



Audit and Compliance Committee Meeting

Via GoToWebinar

Tuesday, 3/16/2021

2:00 - 4:00 PM ET

- I. Welcome
- II. Public Comment
- III. Approval of Minutes of the December 10, 2020 Meeting
  - Meeting Minutes - Page 3*
- IV. Audit Reports
  - A. Report 434: Health Insurance Premiums and Credits
    - Audit Report 434 - Page 8*
    - Management Response - Page 28*
  - B. Report 435: Conformance with VITA's Security Program
    - Audit Report 435 - Page 31*
- V. Report on Code of Ethics by Management
  - Code of Ethics Reporting - Page 45*
  - A. Report from Administration
    - Administration Code of Ethics Report - Page 46*
    - VRS Code of Ethics - Page 47*
  - B. Report from Investments
    - Code of Ethics Cover Memo - Page 49*
    - Code of Ethics Report - Page 50*
    - Code of Ethics and Standards of Professional Conduct Policy - Page 53*
    - MNPI Policy - Page 63*
    - Personal Trading Policy - Page 71*
    - Gifts Policy - Page 79*
- VI. Quarterly Reports on the Modernization Program - Phase 4
  - A. Report from Management
    - Management's Report - Page 83*
  - B. Report from Internal Audit
    - Internal Audit's Report - Page 93*
- VII. FY2021 Audit Plan Progress as of December 31, 2020
  - FY2021 Annual Plan Progress as of December 31, 2020 - Page 105*
- VIII. Quarterly Report on Fraud, Waste and Abuse Hotline Cases
  - Fraud Waste and Abuse Report as of January 31, 2021 - Page 111*
- IX. Miscellaneous Updates
  - A. Management's Quarterly Travel Expenses and Per Diem Report
    - Travel Expense and Per Diem Report as of December 31, 2020 - Page 115*

B. Internal Audit's Review of the Cost of Living Adjustments

*Internal Audit COLA Memorandum - Page 120*

C. Next Meeting Date: Thursday, June 3, 2021 at 2:00 p.m.

## **Minutes**

In accordance with Item 4-0.01 of Chapter 56 of the 2020 Special Session I Acts of Assembly of the *Code of Virginia* as it relates to conducting business during the COVID-19 pandemic, the Audit and Compliance Committee of the Board of Trustees convened electronically on December 10, 2020.

The following individuals participated electronically.

***Audit and Compliance Committee Members:***

Joseph W. Montgomery, Committee Chair  
W. Brett Hayes, Committee Vice Chair  
O'Kelly E. McWilliams, III, Board Chair

***Other Members of the Board of Trustees:***

William A. Garrett

***VRS Staff:***

Patricia Bishop, Jennifer Schreck, Rory Badura, Judy Bolt, Jeanne Chenault, Michael Cooper, Valerie Disanto, Barry Faison, Joshua Fox, Krystal Groff, Robert Irving, Curt Mattson, Matthew Priestas, Denise Rasmussen, Kristy Scott, Jillian Sherman, and Cynthia Wilkinson

***Auditor of Public Accounts:*** Zach Borgerding and Justin Ferrell

Mr. Montgomery called the meeting to order at approximately 10:00 a.m. and noted that given the current circumstances related to COVID-19, the Audit and Compliance Committee (Committee) was unable to meet in person. However, utilizing electronic means, the Committee could hold this meeting in accordance with Item 4-0.01 of Chapter 56 of the 2020 Special Session I Acts of the Assembly of the *Code of Virginia* as it relates to conducting business during a pandemic.

Mr. Montgomery then completed a roll call of each Committee member for attendance purposes:

Mr. Hayes – present  
Chief Garrett – present  
Mr. McWilliams – present  
Mr. Montgomery – present

***PUBLIC COMMENT***

Mr. Montgomery noted that no individuals registered to provide public comment to the Committee.

***MINUTES***

Upon motion of Mr. McWilliams, seconded by Chief Garrett, the Committee approved the minutes of the Audit and Compliance Committee meeting held on September 29, 2020 upon the following roll call vote:

Mr. Hayes – aye  
Chief Garrett – aye  
Mr. McWilliams – aye  
Mr. Montgomery - aye

***EXIT ON THE 2020  
COMPREHENSIVE  
ANNUAL FINANCIAL  
REPORT AUDIT***

Mr. Borgerding informed the Committee that the APA’s audit work over VRS’ fiscal year 2020 Comprehensive Annual Financial Report was in its final stages. Mr. Borgerding indicated the APA anticipates issuing an unmodified opinion dated on or about December 11, 2020. Mr. Borgerding noted the opinion will include an emphasis of matter paragraph noting the early implementation of GASB Statement No. 84. Also, as a part of the audit, the APA would issue a “Report on Internal Controls and Compliance” which would not include any formal recommendations.

***ENTRANCE WITH  
APA REGARDING  
EMPLOYER  
ASSURANCES***

Mr. Borgerding then provided the Committee with an overview of the APA’s upcoming examinations designed to provide participating employers and their auditors the assurances necessary to prepare their own annual financial statements in accordance with:

- *GASB Statement No. 68*, which focuses on employer reporting over pension plans, and
- *GASB Statement No. 75*, which deals with employer reporting over other post-employment benefit plans.

Mr. Borgerding noted the examinations will cover the period July 1, 2019 through June 30, 2020 and that the APA anticipates issuing its opinions on these matters on or about June 30, 2021. He further indicated an engagement memo would be provided to the Committee at a later date.

***AUDIT REPORTS***

The Committee received one audit report from staff.

***Audit Report 433***

Ms. Groff presented audit report 433 – Member and Employer Contributions which assessed the validity and accuracy of the processing of monthly contributions, adjustments and related data submitted by participating employers and recorded by VRS. There were no written recommendations resulting from the review. The Committee discussed the interest posting process.

***ACCEPTANCE OF  
AUDIT REPORTS***

Upon motion of Mr. McWilliams, seconded by Mr. Hayes, the Committee accepted audit report 433 as presented, upon the following roll call vote:

Mr. Hayes – aye  
Chief Garrett – aye  
Mr. McWilliams – aye

Mr. Montgomery - aye

**MODERNIZATION  
QUARTERLY REPORT  
- MANAGEMENT**

Ms. Rasmussen presented Management's report on the Modernization Program - Phase Four. Ms. Rasmussen provided a timeline highlighting the progress of the Modernization Program over the past 10 years and updated the Committee on the Phase Four progress. Ms. Rasmussen discussed the ongoing development efforts, noting the development of member portal functionality and recent pilot results for online retirements. The budget and cost updates as of September 30, 2020 were provided.

**MODERNIZATION  
QUARTERLY REPORT  
- INTERNAL AUDIT**

Mr. Priestas discussed Internal Audit's Review of Modernization - Phase Four indicating agreement with management's representations regarding the overall schedule, budget and scope of Phase Four. Mr. Priestas acknowledged management's continued thoughtful and deliberate efforts to bring this phase to a close while ensuring the continued protection of member data, noting diligent management of resources across concurrent projects and organizational initiatives remains critical to realize this effort. Looking forward, VRS risk-adverse strategies indicate full release of final implementation for all users to be deferred until sometime in fiscal year 2022 to ensure the integrity of VRS and its processing.

**QUARTERLY REPORT  
ON FRAUD, WASTE  
AND ABUSE HOTLINE  
CASES**

Ms. Bolt presented the Fraud, Waste and Abuse cases investigated for the period August 1, 2020 through October 31, 2020. Ms. Bolt noted there were two cases reported during the period. Both cases alleged abuse of short-term disability benefits. One case was determined to be unfounded and therefore closed. Ms. Bolt further noted, one case was under review, but after completion of the quarterly report was subsequently determined to be unfounded and closed.

**ANNUAL REPORT ON  
INTERNAL AUDIT'S  
QUALITY  
ASSURANCE  
IMPROVEMENT  
PROGRAM**

Ms. Schreck presented the results of the annual Internal Quality Assurance and Improvement Program Review as of June 30, 2020, noting the Principal Auditor for Quality Assurance had completed the review and concluded there was reasonable assurance that the Internal Audit Department was performing in conformance with the *International Standards for the Professional Practice of Internal Auditing*. The Committee had discussion around the future integration of Enterprise Risk Management (ERM) into Internal Audit's risk assessment activities.

**MISCELLANEOUS  
UPDATES**

**Management's Quarterly Travel Expense and Per Diem Report**

Ms. Schreck indicated management's quarterly travel expense and per diem report is available for the Audit and Compliance Committee's review.

**Next Committee Meeting Date**

Ms. Schreck noted the next meeting of the Committee is scheduled for March 16, 2021 at 2:00 p.m.

***MEETING***  
***ADJOURNMENT***

There being no further business, Mr. McWilliams motioned to adjourn the meeting which was seconded by Chief Garrett.

Mr. Montgomery adjourned the meeting at approximately 11:15 a.m. upon completion of the following roll call vote:

Mr. Hayes – aye  
Chief Garrett – aye  
Mr. McWilliams – aye  
Mr. Montgomery - aye

---

---

**Committee Chair**

---

---

**Secretary**

# Audit Reports

# Health Insurance Premiums and Credits

April 1, 2020 Payrolls

Highlighting VRS Core Values: *Integrity, Teamwork, Accountability* and *Agility* in Action

THIS REPORT IS INTENDED SOLELY FOR THE USE OF THE VRS BOARD OF TRUSTEES AND THE MANAGEMENT OF VRS AND IS NOT INTENDED FOR OTHER PURPOSES.





Dear Members of the Audit and Compliance Committee,

We have completed audit number 434, "Health Insurance Premiums and Credits." The primary purpose of our audit was to verify the validity and accuracy of the retiree health insurance premiums withheld from retiree's benefits, the transfer of such withholdings to the appropriate parties and the validity and accuracy of health insurance credits paid by VRS.

We conducted our audit in accordance with the *International Standards for the Professional Practice of Internal Auditing*. These standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for the conclusions based upon our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This report was distributed to the VRS Director and members of management for review and comment. Management expressed substantial agreement with our report and will issue a written response to the recommendation contained in this report.

We appreciate the cooperation and assistance of the Health Benefits, Managed Disabilities Programs and Finance Departments throughout this audit.

Respectfully Submitted,

A handwritten signature in black ink that reads 'Jennifer P. Bell Schreck'.

**Jennifer P. Bell Schreck, CPA, CISA, PMP**  
Audit Director

---

## TABLE OF CONTENTS

TITLE PAGE	1
TRANSMITTAL LETTER	2
EXECUTIVE SUMMARY	3
BACKGROUND	4
SCOPE AND METHODOLOGY	11
CONCLUSIONS	14
FOLLOW-UP ON PRIOR REPORTS	17
RECOMMENDATIONS	17
MANAGEMENT EXIT CONFERENCE	19
REPORT DISTRIBUTION	20

---

## EXECUTIVE SUMMARY

We conducted an examination of VRS' Health Insurance Premiums and Credits processes for the retirement payroll date of April 1, 2020.

VRS' Health Benefits area has two primary functions. The first is to withhold health insurance premiums from retirees who are enrolled in an employer-sponsored health plan (either the State Retiree Health Benefits Program or a non-state employer-sponsored health plan). The second is to provide a Health Insurance Credit (HIC), a non-taxable reimbursement benefit, to eligible retirees which assists with the cost of health insurance coverage in retirement. For a retiree to receive a HIC reimbursement, the retiree must have accumulated 15 or more years of one of the following: VRS creditable service, Optional Retiree Plan creditable service or a combination of the preceding. Finally, the retiree must also be enrolled and paying a premium for health insurance coverage.

Like all benefits paid by VRS, as of May 2019 VRS uses VNAV to manage the collection and distribution of these benefits.

Our review determined:

- Health insurance premiums being withheld are accurate and complete;
- Health insurance credits are valid and only paid to eligible retirees;
- VRS financial records of transactions related to health benefit activities are reasonable; and,
- Business processes are supplemented with proper controls and access to DHRM's Benefit Eligibility System is appropriate and follows the principle of least privilege.

While VNAV provides improvements to the previous control environment there are always opportunities for post-implementation refinements. As a result, we included one formal opportunity to enhance monitoring activities to ensure retiree HIC payments are in accordance with established rules and sufficient oversight of departmental segregation of duties is provided.

### SNAPSHOT

For the **April 1, 2020 payroll**, VRS paid **\$14.4 million** in **Health Insurance Credit** to retirees.

VRS withheld **\$17.2 million** in **health insurance premiums** from retiree benefits and **remitted these withholdings** to appropriate **state** and **non-state** benefit administrators.

