and production support services.

The Cardinal team asked specific questions in a conversational format and provided clarification to business and statute expectations. The sessions were a great knowledge sharing opportunity for the Commonwealth and the suppliers. Each Cardinal team member completed an evaluation of each supplier's presentation, including reevaluating some business requirement proposed solutions based on the demonstration.

Each of the eight suppliers was also asked to provide three references to complete evaluation forms or allow interviews by the Cardinal team. The references were requested to be Cloud ERP financial customers of similar scale, preferably government, with implementations in the past two years. Receiving anecdotal feedback from the client references of the suppliers helped to round out each supplier profile. The Cardinal team also asked each supplier for their list of ERP financial implementations at a statewide level, regardless of cloud or on-premise solution, to provide the current state of the state marketplace.

Cloud Software Summary and Conclusions

Although Cloud SaaS ERP products allow for flexible configuration and are considered modular, the software requires clients to accept delivered processes and works best when all business functions are processed in the same system. This concept is considered adopting a "SaaS mindset". However, most of the Cloud products were built for commercial clients or developed from a vendor's existing on-premise solution. Software companies are continually developing functionality (e.g., P-Card, federal billing, cash accounting) for government clients across Cloud platforms.

Statewide financial ERP requirements are more multifaceted than a singular agency or locality and more complex than private sector entities. Currently, very few statewide ERPs are stable on Cloud solutions, and none are the same size, scale, and complexity (e.g., decentralized processing, siloed systems across financial functions, DOT inclusion, volume of interfacing entities/systems) as the Commonwealth.

There is consensus that no current delivered Cloud SaaS ERP software will fully meet the Commonwealth's needs given the lack of product maturity. Significant functionality gaps were identified between current financial business needs and Cloud software options. Cloud software suppliers need to develop additional functionality for their base products to address statewide processing and government specific needs. The Commonwealth is positioned to influence Cloud software companies' roadmaps and suppliers are enthusiastic about the dialogue established with Virginia to understand and build out the state's business needs.

Multiple supplier client references the Cardinal team spoke with and/or exchanged correspondence with highly recommended performing separate procurements for software and services to get the best overall results. They also suggested including additional time for in-depth review and demonstration of the Cloud software against the Commonwealth's RFI priority requirements. The Commonwealth also needs to be aware of the model change to the total cost of ownership. Data exchanges and middleware translation between SaaS ERP and other systems will be complex and potentially very costly, since the ongoing

Cloud software fee structure includes consumption and data throughput. This pricing model makes intelligent design incredibly important, and it takes years to achieve before implementing the solution.

Cloud Implementation Services Summary and Conclusions
Several of the client references had implementation schedule extensions, citing that the Cloud project was more complex than anticipated. Both public and private sector client references encountered significant implementation challenges with major business process standardization changes, software functionality gaps (e.g., DOT FHWA billing, 1099 processing requiring third party products, cash accounting), stakeholder engagement, security access compliance, data clean up, state staff attrition, uncovering hidden requirements in late stages of the project, and high demand on agency personnel.

The Cardinal team is engaging with multiple states and monitoring statewide financial implementations to gather lessons learned. The State of North Carolina is live on Oracle Cloud ERP core FIN functionality (e.g., AP, GL, AR, Planning & Budgeting, Consolidation) and rolling out additional functionality to onboard additional agencies. The State of Missouri selected and is implementing Oracle Cloud ERP full FIN functionality, including supporting FHWA Billing for DOT which has delayed the project go-live until July 2026. The State of Rhode Island is live on Workday Finance/Procurement as of July 2025 and is in the process of stabilizing the application and preparing for their Workday HCM rollout. The States of Georgia and Vermont have selected and are implementing Workday. Georgia recently delayed their go-live until April 2026 to confirm DOT processing for FHWA Billing and data conversion for all agencies. The State of Florida's implementation of PeopleSoft (on-premise solution like Virginia's current ERP) is also highly important, given their investment in the software relative to Oracle's commitment to provide enhancements and patching to the software beyond 2036.

To get the most value from a Cloud ERP implementation, the Commonwealth cannot simply lift-and-shift the current state financial business processes across to the Cloud. The Commonwealth must take a transformative approach to modernization and challenge the status quo for decentralized processing, siloed systems across financial functions, and volume of interfacing entities/systems. Determining the system scope starts with reimagining business processes and stakeholder engagement to get all impacted entities agreeing to change in the Cloud future-state.

