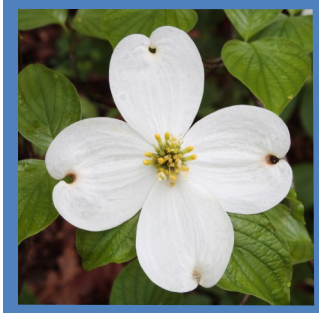



# AGENCIES OF THE SECRETARY OF FINANCE

# REPORT ON AUDIT FOR THE YEAR ENDED JUNE 30, 2018

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# AUDIT SUMMARY

This report summarizes our fiscal year 2018 audit results for the following four agencies under the Secretary of Finance (Secretary):

- *Department of Accounts*
- *Department of Planning and Budget*
- *Department of Taxation*
- *Department of the Treasury and the Treasury Board*

Our audits of these agencies arise from our work on the Commonwealth's Comprehensive Annual Financial Report (CAFR). Overall, we found the following:

- proper recording and reporting of transactions, in all material respects, in the Commonwealth's accounting and financial reporting system, each agency's accounting records, and other financial information reported to the Department of Accounts;
- six prior year findings discussed in the Status of Prior Year Findings and Recommendations section, where progress has been made in correcting the findings, but there continue to be areas that require management's attention;
- six findings involving internal control and its operation, necessary to bring to management's attention. Of these findings, five are considered to be instances of non-compliance with applicable laws and regulations that are required to be reported. These are included in the Internal Control and Compliance Findings and Recommendations section;
- one risk alert, which represents an issue that is beyond the corrective action of the affected agency and requires the cooperation of other involved agencies to address the risk; and
- adequate corrective action with respect to audit findings reported in the prior year that are not referenced in this report.

This report also includes information on a significant initiative for the Secretary and Department of Accounts, regarding the status of the Commonwealth's Human Capital Management System development project.

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## SIGNIFICANT INITIATIVE

The following section provides an update on a major Commonwealth initiative affecting Secretary of Finance agencies.

### Status of System Development Project

***Applicable to:*** *Secretary of Finance and Department of Accounts*

*Commonwealth's Human Capital Management Systems Project*

In August 2016, Department of Accounts (Accounts) launched a Payroll project to replace the Commonwealth's existing payroll system that has been in place since 1986. Currently, 200 state agencies use the system for payroll and/or leave tracking purposes. Accounts originally scheduled the completion of the Payroll project during 2018 to coincide with the time sensitive availability of vendor software support for the existing payroll system. However, due to delayed data conversions and unreliable data from statewide systems that support the payroll process, Accounts encountered project delays.

In May 2018, Accounts made the decision, with the support of the Secretary of Administration and the Secretary of Finance, to immediately halt the original Payroll project and proceed with a more sweeping Human Capital Management project to include not only replacing the statewide payroll system, but also replacing the Commonwealth's human resources; time, attendance, and leave; and benefits administration systems. In addition, Accounts successfully negotiated continued vendor software support of the Commonwealth's existing payroll system through the end of 2021.

Since May 2018, Accounts has been working through an analysis phase to determine the Human Capital Management project's new timeline, budget, and scope. Accounts has partnered with the Department of Human Resource Management to ensure the new systems' specifications are accurate and capture the Commonwealth's standards. Accounts plans to complete the analysis phase in April 2019 and will present a change request for approval of the new timeline, budget, and scope.

Accounts estimated a total cost of $43 million to implement the Payroll project, prior to the decision to transition to the Human Capital Management project. The Governor approved a Decision Brief to allow Accounts to access an existing $25 million working capital advance for the replacement of statewide systems that support the payroll process. In order for Accounts to complete the planning, requirements definition, and software assessment for the Human Capital Management project, a budget of $9 million was established. Using the working capital advance, Accounts will develop the new timeline, budget, and scope with an estimated completion date of April 2019.

The Human Capital Management project scope will integrate with the Commonwealth's accounting and financial reporting system, reduce risks by modernizing several aging statewide systems, and will meet the majority of the Commonwealth's payroll and human resource requirements. Further, by integrating with the accounting and financial reporting system, the Commonwealth will have a variety of new reporting capabilities and more streamlined processes.

As with all projects, Accounts continues to face risks while implementing the Human Capital Management project. For example, although Accounts is familiar with the software product they are implementing, their experience with that product has been limited to the accounting and financial reporting system modules and not the payroll and human resources modules. Furthermore, the timeline for implementing each module is closely dependent on the other modules, causing a greater risk of major schedule impact with any delays. Accounts, Human Resource Management, and all agencies that use the Commonwealth's payroll and human resource systems will need to continue to devote key personnel, time, and technology resources to mitigate the risks associated with the Human Capital Management project.

## STATUS OF PRIOR YEAR FINDINGS AND RECOMMENDATIONS

This section is organized by agency and each status of prior year finding reported includes information on the type of finding, the severity classification for the finding, and an update on progress made since the issuance of the prior year's audit report. The severity classifications are discussed in more detail in the section titled "Independent Auditor's Report."

### Department of Accounts

*Ensure all Nonexempt Active Vendors in the Commonwealth's Accounting and Financial Reporting System Have a Form W-9*

**Type:** Internal Control
**Severity:** Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)

Accounts' Commonwealth Vendor Group (CVG) is making progress to address a weakness communicated in our prior year report related to CVG not having Form W-9s for all nonexempt active vendors in the Commonwealth's accounting and financial reporting system. As Accounts' corrective action remained ongoing through fiscal year 2018, Auditors found 41 percent of vendors tested in the current year did not have a Form W-9 on record within the system.

Not having Form W-9 on file for all nonexempt vendors in the system could result in agencies reporting inaccurate or incomplete tax information on Form 1099-MISC. Additionally, lack of Form W-9s contributes to CVG not being able to definitively determine if vendors with the same name or Tax Identification Number represent duplicate vendors within the system. Prior to the establishment of Accounts' CVG, the Virginia Department of Transportation added vendors in Cardinal.