### AUDIT ASSESSMENT

**Overall, Health Insurance premiums are properly withheld, remitted and recorded. Health Insurance Credit disbursements are valid and complete.**

**However, some concerns exist over the accuracy of certain Health Insurance Credit payments. These are discussed further in the Conclusions and Recommendations sections.**

**Written Recommendations: 1**

## BACKGROUND

### INTRODUCTION

State employees who retire may continue their health insurance (HI) coverage into retirement by participating in the State Retiree Health Benefits Program. Depending upon the benefits offered by the non-state employer, political subdivisions or school systems, retirees may also be able to continue HI coverage into retirement by participating in post-retirement employer-sponsored health insurance plans. VRS supports the administration of these HI benefits by withholding applicable premiums from monthly retirement benefits and remitting such amounts to the respective employers for payment to insurance carriers.

In addition to collecting and remitting HI premiums, VRS administers the Retiree Health Insurance Credit (HIC) Program. This post-employment benefit is designed to assist retirees with the cost of HI. The HIC benefit amount is set by the General Assembly based on each year of creditable service at retirement. The benefit only applies to the retiree's portion of the HI premium and cannot exceed the maximum amount established by the General Assembly or the actual HI premium. This program is funded through employer contributions to the Retiree HIC Trust Fund and investment returns.

### HI PREMIUMS FOR STATE RETIREES

The Department of Human Resource Management (DHRM) serves as the plan administrator for the Commonwealth's Retiree Health Benefits Program. DHRM establishes the guidelines for the program, selects the carriers, handles all negotiations and remits monthly premiums to the carriers. Retired state employees receiving either a service or disability retirement benefit and state employees on long-term disability (LTD) through the Virginia Sickness and Disability Program (VSDP) are eligible to enroll in the State Retiree Health Benefits Program.

#### Enrollment of Eligible Retirees (including Disability Retirees)

The eligible individual's pre-retirement employer Agency Benefit Administrators are responsible for the initial enrollment of these retirees, their spouses and dependents, as applicable, into the State Retiree Health Benefits Program. After the initial enrollment, VRS is *accountable* for

---

### HEALTH INSURANCE CREDIT

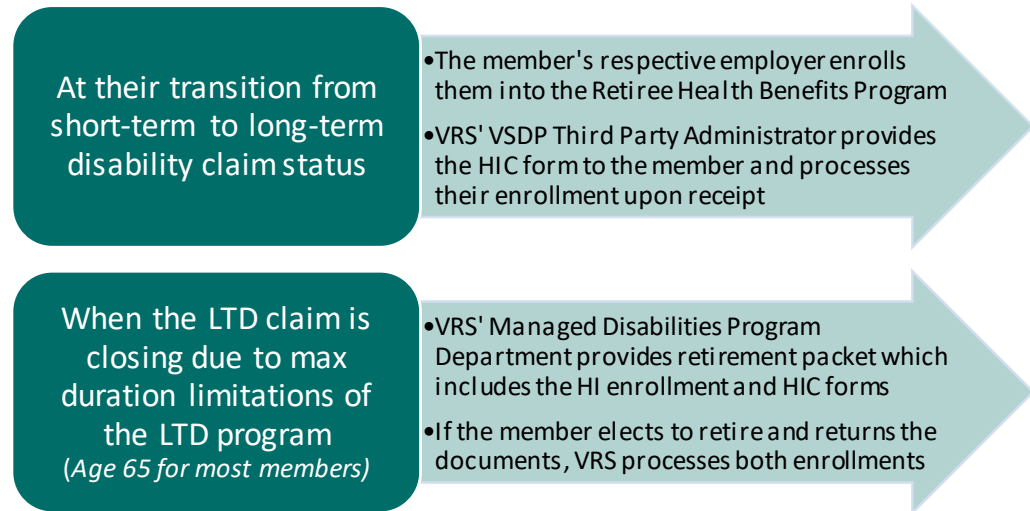
A **health insurance credit** is a **non-taxable** benefit paid as a **reimbursement**. Reimbursement **applies only** to the **retiree's portion** of the **premium**.

---

processing any changes in the health insurance coverage as well as responding to retiree questions regarding changes in available coverage.

### Enrollment of VSDP LTD Participants

Enrollment and processing of VSDP LTD participants who choose to participate in the State's Retiree Health Benefits Program occurs at two points during their participation in the program:



As discussed further below, retirees who choose to opt out of the State Retiree Health Benefits Program can still receive HIC reimbursement by self-reporting eligible HI coverage from a private plan.

### HI PREMIUMS FOR NON-STATE ENTITY RETIREES

Non-state entities are made up of employers categorized as political subdivisions and school systems. They serve as the plan administrators for their individual employer-sponsored HI plans. As with DHRM, these employers establish the guidelines for their various plans, select the carrier, negotiate and remit the monthly premiums. These retirees (and their spouses and dependents depending on the plan) are eligible to enroll in their employer-sponsored HI plan. Spouses and

---

## HEALTH INSURANCE PREMIUMS

For the **April 1, 2020** retirement payroll, VRS withheld **\$17.2 million** in **premiums**.

\$13.9 million in premiums withheld for the State Retiree Health Benefits Program

\$3.3 million in premiums withheld for 54 active non-state employers

---

dependents may continue their HI coverage upon the death of such retirees subject to each employer's plan guidelines.

The retirees' pre-retirement employers are responsible for their initial enrollment. Unlike state retirees, each plan administrator is responsible for processing any matters and answering any questions pertaining to HI coverage, including requested changes to individual coverages.

Non-state entities also may participate in the Virginia Local Disability Program (VLDP). Enrollment and processing of VLDP LTD participants into employer-sponsored HI plans is handled by each individual's respective employer.

### WITHHOLDINGS AND REMITTANCE OF HEALTH INSURANCE PREMIUMS

VRS is *accountable* for withholding HI premiums from the retirement benefits of state and certain non-state retirees provided the below conditions are met. First, for both state and non-state retirees, the monthly retirement payment must be sufficient to cover the HI deduction. Second, for state retirees, the retiree must be a participant in the State Retiree Health Benefits Program administered by DHRM. For non-state retirees, their pre-retirement employer must have an agreement with VRS authorizing the deduction. VRS remits the collected premiums monthly to the various plan administrators.

If the retiree's monthly benefit is not sufficient to cover the insurance deduction, then the retiree is billed directly by the employer or HI carrier. Likewise, VSDP and VLDP LTD participants are billed directly by their respective insurance carrier for their monthly premiums.

### HIC PROGRAM

The HIC Program was established by the General Assembly on January 1, 1990 and provides a credit to assist with the cost of HI premiums for eligible state retirees. Coverage under this program was extended to retired teachers and to retired employees of participating political subdivisions on July 1, 1993; to retired constitutional officers, retired employees of constitutional officers or retired local social service employees on July 1, 2004; and to retired registrars or retired employees of registrars on July 1, 2005.

As applicable, the program also covers disability retirees, VSDP long-term disability participants and retired state employees participating in an Optional Retirement Plan, as well as participants receiving benefits under the Line of Duty Act (LODA). Further, beginning January 1, 2014, VLDP participants were also covered during long-term disability, if their employer elected to participate in the HIC Program. Actuarially determined contribution rates, which vary by participating employer, are paid by the employers to fund the program.

To be eligible the member must have accumulated 15 or more years of total covered or combined service or be retiring under disability with an employer who participates in the HIC Program. Survivors of beneficiaries receiving VRS benefits are not eligible for this credit. The schedule below highlights the HIC Program benefits provided to each eligible retiree population.

	State Employees, including ORP participants	Retired Teachers	Political Subdivision Retirees	Retired Local Officers, Social Service Employees and Registrars <sup>(1)</sup>	Retired Local Officers, Social Service Employees and Registrars with HIC enhancement <sup>(1)</sup>
<b>Regular Retirees</b>					
Monthly Credit Amount (per year of service)	\$4	\$4	\$1.50	\$1.50	\$2.50
Minimum Monthly Credit per Month <sup>(2)</sup>	\$60	\$60	\$22.50	\$22.50	\$37.50
Maximum Monthly Credit per Month <sup>(3)</sup>	-	-	\$45	\$45	\$75
<b>Disability Retirees</b>					
Monthly Credit Amount	Greater of \$120 or \$4 per year of service	\$4 multiplied by the smaller of: twice the member's years of service or the years of service the member would have at age 60	\$45	\$45	\$75
Minimum Monthly Credit per Month <sup>(2)</sup>	\$120	-	\$45	\$45	\$75
Maximum Monthly Credit per Month <sup>(3)</sup>	-	-	\$45	\$45	\$75

VSDP and VLDP LTD Participants					
Monthly Credit Amount	Greater of \$120 or \$4 per year of service	Greater of \$120 or \$4 per year of service	\$45	\$45	n/a <sup>(4)</sup>
Minimum Monthly Credit <sup>(2)</sup>	\$120	\$120	\$45	\$45	n/a <sup>(4)</sup>
Maximum Monthly Credit <sup>(3)</sup>	-	-	\$45	\$45	n/a <sup>(4)</sup>

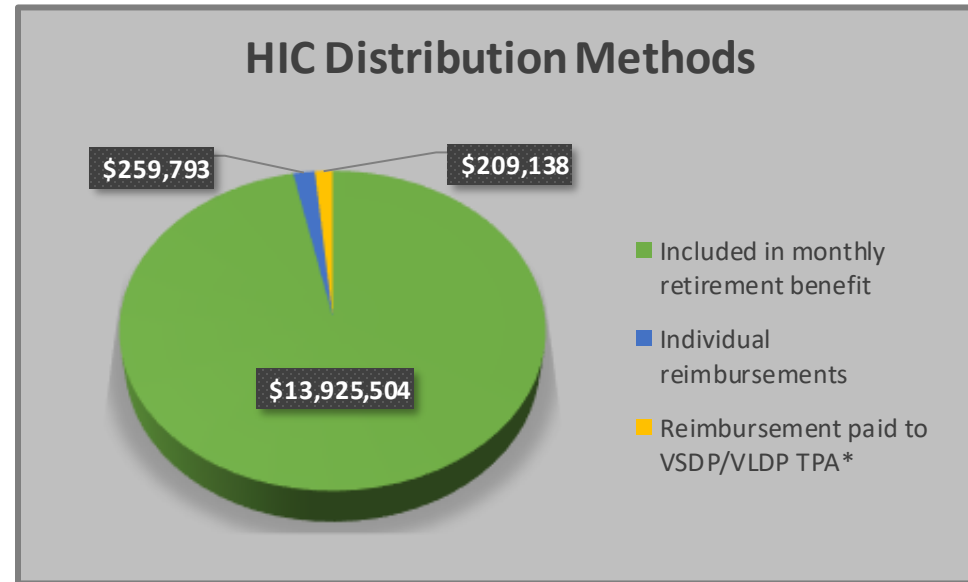
- <sup>(1)</sup> Localities must elect to offer the HIC for their retirees to receive the credit. However, upon employer certification, constitutional officers and their employees, general registrars and their employees, and local social service employees receive a HIC, regardless of the political subdivision's election. (A political subdivision may also elect to enhance the HIC coverage for their retirees by providing an additional benefit amount of \$1.00 per year of service. Currently, only two employers (Pittsylvania County and the City of Roanoke) have elected this option.)
- <sup>(2)</sup> "Minimum Monthly Credit" signifies the minimum amount an individual is eligible to receive if recipient has verified HI coverage paid of at least this amount. If the HI premium is less than the minimum monthly credit, the individual only receives the amount of the premium actually paid.
- <sup>(3)</sup> "Maximum Monthly Credit" signifies the maximum amount an individual is eligible to receive if recipient has verified HI premiums paid of at least this amount.
- <sup>(4)</sup> Currently, there are no VLDP participating employers electing to offer enhanced HIC coverage, hence these areas are referenced as not applicable (n/a).

## HIC REIMBURSEMENT DISTRIBUTION METHODS

HIC reimbursements are distributed to eligible retirees based on their type of retirement.

- For retirees receiving a retirement payment from VRS, the HIC is simply added to the monthly benefit amount.
- For retirees not receiving a retirement payment from VRS (i.e., Optional Retirement Plan retirees, disability retirees receiving worker's compensation in an amount fully offsetting their VRS benefit, or retirees who chose the advance pension retirement payment option that reduced their monthly annuity to zero upon reaching Social Security age), a separate monthly payment is sent.
- For VSDP and VLDP LTD participants, HIC reimbursements are paid to the VSDP/VLDP third-party administrator (TPA) for inclusion in their monthly benefit amount.
- For LODA participants, HI premiums are paid directly by the LODA Fund or by the employer, if the employer is not a LODA Fund participating employer. The applicable HIC reimbursements are transferred annually from the Retiree HIC Trust Fund to reimburse the LODA Fund or the non-LODA Fund participating employer.