The Cardinal team has a proven record for successful statewide implementations. A major contributing factor is the selection of a system integrator who submits a reasonable timeline, displays expertise with the selected product, clearly defines client roles/responsibilities, and acts as a partner for the implementation journey. Price should not be the driving criteria to selecting such a critical partner. There are limited system integrators with the resources and experience capable of implementing a Cloud SaaS ERP for the Commonwealth. The size and complexity of Cardinal transformation requires a Tier-1 supplier, also with a proven record of success. Based on the meetings held with several such suppliers, the Commonwealth is confident that there are multiple options for Virginia to consider when the time comes.

Next Steps
Given the decision to defer a Cardinal transformation to the Cloud for the next several years, the Cardinal team will proceed with the process identified in Figure 2. Addressing "Technical Debt" is the highest priority (see Cardinal Upgrade and BI Replacement Assessment), followed by measured functionality expansion to on-board agencies to Cardinal and decommission agency-based systems. The agency rollout strategy is highly dependent on Oracle's extended support duration of the PeopleSoft product in conjunction with the risk of migrating the entire Commonwealth to a new SaaS cloud solution. The time to address this decision is expected to be in the 2029-2030 timeframe, as more experience becomes available to examine the total costs of the statewide implementation and support. In the meantime, the CGC, the Cardinal Project team, and other stakeholders will continue to monitor the statewide Cloud ERP projects and engage with the Cloud software suppliers to address functionality gaps.

Additionally, pre-transformation activities are needed to identify and support the case for change to the Cloud. These include leadership alignment, in-flight agency project governance and expectation setting, project resource planning, change readiness assessment, data strategy, reporting and analytics expectations, and security strategy as considerations for the transformation journey. Although software extensions/customizations are available in Cloud to meet business requirements, they are not recommended due to ongoing maintenance and cost considerations. Pre-work on legislative and policy changes will be required to reduce the business need for customizations prior to the RFP process. The priority and timeline for these activities need to be determined given the other Cardinal team initiatives. While these discussions should begin now, it will become more critical in the 2029-2030 timeframe once more experience is available from additional states' adoption of SaaS ERP solutions.

DOA predicts that a move to a Cloud SaaS solution is realistically seven to eight years away. DOA determined this timeframe based on the following:

- The Cloud SaaS ERP market is not currently mature enough to meet the Commonwealth's business requirements, as there are significant functionality gaps between Commonwealth business needs and Cloud software.
- There are very few states that have successfully implemented a statewide Cloud solution. The Commonwealth and other states will need to work with software suppliers and system integrators to reduce existing functionality gaps.
- The Commonwealth needs to do work to prepare to move to the Cloud. Several initiatives should be undertaken, including reviewing central processing interfaces to determine if there are alternative methods of sending/receiving data, reviewing systems for potential data cleansing, reviewing processes and policies to determine where changes could be requested to better align with industry standard business processes, and establishing a comprehensive change management program to prepare for the paradigm shift necessary for Cloud acceptance.
- Once the Cloud market is more mature, the Commonwealth will need to conduct two major procurements to select a software supplier and system integrator.
- The actual Cloud financial implementation effort will likely span three or more years.
- At the direction of the CGC, significant near-term projects must be completed to reduce risk to the Commonwealth and extend the useful life of the PeopleSoft ERP system, including:
  - Upgrading existing PeopleSoft applications to maintain current support requirements and restore business intelligence capabilities.
  - Expanding Cardinal FIN to replace the aging FAACS and LAS Plus systems, both of which are at end of life.