In 2015 and 2018, Accounts performed mass mailings to active vendors in the system, requesting Form W-9s. Additionally, during October 2018, Accounts deactivated active vendors in the system where there was no record of payment. Accounts further established a deadline of December 15, 2018 to deactivate all nonexempt active vendors who did not provide Form W-9s in response to Accounts' outreach efforts. The fiscal year 2019 audit will include an evaluation of Accounts corrective action and determine whether Accounts has satisfactorily resolved this weakness.

## Department of Taxation

### *Background Information on Recent Information System Access Changes at Taxation*

During fiscal year 2017, Department of Taxation (Taxation) made significant improvements to address previously identified internal control weaknesses over system access to their financial accounting and reporting system. Taxation undertook two significant initiatives to strengthen their system access management. They implemented a new access management system and reconfigured their access structure.

Taxation implemented a new access management system that went live early in fiscal year 2017. This system manages most access granted to employees and contractors, including information system access as well as other types of access, such as building or email. The new access management system is an integrated system, meaning it has the ability to interface directly with Taxation's applications to grant, change, or delete system access. Currently, Taxation's most significant applications are managed with the new access management system, and it is their intent to eventually add all applications. Applications that are not integrated are referred to as "disconnected" applications. Taxation made significant progress in reducing the number of disconnected applications during fiscal year 2018.

Taxation also implemented changes to their access structure to allow for a role-based access approach in fiscal year 2017. Role-based access is a method of granting access where access security roles are designed to meet the needs of a single position within an agency. Taxation's former access structure included less granular security roles, such as access for a group of positions, rather than a single position. Transitioning to more refined access groupings has involved several phases, extensive planning, and input from business owners across the agency.

Throughout fiscal year 2018, Taxation continued efforts to refine access through their annual certification of system access and consideration of segregation of duties when assigning new access functions to security roles. Taxation has dedicated significant resources to improve the documentation of the various access functions that make up security roles. This improved documentation helps facilitate the consideration of least privilege when assigning access to security roles. In addition, the "uncorrelated" accounts identified in the prior year have all been categorized and assigned as a service account or removed. Furthermore, Taxation implemented a process to monitor, correlate, and mitigate any further uncorrelated accounts created. Corrective action over segregation of duties is still ongoing as discussed in our status of prior year finding, "Strengthen Access Controls", below.

Many of the current issues, included below and under the section "Internal Control and Compliance Findings and Recommendations," are remnants of the technical challenges that arose in fiscal year 2017 when Taxation reconfigured their access structure. Taxation has devoted a significant amount of resources and is actively working to address these issues.

### *Strengthen Access Controls*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)

Taxation has made progress in addressing the weakness communicated in our prior year audit report related to strengthening access controls in their financial accounting and reporting system; however, Taxation's corrective action remains ongoing as it relates to segregation of duties issues. As of June 2018, Taxation's Office of Technology (Technology) has identified access functions that create segregation of duties issues. Technology also developed a process to ensure additional segregation of duties issues are identified if management assigns new access functions to security roles.

Agency management personnel performed a systems role access certification in May 2018 for the financial accounting and reporting system and a system access recertification for all applications in July 2018. Technology plans to use the results of the segregation of duties analysis, to determine whether Taxation's management has adequately considered access controls when recertifying systems access. Technology will meet with members of management who recertified any of the identified access functions that create segregation of duties issues to discuss the need for the conflicting functions. The estimated completion date for this corrective action was December 2018. The fiscal year 2019 audit will include an evaluation of Taxation's corrective action and determine whether adequate controls over segregation of duties are in place. Taxation also continues to have access roles that violate the concept of least privilege. This issue is further discussed in the finding entitled "Improve Controls over Role Access" within the section titled "Internal Control and Compliance Findings and Recommendations." In the interim, Tax continues to rely on various compensating controls to ensure adequacy of access controls.

### *Continue to Improve Service Account Management*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)

Taxation addressed all but one of the items from the prior year management recommendation titled, "Improve Service Account Management," and is making progress in addressing the remaining item. In general, the remaining item relates to the documentation of production service accounts.

We communicated the details of this control weakness to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under §2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

Taxation's Information Security Program, Section 8.1 Access Control, requires documentation of production service accounts; however, due to resource prioritization, Taxation has not yet addressed this issue. Taxation should continue its plan, as resources become available, to document the production service accounts.

## Department of the Treasury

### *Improve Accounting and Financial Reporting Control Environment of Trust Accounting*

**Type:** Internal Control
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2016)

In the prior year, we recommended that the Department of the Treasury (Treasury) continue its efforts to fully cross train key positions, consider restructuring responsibilities, and consider adding a position to the Trust Accounting section to ensure it maintains an adequate control environment throughout the year and ensure continuity of operations in the event of the loss of key staff. Treasury has continued its efforts, during the 2018 fiscal year, to address the issues noted in the previous audit. Treasury hired an additional assistant accounting manager and cross-trained staff in the completion of most of its processes. In addition, Treasury has been evaluating Trust Accounting's processes to determine where they could make changes to possibly improve the efficiency of its processes.

While Treasury has continued its efforts to address the issues noted in the previous audit, during the fiscal year 2018 audit we continued to note issues with the workload of several key positions within Trust Accounting resulting in staff having to prioritize their daily tasks and in some cases defer tasks such as reconciliation preparation and review, and financial statement review. In addition, several key positions continued to regularly work overtime to ensure continuity of operations. Further, Treasury did experience turnover in a Trust Accounting Assistant Manager position during fiscal year 2018.