The following chart highlights the monthly distribution methods for the \$14,394,435 HIC reimbursements which were paid on April 1, 2020.



\* VSDP/VLDP reimbursement payment to the TPA was performed on April 8, 2020 and April 14, 2020, respectively.

As previously noted, LODA participant HIC reimbursements are paid annually. For the fiscal year 2019, LODA participants were eligible for \$578,167 in HIC reimbursements which included transfers from the Retiree HIC Trust Fund to the LODA Fund of \$114,591 on August 1, 2019 and \$463,576 to non-LODA Fund participating employers.

### RETIREE HIC TRUST FUND

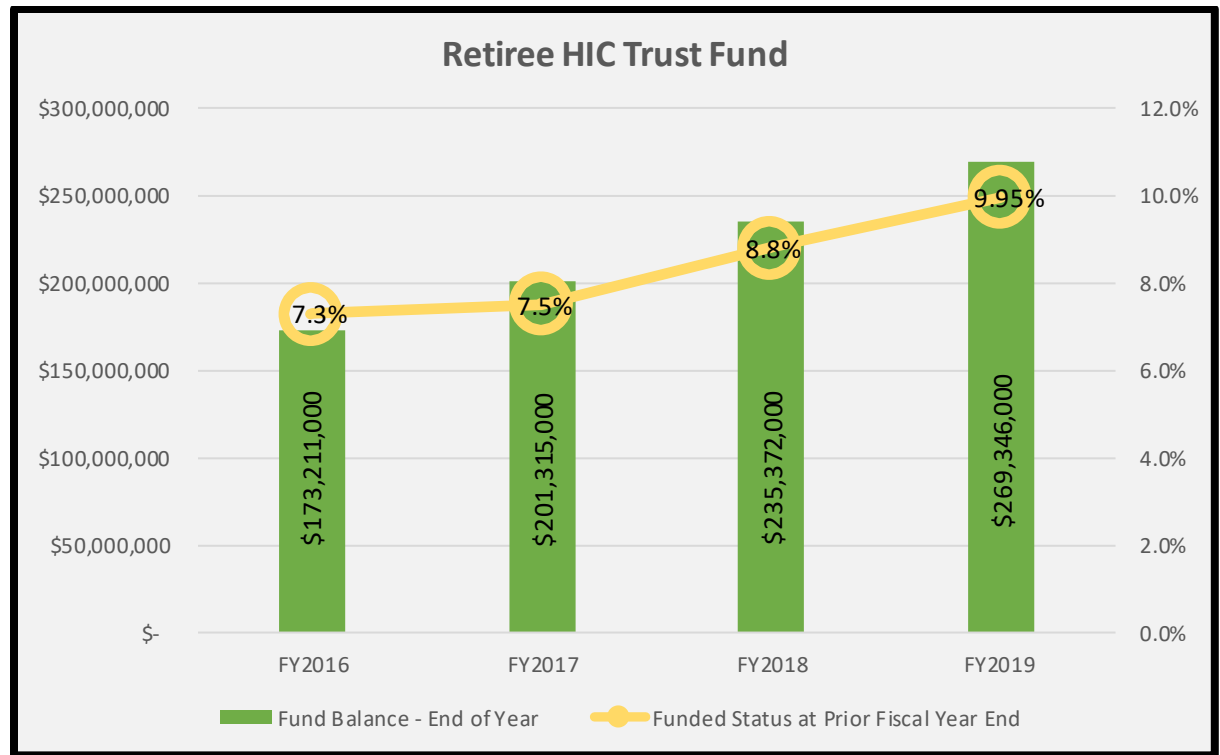
The resources within the Retiree HIC Trust Fund cover the HIC reimbursements and operating expenses of the program. Employer contributions and investment income fund the Trust. The chart on the following page shows the Trust's year-end balances and corresponding funded status over the past four fiscal years.

### FY 2020 EMPLOYER CONTRIBUTION RATES

State	1.31%
Teachers	1.20%
Political Subdivisions	0.32%*
Constitutional Officers	0.38%
Social Services Employees	0.43%
Registrars	0.39%

\*This rate signifies the average contribution rate since separate and unique HIC rates are calculated for each political subdivision.





In the past, the General Assembly did not consistently fully fund the actuarially recommended and Board of Trustees approved contribution rates for VRS' various pension and post-employment programs. However, in 2012 the Governor and General Assembly implemented a phased-in approach to fully fund VRS retirement contribution rates by the 2018-2020 biennium. Since the commencement of this phased-in initiative for retirement benefits, the Governor and the General Assembly have instituted a similar, but non-statutory, approach for the other post-employment programs like HIC. The funded status of the Retiree HIC Trust Fund has rebounded from a low of 5.8% on June 30, 2012. The HIC program's funded status will continue to improve slowly over time, as long as the General Assembly continues to fully fund VRS' actuarially recommended and Board approved rates.

---

## AUDIT EXCLUSIONS

**VNAV role-based access** was **excluded** from this review as these controls were **tested** in the recent **Application Controls: VNAV and myVRS** examination, **AR411**.

Overall **logical access account management** processes were also **excluded** since they were **tested** in the recent **General Controls** examination, **AR425**.

Going forward, VRS' **logical access processes** will be **studied** in a new examination referred to as the **Logical and Physical Access** review.

---

## UPCOMING SYSTEM CHANGES

VRS' Modernization Program has touched nearly every program VRS administers. VRS will be implementing new functionality for retirees during the final implementation milestones of Phase 4 of the Modernization Program. This functionality will provide retirees the ability to submit their application for HIC benefits and maintain their HIC payments through the myVRS portal rather than the current paper-based submissions. Release plans are yet to be finalized, however VRS plans to roll out all new portal functionality individually during a slow rollout with planned implementation to all retirees during 2021.

In addition, the Commonwealth is in the process of implementing a new statewide human resource, health benefit, time and attendance and payroll system of record. Cardinal HCM will replace multiple systems' functionality including the Benefits Eligibility System (BES) which DHRM uses to manage and track retiree health insurance benefits. A direct interface from VNAV, VRS' administrative system, to Cardinal HCM will be implemented to port all new retirees into Cardinal HCM, eliminating manual intervention. Further, new retirees will make health elections choices through the Cardinal HCM portal and elections will be interfaced to VNAV, significantly reducing VRS' management of HI premium changes into the DHRM system. These updated connections should improve data quality and VRS' access to the reporting capabilities. Scheduled go-live is segregated into two releases which were recently shifted six months later to October 2021 for agency access and April 2022 for the retiree access.

## SCOPE AND METHODOLOGY

The primary purposes of the examination were to:

- Determine whether health insurance premiums withheld are accurate and complete;
- Determine the accuracy, validity and completeness of health insurance credits disbursed to retirees;
- Ensure VRS financial records related to health benefit activities are reasonable;
- Validate the Health Benefit Department's business processes are supplemented with proper controls; and,
- Ascertain system access to DHRM's Benefit Eligibility System is in accordance with the principle of least privilege.

---

## ELIGIBILITY FOR STATE SPOUSES OR DEPENDENTS

In the event of a **retiree's death**, **spouses** and **dependents** may **participate** in the State Retiree **Health Benefits Program** **depending** upon the **circumstances**.

If the **decedents** were already **enrolled** at the **time of death**, coverage in the program **may continue** for the spouse or dependents. If **decedent** is **not enrolled** in the **program** at the **time of death**, but **survivor benefit option** was selected at retirement, their spouses and dependents **may enroll** in the State Retiree **Health Benefits Program** even if they were not previously covered.

---

## GENERAL ASSESSMENT AND UNDERSTANDING

We obtained a general understanding of the HI premiums and credits as well as the controls over these areas by meeting with key individuals. We also reviewed the applicable policies and procedures and other relevant documents, such as the *Code of Virginia* and the VRS employer manuals, to support our understanding.

## HIC TRANSACTIONS

To validate compliance and controls over the HIC transactions, the entire April 1, 2020 retirement payroll containing 22,813 payments was evaluated. All claims were examined to ensure:

- Retiree was eligible to participate in the HIC Program based on employer or position;
- No ineligible survivors were receiving HIC payments;
- No duplicate payments existed, and if so, the reasonableness of such transactions; and,
- All retirees were receiving the maximum HIC allowable or lower amounts. *(Any recipients which payments exceeded maximum or appeared unusual was reviewed in detail.)*

Further, we obtained the VSDP/VLDP payroll for April 1, 2020 which contained 2,468 payments. We evaluated this payroll and took a sample of 25 payments made which contained HIC reimbursements. We then examined each reimbursement to ensure the claimant was eligible to receive payment and the amount paid was reasonable based on documentation received by the third-party administrator.

## HI PREMIUMS WITHHELD

In correlation with the claims which were reviewed in detail during HIC population testing, the accuracy and validity of HI deductions was also reviewed. For those individuals, we ensured they had enrolled in the health benefit plan and, if applicable, authorizing agreements for VRS to deduct the HI premiums were on file. Additionally, we validated amounts retained were accurate and HIC did not exceed health insurance premiums paid. Control processes were also reviewed to ensure all HI premiums are accurately withheld and completely remitted to the appropriate employers.

## **VRS FINANCIAL RECORDS**

We determined the validity and accuracy of VRS financial records surrounding activities of the Health Benefits Department. The internal VNAV general ledger transactions along with the VNAV report repository were examined for the April 1, 2020 payroll and compared to transactions recorded in VRS' separate general ledger.

Specifically, HI premium transactions were reviewed to ensure funds were accurately recorded and properly remitted to either the Department of Human Resources Management (DHRM) or non-state employer plan administrators. HIC benefits paid through the April 1, 2020 retirement payroll and the VSDP/VLDP payroll were also reviewed to ensure amounts remitted were accurately recorded in the general ledger.

Finally, the Retiree HIC Trust Fund was evaluated to determine whether the Trust was used exclusively for appropriate and approved HIC benefits, including expenses related to the administration of the program. A trend analysis on the activity in the Retiree HIC Trust Fund was performed, while also ensuring the administrative fee allocations expensed to the fund for the fiscal year 2020 was reasonable.

## **CONTROL MANAGEMENT**

Material control points within health benefits processes were evaluated to ensure individual duties were managed, approved and segregated appropriately, to ensure that one individual cannot complete an entire task as dictated in the VRS Security Standard, AC-5.

VRS employees' user access to DHRM's Benefits Eligibility System (BES) was also examined for compliance with the principle of least privilege as stated in the VRS Security Standard, AC-6.

## CONCLUSIONS

### GENERAL ASSESSMENT AND UNDERSTANDING

Overall, the control environment surrounding the health benefits area is adequate. Our assessment of health insurance premiums found amounts withheld were accurate and remitted to DHRM and non-state entities timely. For the most part, HIC benefit payments were also accurate; however, instances were identified where VNAV was not applying business rules appropriately. Due to this, there are aspects of the benefit program which warrant management's ongoing attention. Further, while management had acceptable and appropriate segregation of duties delegated to its processing staff, an opportunity for enhancement to ensure duties remain appropriately segregated exists. These opportunities are discussed in further detail within the Recommendations section of this report.

Other minor findings which were determined to be isolated in nature, were referred to management, who has taken appropriate corrective actions to address them.

### HEALTH INSURANCE CREDIT TRANSACTIONS

Evaluation of HIC transactions found retirees were eligible for payments based on service earned with a qualified employer for which proper proof of service was obtained. Within those transactions, no survivors, who are ineligible for this benefit, were identified as receiving HIC disbursements.

No participants within the tested population received duplicate HIC payments, however, an instance of dual HIC payment line items being created in VNAV under a single benefit disbursement was identified. In addition, during our population testwork surrounding the recalculation of HIC payments, four distinct scenarios were discovered with respect to VNAV's calculation of health insurance credits which led to inaccurate benefit payments for a limited number of beneficiaries, either over or under.

Once brought to management's attention, immediate action was taken to address the exceptions identified. Investigation of root cause began within VNAV and cases were created to eventually implement a code correction in VNAV. More robust monitoring of Health Benefits transactions likely would have allowed VRS to identify such anomalies earlier and minimize any impact on

retirees and the Retiree HIC Trust Fund. These observations are discussed further in the Recommendations section of the report.

## HEALTH INSURANCE PREMIUMS WITHHELD

Overall, our examination of health insurance premiums found individual premiums were being withheld accurately and deductions were transmitted to the appropriate health benefits administrator timely.