Appendix – History of Cardinal Timeline

Where we started:

- In 1978, DHRM implemented PMIS
- In 1981, DHRM implemented BES
- In 1986, DOA implemented both CIPPS & CARS II
- In 1987, DOA implemented FAACS/LAS Plus
- In 1998, Virginia Department of Transportation implemented Financial Management System (FMS II)

Enterprise Analysis:

- In 2009, request for proposal (RFP) for ERP software and services
- Contracts established with Oracle PeopleSoft and Accenture as our implementation partner
- Began work on financial system (i.e., Cardinal)

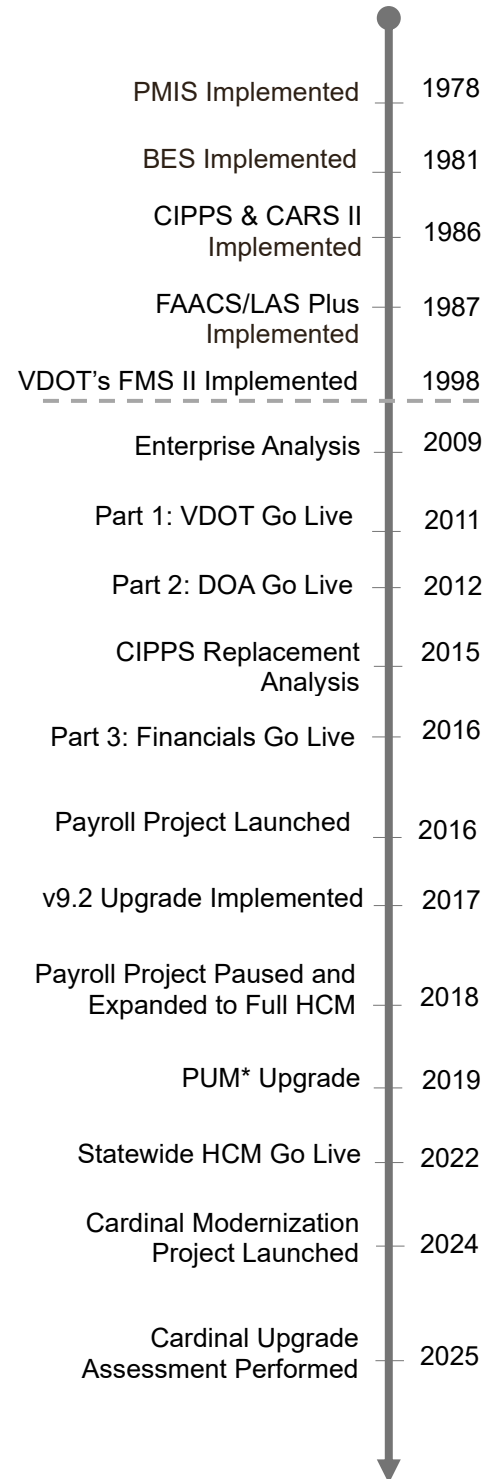### Cardinal Financials Implementation:

- In 2011, Part 1: Rollout of a new financial management system at VDOT
- In 2012, Part 2: Establishment of the Base Financial System at DOA
- In 2016, Part 3: Statewide Rollout of Base Financial System and Retirement of CARS

Cardinal HCM Implementation:

- In 2015, CIPPS Replacement Analysis started
- In Fall 2016, Cardinal Payroll Project launched
- In May 2018, Cardinal Payroll Project put on hold due to PMIS HR data impacting employee pay. In August 2018, HCM expanded scope to include the state's HR, heath benefits, time and attendance, and payroll systems
- In Fall 2022, Statewide Rollout of Cardinal HCM with retirement of CIPPS, PMIS, and BES

Cardinal Upgrade Projects:

- In 2017, Cardinal v9.2 Upgrade Implemented
- In 2019, Cardinal PUM Upgrade go-live to stay current on PeopleSoft to prepare for HCM
- In Summer 2024, Cardinal Modernization Project launched
- In Spring 2025, Cardinal Upgrade Assessment evaluated technical debt and new features

Timeline:

Event	Year
PMIS Implemented	1978
BES Implemented	1981
CIPPS & CARS II Implemented	1986
FAACS/LAS Plus Implemented	1987
VDOT's FMS II Implemented	1998
Enterprise Analysis	2009
Part 1: VDOT Go Live	2011
Part 2: DOA Go Live	2012
CIPPS Replacement Analysis	2015
Part 3: Financials Go Live	2016
Payroll Project Launched	2016
v9.2 Upgrade Implemented	2017
Payroll Project Paused and Expanded to Full HCM	2018
PUM* Upgrade	2019
Statewide HCM Go Live	2022
Cardinal Modernization Project Launched	2024
Cardinal Upgrade Assessment Performed	2025

* PeopleSoft Upgrade Manager (PUM)