Trust Accounting performs many critical and financially significant statewide operational accounting and reporting functions. Currently, a few highly qualified and experienced staff, who work overtime primarily during year-end, perform many of these functions. Further, Treasury has experienced regular turnover of staff within Trust Accounting that has made it difficult to ensure that the appropriate number of staff are available and trained for key functions.

We recognize that it takes time to build experience and resolve this issue and we acknowledge Treasury's significant efforts over the last few years towards addressing our concerns. We recommend that Treasury continue to evaluate and implement efficiencies and other improvements in Trust Accounting processes. Treasury should ensure that the appropriate number of staff are available and trained for key functions to ensure continuity of operations in the event of the loss of key staff.

### *Improve Financial Reporting of Unclaimed Property Activity*

**Type:** Internal Control
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)

In the prior year, we noted multiple material misstatements in the financial statement submission template (template) Treasury's Unclaimed Property Division (Unclaimed Property) submitted to Accounts for inclusion in the Commonwealth's Comprehensive Annual Financial Report (CAFR). As a result, we recommended that Treasury consider creating a dedicated financial reporting resource to assist with all of its financial reporting functions throughout its various divisions, including Unclaimed Property operations staff. In addition, we recommended Unclaimed Property should continue its efforts to improve its process for developing and analyzing the long-term liability related to estimated future claims to be paid.

During the current year, we again noted deficiencies in the process that Unclaimed Property uses to compile the information for the template. We continued to note multiple misstatements in the template; however, they were not as significant as the prior year misstatements. We found misstatements related to classification of net position, typographical errors in amounts, the omission of activity, as well as other miscellaneous errors. Further, while Treasury spent a significant amount of time and made improvements modifying the analysis of the long-term liability related to estimated claims, we continue to note areas for improvement in this process including analysis of trends in the claims experience.

Unclaimed Property must present their financial statement template in accordance with the instructions provided by Accounts in the Comptroller's Directive as well as accounting principles generally accepted in the United States of America. Inaccurate compilation of financial statement amounts submitted to Accounts could materially misstate the amounts presented in the CAFR.

Unclaimed Property should continue its efforts to develop a sufficient process for evaluating the financial reporting implications of their operations; appropriately considering, researching, and applying accounting standards; and adequately reviewing the financial information communicated to Accounts through the template. Unclaimed Property should ensure staff have sufficient knowledge and training to prepare the template; continue to consider and conduct research of applicable accounting standards to present their activity fairly for inclusion in the CAFR; and fully consider and analyze all areas of their operations that may have financial reporting implications. Furthermore, Unclaimed Property should continue to refine and improve its process for developing and analyzing the long-term liability related to estimated claims.

*Improve Information System Access Controls*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)

In the prior year, we recommended that Unclaimed Property strengthen access controls to two of its information systems used to administer unclaimed property to ensure access privileges are adequately defined and documented, are assigned based on the principle of least privilege, and ensure proper segregation of duties. During fiscal year 2018, Unclaimed Property corrected access issues related to one of the two systems. For the remaining system, Unclaimed Property has started, but not yet completed, documentation of access privileges and internal control processes. In addition, Unclaimed Property implemented a detective control; however, the initially implemented detective control did not fully alleviate the segregation of duties concerns. Unclaimed Property made additional improvements to its detective control subsequent to our review, which will be tested during the fiscal year 2019 audit.

The Commonwealth's Information Security Standard SEC 501 (Security Standard), Section 8.1 AC-6, requires that Unclaimed Property employ the principle of least privilege when granting access. Additionally, the Security Standard, Section 8.1 AC-5 parts a through c, require that Unclaimed Property define and assign system access to support segregation of duties. Segregation of duties and access assigned based on the principle of least privilege reduces the risk of fraud and errors.

Unclaimed Property should continue its efforts to adequately document access privilege descriptions. In addition, they should document their policies and procedures for all processes including, but not limited to, ensuring segregation of duties exist for claim payments and for conducting periodic access reviews to ensure system access is appropriate. Finally, Unclaimed Property should consider business needs as well as employees' overall access when performing periodic access reviews and maintain adequate documentation supporting access privileges assigned.

## INTERNAL CONTROL AND COMPLIANCE FINDINGS AND RECOMMENDATIONS

This section is organized by agency and each finding reported includes information on the type of finding and the severity classification for the finding. The severity classifications are discussed in more detail in the section titled "Independent Auditor's Report."

### Department of Accounts

*Review and Document Service Organization Control Reports of Third-Party Service Providers*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** No

Accounts does not maintain support of its review of third-party service providers' (providers) Service Organization Control reports, including subservice organizations. Providers are entities that perform outsourced tasks and business functions on behalf of Accounts and the Commonwealth. A Service Organization Control report provides an independent description and evaluation of the provider's internal controls.

The Security Standard, Section 1.1, states that agency heads remain accountable for maintaining compliance with the Security Standard for information technology equipment, systems, and services procured from providers. Agencies must enforce the compliance requirements through documented agreements and oversight of the services provided. Additionally, the Commonwealth Accounting Policy and Procedures (CAPP) Manual Topic 10305 requires agencies to have adequate interaction with the provider to appropriately understand the provider's internal control environment. Agencies must also maintain oversight over the provider to gain assurance over outsourced operations.

Without performing timely reviews of Service Organization Control reports, Accounts cannot ensure providers' controls are operating effectively. Although Accounts maintains a high degree of interaction with its providers, management is increasing the Commonwealth's risk that it will not detect a weakness in a provider's environment, which could negatively impact the Commonwealth. To address this issue, Accounts is currently in the process of developing and implementing policies and procedures relating to the review of Service Organization Control reports.