VRS continues to show their *teamwork* by providing monthly reporting to non-state entities, political subdivisions and school systems, which have requested such documentation to support their reconciliations and ensure total funds are received entirely each month.

Previous business processes using RIMS allowed a “change” report to be produced quarterly, which DHRM would then use to create a reconciliation between RIMS and BES, allowing VRS to investigate any differences and make any necessary changes. This process helped each agency ensure that HI deductions withheld for state retirees matched the total amount of HI premiums due and paid to DHRM. During fiscal year 2020, VRS developed a data extract of all DHRM health premium deductions withheld and an Excel spreadsheet that allows DHRM to view total payments by health plan and option, as well as “changes” to these by disbursement schedule. This allows DHRM to complete the same reconciliation work previously done with the RIMS reports. Currently, this data is provided periodically to DHRM, but management intends to make this reporting functionality available in VNAV before June 30, 2021.

Demonstrating their *agility* and *teamwork*, VRS is working with DHRM in support of BES’ replacement in October 2021. To ensure the cutover to Cardinal HCM is a success, present plans call for a temporary restart of reconciliations to ensure data converted into the new system is accurate and complete.

With this implementation, VRS should then have access to state retiree health plan member records and reports in the new Cardinal HCM system sufficient to reconcile VNAV deductions. Prior to the termination of these temporary reconciliations, VRS should ensure new quality monitoring and business processes are in place to validate interface connections are functioning as designed and all due retiree premiums are withheld by VRS and remitted completely to DHRM.

---

### BES REPORTING CAPABILITIES

VRS’ assigned **access** to **BES**, does **not** provide the appropriate **reporting capabilities** to allow VRS to **produce** a **report** to **reconcile** enrolled **retirees** versus the **premium amounts** made in the **VNAV** system.

---

## VRS FINANCIAL RECORDS

The Retiree HIC Trust Fund was used exclusively for approved HIC benefits and administrative expenses to the program. Account balances for the Retiree HIC Trust Fund over the four-year period were reviewed and appeared reasonable.

The HI premiums withheld were valid and accurate and remitted timely to the appropriate benefit administrators. HIC expenses and HI premiums were also properly transmitted and posted to the VRS general ledger.

Nonetheless, we observed immaterial variances in contributions recorded in the general ledger when compared to the amount billed to employers and recorded in VNAV for members under the eligible positions of Constitutional Officers, Social Services Employees and Registrars. Rates charged in VNAV were found to be the approved rate and accurate for these positions, however, there is an issue with the transfer of this specific data from VNAV to the general ledger resulting in a \$47,929 variance between the two systems.

Per discussion with management, the Finance Department already is actively researching this known issue to determine the cause or transaction types which are not being transferred appropriately. Once the cause can be identified, management will take appropriate action to correct the issue.

Until this issue can be resolved, VRS should enhance its *agile* practices at year-end and consider making the appropriate general ledger adjustments prior to fiscal year-end financial reporting to mitigate the inexact recording of these contributions. By performing these adjustments, it will also help ensure VRS general ledger data is complete prior to VRS' transition to a new general ledger in Spring 2021.

## CONTROL MANAGEMENT

Review of DHRM's BES access granted to VRS employees found the access granted to individuals appeared reasonable and appropriate for employees' job functions and responsibilities, along with the appropriate alignment with least privilege principle.

---

## REPORTABLE CONDITION

Any observation included in the Recommendations section of the report is considered a “Reportable Condition.” The resolution of a “Reportable Condition” merits monitoring in the Audit Recommendation Follow-Up System (ARFUS).

## MATERIAL ISSUE

Certain recommendations may address a matter that poses such significant risk to VRS whereby immediate measures should be taken to mitigate the exposure. Other long-term solutions may also be appropriate for the permanent resolution of the matter. These recommendations are considered a “Material Issue.”

All recommendations require a formal response from management.

---

Further, management has appropriately divided duties of the team’s specialist to reduce the risk of malevolent activity without collusion and to ensure one individual is not completing an entire process or task. While VNAV is designed to identify user IDs and not allow the same user ID to initiate, process and also approve a defined workflow process, in certain instances a specialist can access and change an existing record in VNAV outside their assigned duties which impacts the principle of least privilege and potentially impacts the intended segregation of duties . An opportunity to mitigate these risks through ongoing monitoring is discussed further in the Recommendations section of the report.

## FOLLOW-UP ON PRIOR REPORTS

There were no outstanding audit recommendations to consider.

## RECOMMENDATIONS

We offer the following recommendation as a result of this examination, which is not considered a “Material Issue.”

### Implement Ongoing Monitoring Techniques over Health Benefits Area

VRS implemented the Health Benefits functionality in VNAV on April 23, 2019 as part of Phase 4 of the VRS Modernization Program. During our audit period, ongoing monitoring activities were not sufficient to ensure the accuracy and successful execution of certain Health Benefit transactions processed through VNAV or provide further assurance over the segregation of duties within the department.

Specifically, testwork revealed a limited number of HIC benefits calculated and paid by VNAV were inconsistent with HIC requirements. The identified transactions, which affected different limited categories of HIC beneficiaries, fell within four areas, as follows:

- **Entitled HIC payment line items were not created in the retirement payroll and therefore excluded from the monthly disbursement. As a result, eligible retirees were underpaid.**



For VNAV to disburse a HIC payment, a line item must be created for the inclusion in the monthly retirement payroll disbursement. In these cases, VNAV calculated the correct HIC payments, however the HIC payment line item was never created. As a result, HIC amounts were not paid to these eligible retirees.

- **Duplicate HIC payment line items were created and paid, resulting in overpayments which also exceeded the maximum allowable HIC benefit for the identified eligible retirees.**

Each eligible retiree should receive one HIC payment monthly. In these instances, VNAV calculated the correct HIC payments, however, two HIC payment line items were created and disbursed.

- **Certain service retirees with pending disability applications in VNAV were overpaid.**

VNAV obtains information from the retiree's retirement application to calculate eligible HIC amounts. Based on statute, disability retirees are eligible for the maximum HIC benefit, which is greater than the amount that would be received as a service retiree. However, these retirees are not eligible for the maximum HIC benefit until the disability retirement is approved. In these cases, rather than obtaining this information from the approved service retirement application, VNAV is using the individual's more recent pending disability application as the source. As a result, the amount HIC paid monthly is incorrect leading to overpayments to retirees.

- **VNAV did not use the retiree's actual service credit to calculate the HIC benefit amount resulting in a mix of under and overpayments to retirees.**

VNAV uses the data fields of service credit and retiree's employer service credit amount to calculate the retiree's HIC benefit. In these occurrences, VNAV does not appear to be calculating the HIC benefit appropriately based on retiree's service credit obtained. As a result, HIC benefit paid monthly is incorrect leading to a mix of under and overpayments to retirees.

As noted, once brought to management's attention, immediate action was taken to address the exceptions identified, determine the root cause and request appropriate code corrections for implementation in VNAV. More extensive monitoring of Health Benefits transactions would likely

have allowed VRS to identify such anomalies earlier and further minimize any impacts on retirees and the Retiree HIC Trust Fund.

To mitigate these operational risks moving forward, the Health Benefits Department should implement more extensive monthly monitoring of Health Benefit transactions to ensure health benefit rules are adhered to properly. Monitoring should include a review of system managed HIC disbursement transactions to identify areas where the system is not working as expected. Monitoring should be aligned with the monthly retirement payroll and standard reports to assess system outputs for possible anomalies. New monitoring tools may need to be incorporated based on techniques applied, however most of these reviews can be performed with existing tools.

In a separate, but related ongoing oversight opportunity, management should also create a periodic monitoring program surrounding the activities performed by Health Benefits specialists in VNAV. The Health Benefits specialists' assigned duties are appropriately segregated by the Health Benefits Supervisor; however, each specialist has been provided the exact same roles in VNAV. There are preventative controls within VNAV workflow design that restrict an individual specialist from initiating, processing and approving a retiree without a health benefits record. Further, they are constrained by controls within the system related to the types and magnitude of changes that can be independently processed for an existing health benefit record. However, any specialist can make certain adjustments or changes to an existing health benefit record whether it is part of their assigned duties or not which does not fully align with the Principle of Least Privilege as defined in VRS Security Standard, AC-6. As the specialists can exercise a certain degree of autonomy in making these limited adjustments to existing records, the Health Benefits Supervisor should regularly monitor their actions in VNAV to mitigate this risk and ensure the actions align with their assigned duties.

## **MANAGEMENT EXIT CONFERENCE**

This report was distributed to Ms. Bishop and other members of VRS' management and staff for review and comment. They expressed substantial agreement with this report and will issue a written response to the recommendation contained in this report.

## REPORT DISTRIBUTION

Submitted to the Audit and Compliance Committee at its meeting held  
March 16, 2021.

### MEMBERS OF THE AUDIT AND COMPLIANCE COMMITTEE

Joseph W. Montgomery, Chair  
W. Brett Hayes, Committee Vice-Chair  
O'Kelly E. McWilliams, III, Board Chair

WITH COPIESTO:

### OTHER MEMBERS OF THE BOARD OF TRUSTEES

J. Brandon Bell, II  
Michael P. Disharoon  
William A. Garrett  
Susan T. Gooden  
Wallace G. Harris  
Troilen G. Seward

### VRS EXECUTIVE LEADERSHIP

Patricia S. Bishop  
Ronald D. Schmitz  
Members of the Director's  
Executive Committee

### AUDITOR OF PUBLIC ACCOUNTS

Martha S. Mavredes

### JLARC

Kimberly A. Sarte  
Jamie Bitz

### PRINCIPAL AUDITOR

Matthew Priestas, CIA, CRMA, CISA, PMP

### AUDIT SUPERVISOR

Joshua G. Fox, CIA, CFE, CIDA



To: Jennifer P. Bell Schreck, Internal Audit Director

From: Patricia S. Bishop, Director

Date: March 9, 2021

Subject: Management's Response to Internal Audit Report No. 434 – "Health Insurance Premiums and Credits"

We reviewed the above captioned Internal Audit Report on "Health Insurance Premiums and Credits." We appreciate the Internal Auditor's thorough review of the validity and accuracy of the retiree health insurance premiums withheld from retirees' benefits and credits paid by VRS. We also appreciate the professionalism and cooperation exhibited by internal audit staff throughout the audit process.

While there were no material findings, the Audit Report provided one recommendation for follow up. Below is the recommendation and management's response.

**Implement ongoing monitoring techniques over Health Benefits area.**

VRS implemented the Health Benefits functionality in VNAV on April 23, 2019 as part of Phase 4 of the VRS Modernization Program. During our audit period, ongoing monitoring activities were not sufficient to ensure the accuracy and successful execution of certain Health Benefit transactions processed through VNAV or provide further assurance over the segregation of duties within the department.

Specifically, testwork revealed a limited number HIC benefits calculated and paid by VNAV were inconsistent with HIC requirements. The identified transactions, which affected different limited categories of HIC beneficiaries, fell within four areas, as follows:

- **Entitled HIC payment line items were not created in the retirement payroll and therefore excluded from the monthly disbursement. As a result, eligible retirees were underpaid.**

For VNAV to disburse a HIC payment, a line item must be created for the inclusion in the monthly retirement payroll disbursement. In these cases, VNAV calculated the correct HIC payments, however the HIC payment line item was never created. As a result, HIC amounts were not paid to these eligible retirees.

- **Duplicate HIC payment line items were created and paid, resulting in overpayments which also exceeded the maximum allowable HIC benefit for the identified eligible retirees.**

Each eligible retiree should receive one HIC payment monthly. In these instances, VNAV calculated the correct HIC payments, however, two HIC payment line items were created and disbursed.

- **Certain service retirees with pending disability applications in VNAV were overpaid.** VNAV obtains information from retirees' retirement application to calculate eligible HIC amounts. Based on statute, disability retirees are eligible for the maximum HIC benefit, which is greater than the amount that would be received as a service retiree. However, these retirees are not eligible for the maximum HIC benefit until the disability retirement is approved. In these cases, rather than obtaining this information from the approved service retirement application, VNAV is using the individual's more recent pending disability application as the source. As a result, the amount HIC paid monthly is incorrect leading to overpayments to retirees.
- **VNAV did not use the retiree's actual service credit to calculate the HIC benefit amount resulting in a mix of under and overpayments to retirees.**

VNAV uses the data fields of service credit and retiree's employer service credit amount to calculate the retiree's HIC benefit. In these occurrences, VNAV does not appear to be calculating the HIC benefit appropriately based on retiree's service credit obtained. As a result, HIC benefit paid monthly is incorrect leading to a mix of under and overpayments to retirees.

As noted, once brought to management's attention, immediate action was taken to address the exceptions identified, determine the root cause and request appropriate code corrections for implementation in VNAV. More extensive monitoring of Health Benefits transactions would likely have allowed VRS to identify such anomalies earlier and further minimize any impacts on retirees and the Retiree HIC Trust fund.

To mitigate these operational risks moving forward, the Health Benefits Department should implement more extensive monthly monitoring of Health Benefit transactions to ensure health benefit rules are adhered to properly. Monitoring should include a review of system managed HIC disbursement transactions to identify areas where the system is not working as expected. Monitoring should be aligned with the monthly retirement payroll and standard reports to assess system outputs for possible anomalies. New monitoring tools may need to be incorporated based on techniques applied, however most of these reviews can be performed with existing tools.

In a separate, but related ongoing oversight opportunity, management should also create a periodic monitoring program surrounding the activities performed by Health Benefits specialists in VNAV. The Health Benefits specialists assigned duties are appropriately segregated by the Health Benefits Supervisor; however, each specialist has been provided the exact same roles in VNAV. There are preventative controls within VNAV workflow design that restrict an individual specialist from both initiating, processing and approving a retiree without a health benefits record. Further, they are constrained by controls within the system related to the types and

magnitude of changes that can be independently processed for an existing health benefit record. However, any specialist can make certain adjustments or changes to an existing health benefit record whether it is part of their assigned duties or not which does not fully align with the Principle of Least Privilege as defined in VRS Security Standard, AC-6. As the specialists can exercise a certain degree of autonomy in making these limited adjustments to existing records, the Health Benefits Supervisor should regularly monitor their actions in VNAV to mitigate this risk and ensure the actions align with their assigned duties.

***Management's Response:***

***As noted in the audit report, VRS has an ongoing monitoring program in place for Health Benefits transactions. As the agency has moved from RIMS to VNAV, staff is utilizing new processes and reports. Additional monitoring procedures will be implemented to address these changes in order to ensure the accuracy of health insurance benefits transactions.***

***Further, the audit report recommends additional monitoring of Health Benefits specialists' activities performed in VNAV. While specialists have multiple user roles in VNAV, the system appropriately prevents the same person from initiating and approving the same transaction for new enrollments. However, specialists can make limited adjustments to existing records without secondary approval. While these types of changes are minimal and limited by system controls, VRS will nevertheless institute additional quality monitoring checks to enhance monitoring of these transactions.***

***Expected completion date:***

***Implement enhanced quality monitoring measures to ensure the accuracy and validity of health benefits transactions – June 30, 2021.***

# Conformance with VITA's Security Program as of November 1, 2020

Highlighting VRS Core Values: *Integrity, Teamwork, Accountability and Agility in Action*

THIS REPORT IS INTENDED SOLELY FOR THE USE OF THE VRS BOARD OF TRUSTEES AND THE MANAGEMENT OF VRS AND IS NOT INTENDED FOR OTHER PURPOSES.



---

**TABLE OF CONTENTS**

TITLE PAGE	1
TRANSMITTAL LETTER	2
EXECUTIVE SUMMARY	3
BACKGROUND	4
SCOPE AND METHODOLOGY	9
CONCLUSIONS	9
FOLLOW-UP ON PRIOR REPORTS	11
RECOMMENDATIONS	12
MANAGEMENT EXIT CONFERENCE	12
REPORT DISTRIBUTION	13
PRINCIPAL AUDITOR IN-CHARGE	13

---

Dear Members of the Audit and Compliance Committee,

We have completed audit number 435, “Conformance with Virginia Information Technology Agency’s (VITA) Security Program as of November 1, 2020”. The main purpose of our audit was to review VRS’ Information Technology Security Policies and Procedures conformity with the mandatory information technology security policies and standards disseminated by VITA.

We conducted our audit in accordance with the *International Standards for the Professional Practice of Internal Auditing*. These standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for the conclusions based upon our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This report was distributed to the VRS Director and members of management for review and comment. They expressed substantial agreement with our report and have issued a written response to the recommendation contained in this report.

We appreciate the cooperation and assistance of the Information Technology Department throughout this audit.

Respectfully Submitted,

A handwritten signature in black ink that reads 'Jennifer P. Bell Schreck'.

**Jennifer P. Bell Schreck, CPA, CISA, PMP**  
VRS Internal Audit Director



## EXECUTIVE SUMMARY

We conducted an examination of VRS' Conformance with Virginia Information Technology Agency's (VITA) Security Program as of November 1, 2020. VRS is subject to VITA's Information Security Policy and its six Information Technology (IT) Standards which form VITA's IT Security Program. The security program requirements are laid out in the following documents.

- VITA IT Security Policy;
- VITA IT Security Standard;
- VITA IT Security Audit Standard;
- VITA IT Risk Management Standard;
- VITA IT Standard Use of Non-Commonwealth Computing Devices to Telework;
- VITA Removal of Commonwealth Data from Electronic Media Standard; and,
- VITA Hosted Environment Information Security Standard.

Conformance with this security program is mandatory for all executive branch agencies, as well as institutions of higher education, legislative branch and independent agencies unless an exemption is requested by the agency and granted by VITA. VRS has not requested an exemption from this mandatory security program.

Agencies may elect to adopt the VITA Policy and Standards for their use, or they may develop their own internal policy and standards that, at a minimum, meet the provisions of the VITA Security Program. VRS has chosen to develop its own VRS Security Policy, Telework Policy and Removal of Commonwealth Data from Electronic Media Standard while adopting all other VITA Standards with supplemental information to clarify specific VRS procedures and processes.

We found VRS' IT Security Policies and Standards generally conform with VITA's IT Security Program. There are no written recommendations resulting from our review, however one recommendation remains outstanding from our previous report.

Our review did not address compliance with VRS' Security Program. Our most recent examinations of program compliance were addressed in the following projects: VNAV and myVRS Application Controls, Report No. 411; Application Controls: AQM, Private i and MUNIS, Report No. 417; and IT Client-Server General Controls Audit, Report No. 425.

### AUDIT SNAPSHOT

VITA's **Security Program** includes **1** IT Security Policy and **6** IT Security Standards, as of **November 1, 2020**.

VRS' **Security Program** includes **3** IT Security Policies and **3** IT Security Standards to **address the requirements** included in VITA's Security Program.

**Annually**, Internal Audit assesses **VRS' conformance** with **VITA's** Security Program.

### AUDIT ASSESSMENT

VRS' IT Security Policies and Standards generally conform with the documents comprising VITA's IT Security Program.

**Outstanding Recommendation: 1**  
**Written Recommendations: 0**

## BACKGROUND

VRS is subject to the requirements of VITA's Information Technology (IT) Security Program. The purpose of the VITA Security Program is *"To protect the Commonwealth information technology assets (and the information processed) by defining the minimum information technology security program for agencies of the Commonwealth of Virginia."* This program is comprised of the IT Security Policy, along with the six IT Security Standards which help agencies in creating and documenting their information security programs. The aforementioned mandatory security documents are as follows.

- VITA IT Security Policy;
- VITA IT Security Standard;
- VITA IT Security Audit Standard;
- VITA IT Risk Management Standard;
- VITA IT Standard Use of Non-Commonwealth Computing Devices to Telework;
- VITA Removal of Commonwealth Data from Electronic Media Standard; and,
- VITA Hosted Environment Information Security Standard.

Compliance with this program is mandatory for all executive branch agencies, as well as institutions of higher education, legislative branch and independent agencies. *(VITA's Security Program for judicial branch agencies includes two additional standards that relate specifically to services they provide.)* All such entities must adhere to this policy and standards, unless an exemption is requested by the entity and granted by VITA. VRS has not requested an exemption from the policy or from the mandatory standards.

## VITA POLICY AND STANDARDS

Periodically, VITA changes, updates or revises a particular policy or standard to incorporate emerging best practices or align them with changes to the *Code of Virginia*. We last reviewed this area in Report No. 429, Conformance with VITA's Security Program as of January 1, 2020. To perform this review, we determined each governance document's current status and assessed the impact of any changes. This analysis confirmed no new documents had been introduced since our previous examination. Of the existing seven documents comprising the VITA Security Program, only one had changed.

### CODE OF VIRGINIA §2.2-2009

"To provide for the **security** of state government **electronic information** from unauthorized uses, intrusions or other security threats, the (VITA) **CIO** shall **direct** the **development** of **policies, standards,** and **guidelines** for assessing **security risks,** determining the appropriate **security measures** and performing **security audits** of government **electronic information**. Such **policies, standards,** and **guidelines** shall apply to the **Commonwealth's** executive, legislative, and judicial branches and **independent agencies...."**

### Updated VITA Requirements

The sole revised document since our last examination is listed in the table below and includes a hyperlink to the current version.

Mandatory VITA Documents	Current Version	Brief Description
<a href="#">VITA IT Risk Management Standard</a>	SEC 520-02	This standard provides a uniform approach for assessing and managing information technology risk within the Commonwealth.

### Unchanged VITA Requirements

Six of the seven VITA mandatory policy and standards are the same version as previously examined in 2020. The unchanged documents are listed below and include a hyperlink to the current version.

Mandatory VITA Documents	Current Version	Brief Description
<a href="#">VITA IT Security Policy</a>	SEC 519-00	This policy provides direction and assistance to each agency in developing and implementing agency information security programs that reduce the risk to information irrespective of the medium containing the information.
<a href="#">VITA IT Security Standard</a>	SEC 501-11.2	This standard establishes a minimum acceptable level of IT security and baseline for information technology security controls in accordance with applicable statutes and best practices. <i>(The previous examination reviewed version SEC 501-11.1. This version was updated to SEC 501-11.2 due to an administrative correction; hence a full review was unnecessary.)</i>
<a href="#">VITA IT Security Audit Standard</a>	SEC 502-3	This standard delineates the methodology for conducting an IT security audit of sensitive IT systems that contain agency information as identified and prioritized in agency's Business Impact Analysis.

Mandatory VITA Documents	Current Version	Brief Description
<a href="#">VITA IT Standard Use of Non-Commonwealth Computing Devices to Telework</a>	SEC 511-00.01	This standard defines the minimum acceptable level of security controls necessary for eligible employees to use computers, computing devices or related electronic equipment not owned or leased by the Commonwealth to telework.
<a href="#">VITA Removal of Commonwealth Data from Electronic Media Standard</a>	SEC 514-05	This standard establishes minimum procedures that must be followed by each agency and their service providers when electronic media is surplus, transferred, traded-in, disposed of or replaced.
<a href="#">VITA Hosted Environment Information Security Standard</a>	SEC 525-04.01	This standard establishes minimum information security requirements for activities associated with Commonwealth data stored in a data center not owned or leased by an agency. Integration support for this standard is laid out in the <a href="#">VITA IT Operations Policies &amp; Procedures: Third-Party Use</a> (Standard remained unchanged during the audit period). Due to VRS' independence, it is not required to explicitly follow these procedures since VRS does not use VITA as an IT service provider nor receives hosted vendor approvals from VITA's Enterprise Cloud Oversight Service.

### New VITA Standards

VITA has not developed any new standards within their IT Security Program since January 1, 2020.

### VRS IT POLICIES AND STANDARD

To address these information security requirements mandated by VITA, VRS has formulated its own IT Security Program. The foundation of this program is structured around two main documents, the VRS IT Security Policy and the VRS IT Security Standard. To supplement these documents, VRS has also created a less technical policy for its system users called the VRS User IT Security Policy. This policy allows users to understand and apply these security documents to VRS business processes to

---

## SECURITY AWARENESS PROGRAMS

**In addition** to the minimum **security awareness standards** promulgated by VITA, **VRS routinely** incorporates security awareness into its **VRS Today meetings**, cyber **security week** activities, and **screen saver** and **hall monitor messages**.

---

protect the *integrity* of VRS systems and the information that remains within. In addition, VRS has created its own Removal of Commonwealth Data from Electronic Media Standard, Telework Policy and VRS Cloud Services Security Standard which provides an introduction and overview of the area and subsequently adopts the VITA Hosted Environment Security Standard. Finally, VRS has rounded out the program with the adoption of the VITA IT Risk Management Standard and VITA IT Security Audit Standard as their own, as indicated within the VRS Security Policy.

### VRS IT Security Policy

VRS developed its IT Security Policy to establish the framework for VRS' IT Security Program to maintain system and data integrity and protect VRS' systems and data from credible threats and unauthorized access or use, whether internal or external, deliberate or accidental. In February 2020, VRS revised this policy in various sections including an update to the scope section to specifically define VRS' *accountability* with a chart summarizing the mandatory security program documents. Within this chart, VRS either adopts the acceptance of the VITA document, points to the republished VRS version or identifies the document as not applicable to the agency.