Accounts should ensure policies and procedures include processes to timely obtain, review, assess, and document the effectiveness of provider controls reported through Service Organization Control reports. In addition, Accounts should use Service Organization Control reports as a component of its oversight activities over its providers to confirm they comply with the requirements outlined in the Security Standard, CAPP Manual, and industry best practices. If Accounts identifies weaknesses in Service Organization Control reports, management should implement complementary controls to mitigate the risk to the Commonwealth until the provider corrects the deficiency.

## Department of Taxation

### *Improve Controls over Workgroups*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** No

As of October 2018, Taxation's Office of Technology (Technology) had not performed a certification of employees' access to workgroups. The Security Standard, Section 8.1 AC-6, requires an organization employ the principle of least privilege when granting access. The lack of a review over employee workgroup access resulted in the following:

- four out of 18 users tested had access to critical workgroups that were not necessary for the user to fulfill their job duties; and

- two out of ten users tested had unnecessary access to supervisor workgroups.

Additionally, workgroup tables were not joined using common fields, thus creating obsolete records. The accuracy of the financial accounting and reporting system's access requires the proper set up and management of workgroups.

Workgroups are collections of worklists that enable users to review, approve, complete, correct or add details to information in the financial accounting and reporting system. Since Technology devoted significant resources to reorganizing other aspects of financial accounting and reporting system's security, workgroups have not been the primary focus. While Taxation established a process to perform this certification, it has yet to be implemented.

Technology should improve controls over workgroups by enhancing documentation over workgroups and implementing a review over employee workgroup access.

### *Improve the Effectiveness of the Access Termination Process*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** No

Technology did not remove access timely for two out of nine terminated employees tested. In addition, three out of nine terminated individuals tested continued to have access after the access management system's removal process was complete. Although Taxation has various compensating controls in place, the Security Standard, Section 8.1 AC-2, requires an organization to remove terminated or transferred users.

Taxation implemented the access management system in early fiscal year 2017 to manage access to Taxation's information systems, as well as building access, email access and other related access points. The "leaver workflow process" initiates when an employee's manager enters the employee's termination date; this begins the process to remove all of the employee's access to agency applications. Because the access management system cannot automatically update access for all of Taxation's applications, the leaver workflow process may require some manual intervention to remove system access for certain applications. In these situations, the leaver workflow process notifies the responsible access manager that he or she needs to terminate access directly in the application. The leaver workflow process stops until the individual confirms that he or she terminated the access.

The untimely access terminations resulted from a delayed leaver workflow process while the access management system waited on the access manager to manually revoke access directly in the application. The active access that remained for terminated employees was a result of the access manager not being adequately trained to identify instances where manual access removal was required. Both the access management system's ability to terminate the unnecessary access and access managers' effectiveness in manually removing access (when necessary) drive the success of Taxation's termination process as a whole.

Technology should evaluate the termination process and determine how to improve the process to ensure access for terminated users is revoked properly and timely. In addition, all access managers involved in managing the leaver workflow process should ensure they understand their respective roles and responsibilities, as well as the importance of promptly and effectively terminating access in the applications.

### *Improve Controls over Role Access*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** Yes (first issued in fiscal year 2017)
**Prior Title:** Strengthen Access Controls

Taxation's management and Technology did not properly restrict the access granted within security roles in their financial accounting and reporting system based on the principle of least privilege. Although Taxation has various compensating controls in place, we found eight out of 35 security roles provided access to critical access functions in excess of the job duties of the employees assigned to these roles. Because of this, employees had unnecessary critical access in the financial accounting and reporting system.

Management did not take proper care when certifying the access granted to employees through security roles. Some managers stated they did not notice the unnecessary access when certifying access

in May 2018. Other managers stated the removal of unnecessary access functions in the past also removed access to necessary functions; therefore, they were hesitant to remove access in fear of employees not being able to perform their job duties.

The Security Standard, Section 8.1 AC-6, requires an organization employ the principle of least privilege when granting access to ensure users only have access that is necessary to accomplish their assigned tasks. Management should strongly consider least privilege when certifying the access granted to employees through security roles to ensure employees have the least amount of access necessary to perform their job duties. Additionally, Technology should ensure proper setup of the access functions to ensure they grant only the stated privileges in the financial accounting and reporting system.

### *Improve Disaster Recovery Planning Documentation*

**Type:** Internal Control and Compliance
**Severity**: Significant Deficiency
**Repeat:** No

Taxation maintains disaster recovery planning documentation that is inconsistent with the recovery expectations of some of its business functions. Additionally, Taxation does not consistently use disaster recovery plan nomenclature in its contingency planning documentation.

We communicated the specific control weaknesses to management in a separate document marked FOIAE under §2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. In general, the control weaknesses do not comply with the Security Standard, Sections 3.2 and CP-1-COV-1.

Inconsistent recovery expectations and ambiguous language reduces the effectiveness of Taxation's disaster recovery planning documentation. Taxation should make the necessary revisions, as discussed in the separate FOIAE communication, to become compliant with the Security Standard and improve the effectiveness of its plans.

## Department of the Treasury

### *Document Risk Management Procedures and Improve Quality of Data Provided to Actuary*

**Type:** Internal Control
**Severity**: Significant Deficiency
**Repeat:** No

Treasury's Division of Risk Management (Risk Management) does not have documented procedures for the compilation of quality data for actuarial analysis. During our review of the data provided to the actuary, we found that Risk Management staff included erroneous information including duplicate transactions reported under different categories; incorrectly calculated recovery amounts; and financial transactions and activity occurring after fiscal year end. In addition, Risk Management staff did not provide complete historic data to the actuary.

During the year, Treasury experienced turnover of key personnel in the Risk Management division who were responsible for preparing the data for the actuary. This, coupled with insufficient documented policies and procedures related to the process for preparing the data for the actuary, contributed to the data discrepancies.