### VRS IT Security Standard

VRS has chosen to adopt the VITA IT Security Standard as its own VRS IT Security Standard. With the adoption of this document, VRS has enhanced particular areas of this Standard to supplement and clarify given procedures, as such applies to VRS and its functions. This standard establishes a minimum acceptable level of IT security and baseline for information technology security controls in accordance with applicable statutes and best practices. Since our last review in 2020, the VRS IT Security Standard has been formally revised.

### VRS User IT Security Policy

Daily security and protection of VRS' information technology assets and information start with VRS employees, along with all authorized system users. The VRS User IT Security Policy communicates technical security requirements in the VRS IT Security Standard in layman's terms while applying them to applicable VRS business processes. System users are routinely made aware of their responsibility to act with *integrity* regarding VRS' IT assets through their acknowledgement they have read and understand VRS Security Policies and Standard, initially when hired and annually during VRS provided security awareness training. This document has not been updated since our last review in 2020.

*Conformance with VITA'S Security Program as of November 1, 2020 Pg. 7 of 13*

---

## METHODOLOGY FOR MAINTAINING IT SECURITY PROGRAM DOCUMENTATION

**Technology** is constantly **evolving** which requires VRS to continually **adapt** to its **ever-changing environment**. To ensure VRS **remains agile** and **aligned**, VRS maintains a **systematic framework** for recording and **updating** IT security **policies, procedures** and **guides**.

VRS **houses** all IT policies and procedural **documentation** within a **software application** which **tracks** and **manages** the **update process**. Each **document** in the application is **owned** by **specific VRS personnel** who are **automatically notified** through email when **routine reviews** for updates **are necessary**.

Since these **responsibilities** are **spread across** personnel in the **entire IT department**, VRS' **collaboration** and **teamwork** is **exhibited regularly** to ensure VRS **stays protected**.

---

## VRS Cloud Services Security Standard

VRS has created and implemented an additional VRS governance security document which focuses on the area of cloud computing services. Cloud computing has grown exponentially over the last decade and VITA has put an emphasis around certain requirements associated with these services. VRS developed its own Cloud Services Security Standard to provide holistic guidance and formal adoption of VITA's Hosted Environment Information Security Standard. This document pertains to all requests for acquisition or continuance of cloud computing services. This document has not been updated since our last review in 2020.

## VRS Removal of Commonwealth Data from Electronic Media Standard

VRS has also created a set of processes and procedures to define the proper course of action when electronic media is surplus, transferred, traded-in, disposed of or replaced. Removal of data from IT assets prior to disposal are paramount steps to prevent loss, unauthorized use or misuse of VRS data and promote the privacy and security of sensitive information within VRS. Electronic media must be sanitized with a separate verification prior to disposal to ensure all data is removed from the IT system. This document is a newly created standard since our last review which replaced VRS' Data Removal Guidelines and the direct adoption of the VITA Removal of Commonwealth Data from Electronic Media Standard.

## VRS Telework Policy

VRS has established a policy to manage flexible work arrangements that supports employee job satisfaction, employee retention, improved productivity, safety and reasonable accommodation. This policy allows the agency to utilize mobility to effectively accomplish goals and fulfill its mission outside the physical boundaries of the agency's offices. Employees working at alternate work locations must always adhere to the User IT Security Policy and are responsible for the security and confidentiality of any VRS information, documents, records or equipment in their possession. Employees must agree to follow agency security procedures in order to ensure confidentiality and security of data. This document has not been updated since our last review in 2020.

## SCOPE AND METHODOLOGY

The primary purpose of our examination was to evaluate whether VRS was in conformity with the mandatory documents included in VITA's IT Security Program as of November 1, 2020. Therefore, we assessed the documented policies, standards and procedures in place, as applicable to IT security at VRS.

We focused our review on new or updated VITA standards and any revised VRS documents, since our last examination of VRS' Conformance with VITA's Security Program, as of January 1, 2020, Report No. 429. We reviewed revised or new requirements to ensure VRS policies, standards and procedures in place reflect any applicable changes.

We did not, at this time, assess VRS' compliance with such VRS policies and procedures. The sole purpose of our current examination was to evaluate the existing VRS policies and procedures in light of VITA's current requirements.

Compliance with such policies and procedures is considered separately in conjunction with our examinations of the overall effectiveness of security for the IT client-server environment utilized by VRS as well as the various reviews of application controls. These areas were most recently reviewed in VNAV and myVRS Application Controls, Report No. 411; Application Controls: AQM, Private i and MUNIS, Report No. 417; and IT Client-Server General Controls, Report No. 425.

## CONCLUSIONS

### GENERAL ASSESSMENT AND UNDERSTANDING

Overall, our review found the VRS IT Security Policies and Procedures generally conform with the mandatory VITA Security Program. VRS' IT Security Policies and Standards continue to be in compliance with applicable VITA Security Program requirements. The VRS Technology Security Department has developed and continues to maintain a strong security program to protect IT systems and data from unnecessary risks.

---

### GENERAL ASSESSMENT

The **VRS IT security policies** and **procedures** generally **conform** with the mandatory **VITA Security Program** as of November 1, 2020.

---

## **REVISED STANDARDS**

Four documents have been expanded or revised since our last examination.

### **VRS Revisions**

As noted in the Background, the VRS IT Security Policy and VRS IT Security Standard have been revised since our last review. The VRS IT Security Policy and VRS Security Standard revisions did not have any wholesale changes, but instead contained substantive clarifications, corrections and adjustments. Additionally, management created the VRS Removal of Commonwealth Data from Electronic Media Standard. This new standard replaces VRS' adoption of VITA's Removal of Commonwealth Data from Electronic Media Standard and the outdated VRS Data Removal Guidelines document. We found revisions to be reasonable and ensured continued conformance with the VITA Security Program. During our review, minor exceptions which did not specifically relate to conformance were noted and discussed with management. Items shared will be considered by management during the next revision of the relevant documents.

### **VITA Revisions**

With respect to VITA requirements, the VITA IT Risk Management Standard has been revised. Within its Security Policy, VRS has adopted the current version of the VITA IT Risk Management Standard as their own Standard, hence VRS remains in compliance upon release of new versions of the standard.

## **UNCHANGED STANDARDS**

Nine documents were found to be unchanged since our last examination.

### **VRS Unchanged Documents**

With respect to the unchanged VRS requirements, we determined three documents (VRS User IT Security Policy, VRS Cloud Services Security Standard and VRS Telework Policy) were currently in the same version as our previous examination, along with VITA's corresponding security document, and thus VRS compliance remained unaffected.



## VITA Unchanged Documents

Six VITA documents remained in the same form and version as our previous examination. Of these six unchanged VITA documents, three had corresponding VRS documents which had been updated. Even though these VITA documents were not updated, they were reviewed to ensure VRS compliance with the VITA Security Program. These unchanged documents are as follows:

- IT Information Security Policy;
- IT Security Standard; and,
- Removal of Commonwealth Data from Electronic Media Standard.

The other three unchanged VITA documents (VITA IT Security Audit Standard, VITA IT Standard Use of Non-Commonwealth Computing Devices to Telework and VITA Hosted Environment Information Security Standard), have been adopted as VRS' own Standard or its corresponding VRS version was not updated since the previous examination, and thus continues to be in compliance.

## FOLLOW-UP ON PRIOR REPORTS

In the previous review, [Audit Report 429](#), one opportunity for improvement was presented to ensure VRS' complete conformance with a new requirement related to the Information Security Officer's direct reporting relationship with the Agency Director.

On April 1, 2019, VITA formally revised its IT Security Standard, updating certain existing requirements, incorporating new requirements and expecting conformance and compliance with all modifications by July 1, 2019. Specifically, Section 2.4, which pertains to the Agency Head's responsibilities, was revised to state: *"The ISO shall report directly to the Agency Head and must not simultaneously serve the function of a CIO."* As a result, management stated they planned to implement organizational structure and position responsibility changes to address their conformance only after completing appropriate analysis and planning.

At the time of this review, resolution of this recommendation was still outstanding. Specifically, per management's status report within the Quarterly Audit Recommendation Follow-up System (ARFUS) Report as of September 30, 2020:

*“The new Security Operations Manager position has been filled and the new employee will join VRS on October 12, 2020. The ISO, who is also functioning as the Security Operations Manager, will work with the new Security Operations Manager to develop and execute the transition plan for a smooth and complete transfer of job responsibilities. In addition, the ISO will also finish all outstanding activities during the transition period. Due to the complexity associated with the transition functions, we anticipate the transition of responsibilities will continue for the next couple of months. Full implementation of the recommendation is on track and is expected to finish earlier than the original anticipated date.”*

Management plans to represent this recommendation as implemented by no later than June 30, 2021. Once represented as implemented, it will be reviewed as a part of the Annual ARFUS process to obtain assurance that it has, in fact, been reasonably addressed by management.

## **RECOMMENDATIONS**

We have no written recommendations to offer as a result of our review.

## **MANAGEMENT EXIT CONFERENCE**

This report was distributed to Ms. Bishop and other members of VRS' management and staff for review and comment. They expressed substantial agreement with this report.

## REPORT DISTRIBUTION

Submitted to the Audit and Compliance Committee at its meeting held  
March 16, 2021.

### MEMBERS OF THE AUDIT AND COMPLIANCE COMMITTEE

Joseph W. Montgomery, Committee Chair  
W. Brett Hayes, Committee Vice Chair  
O'Kelly E. McWilliams, Board Chair

WITH COPIESTO:

#### OTHER MEMBERS OF THE BOARD OF TRUSTEES

J. Brandon Bell, II  
Michael P. Disharoon  
William A. Garrett  
Susan T. Gooden  
Wallace G. Harris  
Troilen G. Seward

#### VRS EXECUTIVE LEADERSHIP

Patricia S. Bishop  
Ronald D. Schmitz  
Members of the Director's  
Executive Committee

#### AUDITOR OF PUBLIC ACCOUNTS

Martha S. Mavredes

#### JLARC

Kimberly A. Sarte  
Jamie Bitz

#### PRINCIPAL AUDITOR IN-CHARGE

Matthew Priestas, CIA, CRMA, CISA, PMP

# Report on Code of Ethics by Management

# Code of Ethics Reporting

## Internal Audit Code of Ethics

As a part of VRS, the Internal Audit Department adheres to the VRS Code of Ethics.

Due to its conformance with the *International Standards for the Professional Practice of Internal Auditing*, the Internal Audit Department also adheres to the Institute of Internal Auditors' Code of Ethics.

As such, we are expected to uphold the following principles:

**Integrity**  
**Objectivity**  
**Confidentiality**  
**Competency**

Internal Audit members participate in VRS Code of Ethics training and certify their conformance with the IIA's Code of Ethics annually.

Members of Internal Audit also hold various other professional designations and memberships, which provide similar frameworks for ethical behavior in the practice of that profession. Those professional organizations also require annual certification.

In accordance with the Audit and Compliance Committee Charter, management provides regular reports to the Committee regarding the process for communicating the VRS Code of Conduct to agency personnel, and for monitoring compliance therewith. This includes the processes and compliance mechanisms in place for both administrative and investment department personnel.

At the Committee's March 16<sup>th</sup> meeting, the Chief Operating Officer will provide an update on the administrative department personnel, followed by an update from the Chief Administrative Officer and Investments Regulatory and Legal Officer on the investment department personnel.

## Administrative Overview

The following items were provided by the Chief Operating Officer to support his update and are included in the meeting book.

Administration 2020 Code of Ethics Report  
VRS Code of Ethics Amended and Approved

## Investments Overview

The items below were provided by the Chief Administrative Officer to support his update and follow the administrative department's materials.


Investments Cover Memo –Annual Report on Code of Ethics  
Investments 2020 Code of Ethics Committee Report  
Investment Department Code of Ethics and Standards of Professional Conduct Policy  
Investments MNPI Policy  
Investments Personal Trading Policy  
Investments Gifts Policy



March 11, 2021

**MEMORANDUM**

**TO:** VRS Audit and Compliance Committee

**FROM:** Patricia S. Bishop  
Director 

**RE:** 2020 Code of Ethics Report

Since adopting its Code of Ethics in 2015, VRS expects all eligible full-time and wage employees to complete ethics training each year. Beginning in 2016, VRS established an online 30-minute interactive Code of Ethics course to more efficiently facilitate the required training. The course details the provisions of the VRS Code of Ethics and includes related scenarios that employees could face in the workplace. Each year the Human Resources staff reviews the training course to ensure it is current.