Governmental Accounting Standards Board (GASB) Concepts Statement Number 1 describes the basic characteristics of information for financial reporting. GASB defines the basic characteristics of effective financial reporting as understandability, reliability, relevance, timeliness, consistency, and comparability. Reliable information should be verifiable and faithfully represent what it purports to represent. Timeliness ensures that the data is relevant and available soon enough after the reported events to affect decisions. Consistency ensures that similar transactions are reported using the same reporting method. Comparability ensures that financial information can be properly evaluated across periods.

Annually, the actuary performs a valuation, using data provided by Treasury, of the various self-insured programs that Risk Management administers for use by state agencies and localities. Annually, the actuary proposes premium options to Treasury to charge state agencies and localities for participating in these programs. Treasury uses the actuarial valuation in determining the amount of the claims liability that it submits to Accounts for reporting in the CAFR. Inaccurate data provided to the actuary may cause the claims liability amount recorded in the CAFR to be incorrect and could result in incorrect premiums being charged to the state agencies and localities participating in the insurance programs. For fiscal year 2018, Risk Management corrected the issues noted above prior to use of the data by the actuary for the actuarial valuation and premiums calculation.

Treasury should ensure it has properly documented policies and procedures to ensure data provided to its actuary is accurate and timely. This will alleviate the loss of institutional knowledge when key personnel leave the agency and provide a better internal control structure.

## RISK ALERT

During the course of our audit, we encountered an issue that is beyond the corrective action of agency management alone and requires the action and cooperation of management and Virginia Information Technology Agency (VITA). The following issue represented such a risk to the agency and the Commonwealth during fiscal year 2018. While this risk alert has been issued each fiscal year since 2015, it should be noted that progress has been made on this issue since we initially reported on it.

### Mitigate Server Vulnerabilities

***Applicable to:*** *Department of Taxation*

The Commonwealth's Information Technology (IT) Infrastructure Partnership with Science Applications International Corporation (Partnership) provides agencies with installation, maintenance, operation, and support of IT infrastructure components, such as servers, routers, firewalls, and virtual private networks. As part of this, Taxation relies on the Partnership for the installation of security patches in systems that support Taxation's operations. During our review, we found that the Partnership is not performing timely security patching in accordance with the Security Standard.

The Security Standard requires the installation of security-relevant software updates within 90 days of release. The Security Standard does allow for varying time periods depending on factors such as the criticality of the update, but generally the Partnership uses a 90-day window from the date of release as its standard for determining timely implementation of security patches (*Security Standard section: SI-2 Flaw Remediation*).

As of November 2018, the Partnership had not applied a significant number of critical and highly important security patches to Taxation's server environment, all of which had already passed the 90-day mark. The systems missing security updates are at an increased risk of cyberattack, exploit, and data breach by malicious parties.

Taxation is working with the Partnership to ensure that all servers have all critical and highly important security patches installed. Additionally, our separate audit of the Commonwealth's IT Partnership contract administrator, VITA, will include a contract performance review regarding this risk alert. We anticipate this report will be issued in the first quarter of 2019.

## FINANCE SECRETARIAT OVERVIEW

The Secretary assists the Governor in the management and direction of the finance agencies and performs program coordination, policy planning, and budget formulation activities. To accomplish this, the Secretary oversees four agencies, which perform critical functions in the Commonwealth's statewide financial management system. These agencies are the Departments of Accounts, Planning and Budget, Taxation, and the Treasury and the Treasury Board.

The individual audits of these agencies primarily support the audit of the CAFR for the fiscal year ended June 30, 2018, and this report is intended to report on the results of this work. Our office also issues another report related to the Secretary of Finance titled "Office of the Governor and Cabinet Secretaries." This report summarizes activities of the Cabinet Secretaries, including the Secretary of Finance. We expect to issue this report during the Fall of 2019.

These four agencies work closely together in the budgeting, managing, and reporting of the Commonwealth's financial resources. They handle all of the financial transactions of the Commonwealth, from collecting taxes to paying bills to distributing aid to localities. Their primary responsibilities include:

- forecasting and collecting revenues;
- preparing and executing the Commonwealth's budget;
- managing the Commonwealth's cash and investments;
- issuing bonds on behalf of various boards and authorities;
- administering the Commonwealth's statewide accounting and payroll systems;
- overseeing the Commonwealth's financial reporting processes; and
- making strategic financial plans.

These agencies primarily serve other agencies within the Commonwealth in a central support capacity. The operations of these four agencies are primarily funded with general funds. Table 1 summarizes the original and final operating budgets, as well as expenses for all finance agencies except the Treasury Board. The Treasury Board's financial activity is not included since its activities consist primarily of the payment of debt service on general obligation and appropriation-supported debt rather than administrative expenses.

**Summary of Budget and Expenses for Fiscal Year 2018**

Table 1

| | Original Budget | Final Budget | Expenses |
|---|---|---|---|
| Secretary of Finance | $ 488,394 | $ 1,364,844 | $ 1,194,236 |
| Department of Accounts | 41,280,136 | 64,702,039 | 55,707,331 |
| Department of Planning and Budget | 7,701,522 | 7,964,886 | 6,512,986 |
| Department of Taxation | 106,329,052 | 114,696,348 | 110,333,355 |
| Department of the Treasury | 23,265,399 | 23,619,175 | 21,980,385 |
| **Total – Finance Agencies** | **$179,064,503** | **$212,347,292** | **$195,728,293** |

Source: Commonwealth's accounting and financial reporting system

The most significant budgetary changes within the Finance agencies took place in Accounts. The $23.4 million increase in Accounts' final budget includes a drawdown of $22.4 million from a working capital advance to assist with the replacement of the Commonwealth's payroll system. A working capital advance of up to $52 million was authorized for Accounts in Item 261 B. 1 of Chapter 836, 2017 Acts of Assembly.

## RETAIL SALES AND USE TAX COLLECTION AND DISTRIBUTION

In accordance with §30-133.2 of the Code of Virginia, we perform work related to retail sales and use tax distributions as part of our annual audit of Taxation. Our review covers retail sales and use tax with a focus on the collection and distribution of local sales and use taxes. As part of our initial review, we reviewed activity for fiscal years 2009 through 2012 and established a benchmark by which to evaluate errors in the process.

In fiscal year 2018, Taxation collected approximately $6.5 billion in retail sales and use taxes, with $1.2 billion of these revenues being distributed to localities as a one percent local option tax. Taxation collects the tax and determines the local portion, which is distributed to the locality where the sale or activity occurred.

The sales and use tax distribution process requires a joint effort between Taxation, localities, and businesses. There are a number of controls and processes in place to help ensure that locality distributions are accurate and made to the correct locality. When an error is detected, Taxation processes an adjustment to correct the distribution and transfers the funds to the correct locality. Errors most frequently occur because a taxpayer does not allocate the proper amounts to the locality or a taxpayer has a liability in more than one locality.

Table 2 shows the local distribution amount for retail sales and use tax, as well as the amount and rate of distribution errors identified and corrected by Taxation in each of the last three fiscal years.

**Error Rate for Local Sales Tax Distributions**

Table 2

| | 2016 | 2017 | 2018 |
|---|---|---|---|
| Local distribution amount | $1,188,704,491 | $1,213,928,644 | $1,243,480,343 |
| Errors identified and corrected | $7,830,223 | $4,904,027 | $4,716,646 |
| Error rate | 0.66% | 0.40% | 0.38% |

Source: Taxation's financial accounting and reporting system

As shown above, the error rate for fiscal year 2018 was 0.38 percent. This is within the one percent benchmark established and a decrease from the fiscal year 2017 error rate of 0.40 percent. Based on these results, it appears that the error rate is within the established benchmark, and Taxation is properly distributing the local portion of the retail sales and use tax. We do not recommend any changes in the established benchmark.

Commonwealth of Virginia

*Auditor of Public Accounts*

Martha S. Mavredes, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

February 1, 2019

The Honorable Ralph S. Northam
Governor of Virginia

The Honorable Thomas K. Norment, Jr.
Chairman, Joint Legislative Audit
and Review Commission

We have audited the financial records and operations of the **Agencies of the Secretary of Finance** for the year ended June 30, 2018. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Audit Objectives

Our primary audit objectives for the audit of the Departments of Accounts, Planning and Budget, Taxation, and Treasury for the fiscal year ended June 30, 2018, include the following:

- to evaluate the accuracy of financial transactions related to tax collections including accounts receivable, unearned revenues and taxes, accounts payable and other liabilities, tax abatements, and tax and interest revenue as reported in the Commonwealth's accounting and financial reporting system and Taxation's accounting and financial reporting system and in supplemental information prepared by Taxation;

- to evaluate the accuracy of financial transactions related to cash and cash equivalents, investments, debt, risk management, and unclaimed property activity, which is controlled by Treasury as reported in the Commonwealth's accounting and financial reporting system, Treasury's internal systems and accounting records, and in supplemental information prepared by Treasury (including the activity of the Treasury Board, the Local Government Investment Pool, the Virginia College Building Authority, the Virginia Public School Authority, and the Virginia Public Building Authority);

- to evaluate whether the budget approved by the General Assembly is appropriately recorded in the Commonwealth's accounting and financial reporting system and controls in this system are adequate to ensure program expenses do not exceed appropriations;

- to determine whether management has established and maintained internal controls over the Commonwealth's financial reporting and other central processes and the centralized services provided to agencies and institutions in support of the preparation of the financial statements as indicated in the Audit Scope and Methodology Section of this report;

- to determine whether management has established and maintained adequate operating and application system controls over the Commonwealth's accounting and financial reporting, payroll, budget, fixed asset, and lease accounting systems and other internal systems as referenced in the Audit Scope and Methodology Section;

- to determine whether the agencies have complied with applicable laws, regulations, contracts, and grant agreements; and

- to review corrective actions related to audit findings from the prior year report.

## Audit Scope and Methodology

Management has responsibility for establishing and maintaining internal control and complying with applicable laws, regulations, contracts, and grant agreements. Internal control is a process designed to provide reasonable, but not absolute, assurance regarding the reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws, regulations, contracts and grant agreements.

We gained an understanding of the overall internal controls, both automated and manual, sufficient to plan the audit. We considered materiality and risk in determining the nature and extent of our audit procedures. Our review encompassed controls over the following processes and systems.

### *Department of Accounts*

Financial reporting*
Commonwealth's accounting and financial reporting system
Commonwealth's payroll system
Commonwealth's fixed asset system
Commonwealth's lease accounting system
Administrative activities

*Including preparation of the Comprehensive Annual Financial Report and Schedule of Expenditures of Federal Awards.

*Department of Planning and Budget*

Budget execution
Commonwealth's budgeting system

*Department of Taxation*

Financial reporting
Tax return processing
Tax revenue collections
Taxation's accounting and financial reporting system

*Department of the Treasury (including Treasury Board operations)*

Financial reporting*
Bond issuance
Debt service expenses
Investment trading
Investment accounting
Investment accounting systems
Bank reconciliation system
Trust accounting
Check processing
Risk management claim processing
Management of unclaimed property
Contract procurement
Access controls
System change controls

*Including preparation of financial statements of the Local Government Investment Pool, the Virginia College Building Authority, the Virginia Public Building Authority, and the Virginia Public School Authority by Treasury.

We performed audit tests to determine whether controls were adequate, had been placed in operation, and were being followed. Our audit also included tests of compliance with provisions of applicable laws, regulations, contracts, and grant agreements. Our audit procedures included inquiries of appropriate personnel, inspection of documents, records, and contracts, and observation of the agencies' operations. We performed analytical procedures, including budgetary and trend analyses. We also tested details of transactions to achieve our objectives.