It is the goal of the agency to have all eligible employees complete the Code of Ethics course at least once during the year. Although a few staff members were unable to complete the training before December 30, 2020, all applicable staff members, except for two, have successfully satisfied the training at this time. The two employees are expected to complete the training upon their return to the office and prior to the Audit and Compliance Committee meeting.

To the best of our knowledge, all employees are in compliance with the requirements and expectations described in the VRS Code of Ethics.

A copy of the VRS Code of Ethics is attached for your information.

Attachment



## Virginia Retirement System Code of Ethics

### Vision

The VRS vision statement is: *“To be the trusted leader in the delivery of benefits and services to those we serve.”* We, as VRS employees, share the responsibility for delivering this vision by following the VRS Code of Ethics, the agency’s Core Values and applicable law, regulation and policy.

The VRS Code of Ethics provides the foundation for the VRS culture and establishes our approach for engaging with our members, employers, retirees, business partners and fellow VRS colleagues.

The Code of Ethics is built on our commitment to upholding the highest standards of integrity, ethical principles and professional conduct.

### Ethical Principles

- **Integrity**

Integrity is the ability to act with honesty and be consistent in administering benefits and managing investments. Integrity serves as the foundation for building trust with the public, retirees, members and employers as we provide services.

- **Accountability**

Accountability is being responsible for decisions made, actions taken and assignments completed. Accountability reinforces our commitment to ethically perform our duties to meet the goals of the agency.

- **Confidentiality**

Confidentiality is exercising discretion and performing our ethical duty to protect the personal information of our members, retirees, beneficiaries and employers. We safeguard personal data and sensitive VRS information that is viewed, acquired or otherwise accessible during the course of VRS employment.

- **Inclusivity**

Inclusivity is embracing a diversity of thinking that helps us reach solutions that achieve excellence and meet the needs of our customers. We encourage an open work environment and an ethical culture in which colleagues are treated with respect and are free to raise issues or concerns without fear of retaliation.

## Ethical Conduct

As employees of the Commonwealth of Virginia and the Virginia Retirement System, we will:

- Perform our work with integrity, competence and dignity and in an ethical manner that earns the trust of members, employers and retirees as we deliver benefits and services.
- Act solely in the best interest of the fund, its members, beneficiaries and retirees.
- Remain free from influence, or the appearance of influence, of any conflicting interests as we conduct business ethically and in compliance with applicable policies and laws.
- Maintain and protect the confidential information of our members, retirees, employers, business partners and employees.
- Deal fairly, objectively and impartially in all matters relating to VRS.
- Promote a positive and welcoming work environment, free from hostility, violence and harassment of any kind.
- Promote safety and security to minimize hazards and threats in our workplace.
- Exercise good faith, civility and professionalism in our interactions with those we serve and with each other.
- Create a climate of trust and respect that contributes to a productive work environment.
- Act as good stewards, effectively and efficiently using resources, while ensuring accountability to our members, retirees and employers that we serve.
- Refrain from having a direct or indirect interest, including financial or other interests, or engaging in a personal business activity that could conflict with the proper discharge of duties or management of VRS.
- Embrace differences in backgrounds, experiences, perspectives and talents and leverage those differences as a fundamental strength of VRS.
- Share in the responsibility to protect the reputation of VRS.

## Illegal or Unethical Behavior

as we strive to maintain an ethical culture, we act in good faith in our interactions with each other, business partners and external customers. We openly discuss and disclose ethical issues.

If at any time, we believe a potential violation of our Code of Ethics has occurred, it is incumbent upon us to seek clarity through discussion with our supervisor, manager, director or human resource office.

If the issue involves information security risks or threats, we should contact the VRS Information Security Officer. If the issue involves waste, fraud or abuse, we should contact the VRS Internal Audit Director, who reports directly to the VRS Board of Trustees.





Virginia Retirement System, Investment Department  
1200 East Main Street, Richmond, Virginia 23219

To: Members of the Audit and Compliance Committee

From: Curtis M. Mattson, Chief Administrative Officer  
Richard W. Brooks, Regulatory and Legal Officer

Date: March 4, 2021

Subject: Annual Report on Investment Department's Code of Ethics and Standards of Professional Conduct Policy (as of December 31, 2020)

As required in the Audit and Compliance Committee Charter, please find attached the annual report on the Investment Department's Code of Ethics and Standards of Professional Conduct Policy. This report describes the process for communicating this Policy to the Investment Department personnel and monitoring compliance with this Policy.

Attached you will also find the current Code of Ethics and Standards of Professional Conduct Policy and the respective stand-alone policies referenced in this Policy.

Let us know if you have any questions.

**VRS Investment Department**  
**Annual Report on the Code of Ethics and Standards of Professional Conduct Policy**  
**As of December 31, 2020**

**Overview**

The Investment Department Code of Ethics and Standards of Professional Conduct Policy (the “Code of Ethics”) is built on our commitment to upholding the highest standards of integrity, ethical principles, and professional conduct. All Investment associates (including new hires, interns, and those working part-time) are subject to this Code of Ethics.

The Investment Department first adopted its Code of Ethics in 2006. This document is periodically reviewed and updated to confirm that its contents and procedures are current. The most recent version of the Code of Ethics became effective July 1, 2015.

The Code of Ethics continues to address potential conflicts of interest in three main areas:

- The treatment of confidential and material non-public information;
- Trading of securities in personal accounts; and
- The disclosure of discussions of potential employment arrangements or other forms of consideration between Investment associates and entities conducting business with the VRS.

Incorporated by reference and made part of the Code of Ethics are the following stand-alone policies:

- Material Non-Public Information Policy;
- Personal Trading Policy; and
- Policy on Gifts.

A copy of each of these policies, as well as the Code of Ethics, is attached.

**Communicating and Monitoring Procedures**

The Code of Ethics and related stand-alone policies are located on the Investment Department’s network drive, which is accessible by all Investment associates.

*Initial Certification Process*

- As part of the Investment Department’s new employee orientation process, the Code of Ethics and related stand-alone policies are provided to the newly hired Investment associate by the Regulatory and Legal Officer.
- Completed and signed initial certification forms are received from the Investment associate.
- All initial certifications are received and reviewed by the Regulatory and Legal Officer. These certifications require the signature of the Investment associate, his or her immediate supervisor, and either the Regulatory and Legal Officer or the Chief Administrative Officer.

### *Quarterly Procedures*

- Following the end of each fiscal quarter, the Personal Trading Policy is sent to all Investment associates by the Regulatory and Legal Officer.
- Certification of compliance with the Personal Trading Policy for the prior fiscal quarter, as well as supporting documentation for applicable personal trades made during that period, is required from each Investment associate.
- All certifications and supporting documentation are received and reviewed by the Regulatory and Legal Officer. These certifications require the signature of the Investment associate, his or her immediate supervisor, and either the Regulatory and Legal Officer or the Chief Administrative Officer.

### *Annual Procedures*

- At the beginning of each fiscal year, the Code of Ethics and related stand-alone policies are sent to all Investment associates by the Regulatory and Legal Officer.
- Each Investment associate is required to certify their compliance with each of these policies during the prior fiscal year, which includes an acknowledgement from the Investment associate that, during the prior fiscal year, he or she had no known personal conflicts of interest related to entities conducting business with the VRS.
- All certifications are received and reviewed by the Regulatory and Legal Officer. These certifications require the signature of the Investment associate, his or her immediate supervisor, and either the Regulatory and Legal Officer or the Chief Administrative Officer.

## **Results**

### *FY 2020*

- Initial certifications of compliance with the Code of Ethics, which incorporates by reference the stand-alone policies, have been received from all Investment associates hired during FY 2020 and were properly reviewed.
- Annual certifications of compliance with the Code of Ethics, which incorporates by reference the stand-alone policies, have been received from all Investment associates and were properly reviewed.
- Personal trading certifications for each fiscal quarter during FY 2020 have been received from all Investment associates and were properly reviewed.

### *FY 2021 (through December 31, 2020)*

- Initial certifications of compliance with the Code of Ethics, which incorporates by reference the stand-alone policies, have been received from all Investment associates hired during FY 2021 (through December 31, 2020) and were properly reviewed.
- Personal trading certifications for the first two fiscal quarters of FY 2021 have been received from all Investment associates and were properly reviewed.

*Overall Conclusion*

- To the best of our knowledge, all Investment associates have been and still are in compliance with the requirements of the Investment Department Code of Ethics and Standards of Professional Conduct Policy and the stand-alone policies incorporated therein by reference.



Virginia  
Retirement  
System

## **Investment Department**

### **Code of Ethics**

**and**

### **Standards of Professional Conduct Policy**

Effective Date – July 1, 2015

Adopted December 2007 – Previously updated February 17, 2011

**Virginia Retirement System  
Investment Department  
Code of Ethics and Standards of Professional Conduct Policy**

**Introduction**

Investment associates (i.e., VRS Investment Department personnel), as employees of a public entity, a fiduciary, and a major market participant, should exemplify the highest standards of ethical conduct in all matters related to VRS. Investment associates owe a duty of loyalty to the Fund and should avoid conflicts that may reasonably be perceived as abusing the faith and confidence that has been placed in the VRS Investment Department.

**Policy**

The VRS Investment Department Code of Ethics and Standards of Professional Conduct Policy (COE or Policy) was established in an effort to ensure loyalty as well as a commitment to fairness, openness and transparency in the governance of the Fund. Furthermore, the VRS Investment Department has also incorporated the CFA Institute Code of Ethics and Standards of Professional Conduct (see pages 5 and 6 of this document) into its COE.

In addition to the incorporation of the CFA standards, this Policy specifically addresses: (i) the treatment of confidential information; (ii) the disclosure of discussions of potential employment arrangements or other forms of consideration between investment associates (or members of their immediate families) and entities conducting business, either directly or indirectly, with the VRS Investment Department where a potential for conflict of interest exists; and (iii) additional policies adopted by the Investment Department to mitigate risks associated with potential conflicts of interest between an investment associate's own interests and those of the Fund.

Any variety of activities, events or matters may cause a potential conflict of interest. The intent of this COE is to help ensure that no VRS investment associate or any member of the investment associate's immediate family seek or accept personal gain in conflict with the provisions this COE and from the investment decisions of the VRS investment programs. For the purposes of this COE, "immediate family" means a spouse and any child who lives at home and who is a dependent of the investment associate.

This Policy is not intended to address every situation or activity where a conflict of interest might exist. Investment associates are strongly encouraged to seek the advice of the Regulatory and Legal officer (RLO) whenever there is uncertainty about compliance with this Policy.

**Treatment of Confidential Information**

In the course of performing their duties, VRS investment associates are expected to exhibit the utmost discretion in handling and/or acting upon any confidential information that has been provided to them with the expectation (whether explicit or implicit) of confidentiality. In their handling of confidential information, VRS investment associates shall exercise reasonable care to protect and preserve the privacy of such information entrusted to them by either internal or external sources. Furthermore, all actions based on, or communications involving confidential information shall be limited to the legitimate

business purposes of the VRS. VRS investment associates shall fully comply with all applicable laws concerning public disclosure of information. Also, see the Investment Department's Material Non-Public Information Policy.

### **Potential Employment/Other Forms of Consideration**

This Code of Ethics and Standards of Professional Conduct Policy specifically addresses the disclosure of discussions of potential employment arrangements or other forms of consideration between an investment associate (and members of their immediate family) and entities conducting business, either directly or indirectly, with the VRS Investment Department where a potential for conflict of interest exists. For purposes of this Policy, an "entity conducting business with the VRS Investment Department" includes but is not limited to: investment managers, placements agents, consultants, broker/dealers, and related vendors.

The appearance of a breach of a duty of loyalty can arise if an investment associate or a member of their immediate family is discussing prospective employment or other forms of consideration with an entity conducting business with the VRS Investment Department, which could reasonably be expected to create a conflict of interest, without first notifying the Chief Investment Officer (CIO). Therefore, all investment associates are required to provide disclosure to the CIO, or his or her designee, regarding such discussions with any entity doing business within the associate's program (such as Total Public Equity, Internal Equity Management, Fixed Income, Credit Strategies, Real Assets, Private Equity, Strategic Opportunities, etc.) or for entities doing business with other areas within the VRS Investment Department for which the associate has had significant input or participation (such as initial evaluation, ongoing due diligence, reviewing fee calculations, etc.).