A non-statistical sampling approach was used. Our samples of transactions were designed to support conclusions about our audit objectives. An appropriate sampling methodology was used to ensure the samples selected were representative of the population and provided sufficient, appropriate evidence. We identified specific attributes for testing each of the samples and, when appropriate, we projected our results to the population.

## Audit Conclusions

We noted certain matters at Accounts, Taxation, and Treasury involving internal control and its operation and compliance with applicable laws and regulations that require management's attention and corrective action. These matters are required to be reported under Government Auditing Standards and are described in the sections titled "Status of Prior Year Findings and Recommendations" and "Internal Control and Compliance Findings and Recommendations."

Our consideration of internal control was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and, therefore; material weaknesses and significant deficiencies may exist that were not identified. However, as described in the sections entitled "Status of Prior Year Findings" and "Internal Control and Compliance Findings and Recommendations," we identified deficiencies in internal control that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial information will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We have explicitly identified 12 findings in the sections titled "Status of Prior Year Findings" and "Internal Control and Compliance Findings and Recommendations" as significant deficiencies for the Commonwealth.

As the findings noted above have been identified as significant deficiencies for the Commonwealth, they will be reported as such in the section "Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards" included in the Commonwealth of Virginia Single Audit Report for the year ended 2018.

We found that Taxation properly stated, in all material respects, the financial records reviewed in support of the tax collections activity detailed in the audit objectives as reported in the Commonwealth's accounting and financial reporting system, Taxation's accounting and financial reporting system, and supplemental information.

We found that after adjustments, Treasury properly stated, in all material respects, the financial records reviewed in support of the cash and investments, securities lending, debt, risk management, and unclaimed property activity reported in Commonwealth's accounting and financial reporting system, Treasury's internal systems and accounting records, and supplemental information.

We found that the budget approved by the General Assembly is appropriately recorded in the Commonwealth's accounting and financial reporting system, and controls in this system were adequate to ensure program expenses do not exceed appropriations.

The agencies of the Secretary of Finance have taken adequate corrective action with respect to audit findings reported in the prior year that are not referenced in this report.

## Exit Conference and Report Distribution

We discussed this report with management of the respective agencies of the Secretary of Finance and have included their responses at the end of this report. We did not audit management's responses and, accordingly, we express no opinion on them. We redacted certain information included in the response from Taxation management in accordance with § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

This report is intended for the information and use of the Governor and General Assembly, management, and citizens of the Commonwealth of Virginia and is a public record.

AUDITOR OF PUBLIC ACCOUNTS

LDJ/vks

COMMONWEALTH of VIRGINIA

DAVID A. VON MOLL, CPA
COMPTROLLER

*Office of the Comptroller*

P. O. BOX 1971
RICHMOND, VIRGINIA 23218-1971

January 28, 2019

Ms. Martha S. Mavredes
Auditor of Public Accounts
James Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Dear Ms. Mavredes:

The Department of Accounts (Accounts) appreciates the opportunity to respond to the *Internal Control and Compliance Findings and Recommendations* contained in your 2018 Secretary of Finance Audit Report. We give your comments the highest level of importance and consideration as we continue to review and improve our current practices.

**Internal Control and Compliance Findings and Recommendations**

*Review and Document Service Organization Control Reports of Third-Party Service Providers*

Accounts acknowledges the importance of reviewing Provider Service Organization Control (SOC) reports to address any internal control weaknesses identified that could negatively impact the Commonwealth. Accounts reviewed the applicable SOC reports and determined there were no substantial weaknesses that warranted mitigating action. However, Accounts acknowledges it has not maintained support of its review. Beginning with fiscal year 2019, our operational procedures will include a section covering the analysis, review and documentation of SOC reports.

Review of the applicable SOC reports will include an evaluation of all exceptions noted. A discussion with each third party provider regarding any exceptions will help determine the impact to the Commonwealth. If it is determined that modifications to current processes and/or any mitigating controls are appropriate, such modifications will be documented. The third party provider will be required to provide an attestation letter confirming their mitigation of issues related to the exception. All reviews, conclusions reached, and actions taken shall be formally documented.

Accounts has, and will continue to maintain, a close working relationship with our third party providers to ensure operations and controls are working properly throughout the year.

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**Status of Prior Year Findings and Recommendations**

*Ensure all Nonexempt Active Vendors in the Commonwealth's Accounting and Financial Reporting System Have a Form W-9*

Accounts appreciates your acknowledgement of the progress that has been made thus far and recognition that this issue requires additional time to complete. We fully anticpate ensuring that all active vendors have a valid Form W-9 during fiscal year 2019.

Sincerely,

David A. Von Moll

Copy: The Honorable Aubrey L. Layne, Jr., Secretary of Finance
Lewis R. McCabe, Jr., Deputy State Comptroller

# *COMMONWEALTH of VIRGINIA*

***Department of Taxation***

January 25, 2019

Ms. Martha S. Mavredes
Auditor of Public Accounts
James Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Dear Ms. Mavredes:

The Department of Taxation ("Virginia Tax") has reviewed the findings and recommendations provided by the Auditor of Public Accounts as part of your audit of the agency's financial records and operations for the year ended June 30, 2018. I appreciate both the effort and professionalism of your staff in the performance of the audit and the opportunity to provide the following responses to address the report findings.

**Strengthen Access Controls**

As noted, in 2018 Virginia Tax undertook a substantial project aimed at strengthening our computer access control structure. As previously noted, we are scheduled to complete this management point in 2020, so we expected additional comments this year.

This project to strengthen our access control structure required a number of activities, including:

- identifying and resolving orphaned accounts,
- creating a service account management process and storing service accounts with this process in a newly-implemented credential vaulting tool,
- implementing an orphaned account identification and management process,
- completing a system access certification for all staff and IT systems, and
- documenting processes and procedures for all of the above.

In addition, although we made significant progress in evaluating potential segregation-of-duties conflicts and ensuring the integration of the concept of least privilege into the certifications, audit results indicate we need to reach a greater degree of success. Before the next access certification in June 2019, Virginia Tax will complete a project that identifies combinations of access functions that create potential segregation-of-duties violations. We will communicate these to management so that they can make and document an informed decision regarding whether to address the potential conflict in the access control process or rely on other compensating controls. Virginia Tax will also recommunicate to all supervisors that during the access request and recertification process they must approve only the access that constitutes least privilege for an employee's current need.

**Continue to Improve Service Account Management**

Virginia Tax will document all service accounts in system security plans by June 30, 2019.

**Improve Controls over Workgroups**

We initially recertified workgroups in December 2018. We will include workgroups as part of the continuing recertification process beginning June 2019.

**Improve Effectiveness of the Access Termination Process**

As previously noted, this finding does not reflect a significant risk to the agency as all applications that are connected to Virginia Tax's Access Management System automatically remove access upon separation.

We will incorporate an additional reporting and notification step into the separation process to ensure a reminder to system administrators until they have completed the separation activity (e.g. account deletion). The agency will begin this process August 1, 2019.

**Improve Controls over Role Access**

Before the next access certification in June 2019, Virginia Tax will complete a project that identifies combinations of access functions that create potential segregation-of-duty violations. We will communicate the results to management so that they can make and document an informed decision regarding whether to address the potential conflict in the access control process or rely on other compensating controls. Virginia Tax will also recommunicate to all supervisors that during the access request and recertification process they must approve only the access that constitutes least privilege for an employee's current need.

**Improve Disaster Recovery Planning Documentation**

In addition to the annual update to the disaster recovery documentation, Virginia Tax is holding additional meetings to address this audit concern. We are devoting these meetings exclusively to improving the communication of the disaster recovery expectations and limitations between the business functions and technology staff to ensure we identify any inconsistencies and address them timely. We held the first of these meetings January 24, 2019.

**Risk Alert**

While I appreciate the acknowledgment that Virginia Tax is not responsible for the delay in applying server patches, I am concerned that this alert does not adequately express the repeated actions Virginia Tax has taken to prompt the "Partnership" to complete action on this important issue. Virginia Tax leadership formally communicates the status of this issue with VITA executive management each quarter. In addition, our agency technology staff meet routinely with VITA staff on other issues, including patching. Although the issue has significantly improved, it takes only one weakness of this nature to put Virginia Tax's information at risk.

Thank you for the opportunity to respond to your report. The Department strives to maintain strong internal controls and business processes that ensure high standards of integrity, efficiency, and control.

Sincerely,

Craig M. Burns
Tax Commissioner

Cc: The Honorable Aubrey L. Layne, Jr., Secretary of Finance

COMMONWEALTH of VIRGINIA
*Department of the Treasury*

MANJU S. GANERIWALA
TREASURER OF VIRGINIA

P.O. BOX 1879
RICHMOND, VIRGINIA 23218-1879
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FAX (804) 225-3187

January 25, 2019

Ms. Martha Mavredes
Auditor of Public Accounts
101 N. 14th Street, 8th Floor
Richmond, VA 23219

Dear Ms. Mavredes,

The Department of the Treasury (Treasury) welcomes the opportunity to respond to the recommendations in your Report on the Audit of the Agencies of the Secretary of Finance for the fiscal year ended June 30, 2018. Treasury appreciates the recognition of our progress in addressing previous concerns as noted in the report. Additionally, your comments and recommendations are appreciated and given the highest level of consideration by Treasury as we continually strive to improve our processes.

## Comments to Management

*Improve Accounting and Financial Reporting Control Environment of Trust Accounting*

Over the last several years, workload has increased considerably due to the growth in programs, higher levels of debt issuances and refundings undertaken, and implementation of new accounting standards. In fiscal year 2019, Treasury received funding for and filled an additional senior management position in Trust Accounting.

Going forward, a continued emphasis on succession planning and cross-training within the Trust Accounting Unit will be a key priority. Treasury will continue to focus on streamlining its accounting and reporting processes where possible.

*Improve Financial Reporting of Unclaimed Property Activity*

The Unclaimed Property Division (UCP) will continue to improve procedures to ensure the financial statements are completed in accordance with the instructions provided by DOA as well as accounting principles generally accepted in the United States of America and a reasonable and reliable method to estimate the long-term claims liability. Additionally, Treasury will research and incorporate any future changes in financial reporting standards in the procedures.

*Improve Information System Access Controls*

Treasury will continue to improve policies and procedures for assigning access to information systems related to UCP. The Division will document the roles and workflow definitions, including the correlation of roles between systems. UCP has made enhancements to the detective control during fiscal year 2019 to address the findings and will ensure the control is operating effectively. Finally, UCP will document all policies and procedures related to access controls for each of its systems.

*Document Risk Management Procedures and Improve Quality of Data Provided to Actuary*

The Risk Management Division has strengthened its internal controls by developing written procedures to prepare actuarial data. The Division will review these procedures annually and make changes, as needed.

Sincerely,

Manju S. Ganeriwala

cc: The Honorable Aubrey Lane, Secretary of Finance

## SECRETARY OF FINANCE AGENCY OFFICIALS

As of June 30, 2018

Aubrey L. Layne, Jr.
Secretary of Finance

David A. Von Moll
Comptroller

Daniel S. Timberlake
Director of the Department of Planning and Budget

Craig M. Burns
Tax Commissioner

Manju S. Ganeriwala
Treasurer