These disclosures will provide the CIO an opportunity to take appropriate steps to protect the Fund, the VRS Investment Department, and the investment associate from allegations of a conflict of interest. Due to the nature of the Investment Department's Management Committee (responsible for reviewing all investment recommendations), all Program Directors and all other participants on that Committee are required to provide disclosures regarding such discussions (including those involving members of their immediate family) with any entity conducting business with the VRS Investment Department. If the CIO is required to make any such disclosures under this Policy, he or she will do so to the Chairman of the VRS Board.

In addition to these disclosure requirements, all members of the Management Committee are prohibited from accepting employment with any entity with which the VRS Investment Department has a contractual agreement for a period of one year from the most recent contract inception date with VRS.

Finally, the Virginia State and Local Government Conflict of Interests Act applies to each investment associate. A portion of this Act prohibits accepting any business or professional opportunity when the recipient knows there is a reasonable likelihood that the opportunity is being afforded for influence in the performance of the recipient's official duties. For details regarding the Virginia State and Local Government Conflict of Interests Act see Exhibit A.

## **Other Investment Department Policies**

In addition to this Code of Ethics and Standards of Professional Conduct Policy, the Investment Department has adopted a number of policies to mitigate risks associated with potential conflicts of interest between an investment associate's own interests and those of the Fund. These additional policies include, but are not limited to, the Investment Department's Personal Trading Policy, Material Non-Public Information Policy, and the Policy on Gifts. These policies are incorporated by reference and made part of this COE.

### **(i) Personal Trading Policy**

The VRS Investment Department has adopted a Personal Trading Policy that applies to all investment associates. This policy is intended to provide guidance and direction on the types of personal trading activities permitted or prohibited. See the separate Personal Trading Policy.

### **(ii) Material Non-Public Information Policy**

In the course of employment and potentially from other sources, VRS investment associates may come into possession of material non-public information relating to publically traded securities. The VRS Investment Department has adopted a Material Non-Public Information Policy to protect against misuse of material non-public information and to comply with Federal securities laws. See the separate Material Non-Public Information Policy.

### **(iii) Policy on Gifts**

The Investment Department has adopted a Policy on Gifts that sets forth specific guidelines and restrictions governing the acceptance of gifts and entertainment by investment associates. It is also the intent of the VRS Investment Department to treat the sections of the State and Local Government Conflict of Interests Act ("COIA") relating to gifts as the minimum acceptable standard - see Exhibit A. Also, see the separate Policy on Gifts.

## **Reporting and Certification Procedures**

Upon implementation of this updated Policy, all current and prospective investment associates (including new hires and interns) will be required to sign an Initial Certification form that they: have read the VRS Investment Department Code of Ethics and Standards of Professional Conduct Policy; understand these documents; acknowledge there are penalties for non-compliance; and, agree to comply with this Policy – see Exhibit B. All VRS investment associates will also be required to annually certify that they have complied with this COE and all aforementioned policies incorporated by reference - see Exhibit C. The RLO will maintain a file of completed forms.

This COE will be updated and revised as necessary. The RLO will provide a copy of this Policy to all investment associates no less frequently than annually or when substantive changes are made to this Policy.



## **Reserve the Right to Request Information from Investment Associates**

If the need arises, the RLO and the Chief Administrative Officer (CAO) reserve the right to request and review Statement of Economic Interests forms, personal brokerage statements and other relevant information from any investment associate or members of their respective immediate households. Investment associates agree to make a reasonable effort to obtain requested information from members of their immediate households if such is requested.

## **Non-Compliance**

Every investment associate is expected to adhere to the requirements of this COE. Failure to comply could result in sanctions, the level of which will depend on the severity of the infraction. Sanctions may include, but not be limited to: a written reprimand; demotion of job duties; disgorgement of profits; and/or, termination of employment. Additionally, improper or illegal actions could result in criminal penalties and/or civil liabilities. All persons subject to this Code of Ethics and Standards of Professional Conduct Policy should report any known violations to the RLO.



# CODE OF ETHICS AND STANDARDS OF PROFESSIONAL CONDUCT

## PREAMBLE

The CFA Institute Code of Ethics and Standards of Professional Conduct are fundamental to the values of CFA Institute and essential to achieving its mission to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society. High ethical standards are critical to maintaining the public's trust in financial markets and in the investment profession. Since their creation in the 1960s, the Code and Standards have promoted the integrity of CFA Institute members and served as a model for measuring the ethics of investment professionals globally, regardless of job function, cultural differences, or local laws and regulations. All CFA Institute members (including holders of the Chartered Financial Analyst® [CFA®] designation) and CFA candidates must abide by the Code and Standards and are encouraged to notify their employer of this responsibility. Violations may result in disciplinary sanctions by CFA Institute. Sanctions can include revocation of membership, revocation of candidacy in the CFA Program, and revocation of the right to use the CFA designation.

## THE CODE OF ETHICS

Members of CFA Institute (including CFA charterholders) and candidates for the CFA designation ("Members and Candidates") must:

- Act with integrity, competence, diligence, respect and in an ethical manner with the public, clients, prospective clients, employers, employees, colleagues in the investment profession, and other participants in the global capital markets.
- Place the integrity of the investment profession and the interests of clients above their own personal interests.
- Use reasonable care and exercise independent professional judgment when conducting investment analysis, making investment recommendations, taking investment actions, and engaging in other professional activities.
- Practice and encourage others to practice in a professional and ethical manner that will reflect credit on themselves and the profession.
- Promote the integrity and viability of the global capital markets for the ultimate benefit of society.
- Maintain and improve their professional competence and strive to maintain and improve the competence of other investment professionals.

## STANDARDS OF PROFESSIONAL CONDUCT

### I. PROFESSIONALISM

- A. Knowledge of the Law.** Members and Candidates must understand and comply with all applicable laws, rules, and regulations (including the CFA Institute Code of Ethics and Standards of Professional Conduct) of any government, regulatory organization, licensing agency, or professional association governing their professional activities. In the event of conflict, Members and Candidates must comply with the more strict law, rule, or regulation. Members and Candidates must not knowingly participate or assist in and must dissociate from any violation of such laws, rules, or regulations.
- B. Independence and Objectivity.** Members and Candidates must use reasonable care and judgment to achieve and maintain independence and objectivity in their professional activities. Members and Candidates must not offer, solicit, or accept any gift, benefit, compensation, or consideration that reasonably could be expected to compromise their own or another's independence and objectivity.

- C. Misrepresentation.** Members and Candidates must not knowingly make any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities.
- D. Misconduct.** Members and Candidates must not engage in any professional conduct involving dishonesty, fraud, or deceit or commit any act that reflects adversely on their professional reputation, integrity, or competence.

### II. INTEGRITY OF CAPITAL MARKETS

- A. Material Nonpublic Information.** Members and Candidates who possess material nonpublic information that could affect the value of an investment must not act or cause others to act on the information.
- B. Market Manipulation.** Members and Candidates must not engage in practices that distort prices or artificially inflate trading volume with the intent to mislead market participants.

## CFA Code of Ethics and Standards of Professional Conduct (page 2 of 2)

### III. DUTIES TO CLIENTS

- A. Loyalty, Prudence, and Care.** Members and Candidates have a duty of loyalty to their clients and must act with reasonable care and exercise prudent judgment. Members and Candidates must act for the benefit of their clients and place their clients' interests before their employer's or their own interests.
- B. Fair Dealing.** Members and Candidates must deal fairly and objectively with all clients when providing investment analysis, making investment recommendations, taking investment action, or engaging in other professional activities.
- C. Suitability.**
1. When Members and Candidates are in an advisory relationship with a client, they must:
    - a. Make a reasonable inquiry into a client's or prospective client's investment experience, risk and return objectives, and financial constraints prior to making any investment recommendation or taking investment action and must reassess and update this information regularly.
    - b. Determine that an investment is suitable to the client's financial situation and consistent with the client's written objectives, mandates, and constraints before making an investment recommendation or taking investment action.
    - c. Judge the suitability of investments in the context of the client's total portfolio.
  2. When Members and Candidates are responsible for managing a portfolio to a specific mandate, strategy, or style, they must make only investment recommendations or take only investment actions that are consistent with the stated objectives and constraints of the portfolio.
- D. Performance Presentation.** When communicating investment performance information, Members and Candidates must make reasonable efforts to ensure that it is fair, accurate, and complete.
- E. Preservation of Confidentiality.** Members and Candidates must keep information about current, former, and prospective clients confidential unless:
1. The information concerns illegal activities on the part of the client or prospective client,
  2. Disclosure is required by law, or
  3. The client or prospective client permits disclosure of the information.

### IV. DUTIES TO EMPLOYERS

- A. Loyalty.** In matters related to their employment, Members and Candidates must act for the benefit of their employer and not deprive their employer of the advantage of their skills and abilities, divulge confidential information, or otherwise cause harm to their employer.
- B. Additional Compensation Arrangements.** Members and Candidates must not accept gifts, benefits, compensation, or consideration that competes with or might reasonably be expected to create a conflict of interest with their employer's interest unless they obtain written consent from all parties involved.
- C. Responsibilities of Supervisors.** Members and Candidates must make reasonable efforts to ensure that anyone subject to their supervision or authority complies with applicable laws, rules, regulations, and the Code and Standards.

### V. INVESTMENT ANALYSIS, RECOMMENDATIONS, AND ACTIONS

- A. Diligence and Reasonable Basis.** Members and Candidates must:
1. Exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions.
  2. Have a reasonable and adequate basis, supported by appropriate research and investigation, for any investment analysis, recommendation, or action.
- B. Communication with Clients and Prospective Clients.** Members and Candidates must:
1. Disclose to clients and prospective clients the basic format and general principles of the investment processes they use to analyze investments, select securities, and construct portfolios and must promptly disclose any changes that might materially affect those processes.
  2. Disclose to clients and prospective clients significant limitations and risks associated with the investment process.
  3. Use reasonable judgment in identifying which factors are important to their investment analyses, recommendations, or actions and include those factors in communications with clients and prospective clients.
  4. Distinguish between fact and opinion in the presentation of investment analysis and recommendations.
- C. Record Retention.** Members and Candidates must develop and maintain appropriate records to support their investment analyses, recommendations, actions, and other investment-related communications with clients and prospective clients.

### VI. CONFLICTS OF INTEREST

- A. Disclosure of Conflicts.** Members and Candidates must make full and fair disclosure of all matters that could reasonably be expected to impair their independence and objectivity or interfere with respective duties to their clients, prospective clients, and employer. Members and Candidates must ensure that such disclosures are prominent, are delivered in plain language, and communicate the relevant information effectively.
- B. Priority of Transactions.** Investment transactions for clients and employers must have priority over investment transactions in which a Member or Candidate is the beneficial owner.
- C. Referral Fees.** Members and Candidates must disclose to their employer, clients, and prospective clients, as appropriate, any compensation, consideration, or benefit received from or paid to others for the recommendation of products or services.

### VII. RESPONSIBILITIES AS A CFA INSTITUTE MEMBER OR CFA CANDIDATE

- A. Conduct as Participants in CFA Institute Programs.** Members and Candidates must not engage in any conduct that compromises the reputation or integrity of CFA Institute or the CFA designation or the integrity, validity, or security of the CFA Institute programs.
- B. Reference to CFA Institute, the CFA Designation, and the CFA Program.** When referring to CFA Institute, CFA Institute membership, the CFA designation, or candidacy in the CFA Program, Members and Candidates must not misrepresent or exaggerate the meaning or implications of membership in CFA Institute, holding the CFA designation, or candidacy in the CFA program.



[www.cfainstitute.org](http://www.cfainstitute.org)

## EXHIBIT A

### VRS Investment Department Code of Ethics and Standards of Professional Conduct Policy

#### Summary of Virginia State and Local Government Conflict of Interests Act Virginia Code § 2.2-3100 et seq.

Certain sections of the Act directly applicable to investment associates include, but are not limited to:

***Use of confidential information and accepting gifts that could influence decisions:*** Officers and employees may not use confidential state information, not available to the public, for their own or for anyone else's economic benefit. Officers or employees may not accept any money, loan, gift, favor, or any other thing of value that could tend to influence their work and the decisions that would influence them in the performance of their official duties. [CITE: Virginia Code § 2.2-3103(4), (5).]

***Business or professional opportunity:*** Furthermore, officers and employees cannot accept a business or professional opportunity when they know that there is a reasonable likelihood that the opportunity is being offered to influence them in the performance of their official duties. [CITE: Virginia Code § 2.2-3103(6).]

See Virginia Code § 2.2-3100 et seq. for the entire Virginia State and Local Government Conflict of Interests Act.

**EXHIBIT B**

**VRS Investment Department  
Code of Ethics and Standards of Professional Conduct Policy**

**INITIAL CERTIFICATION FORM**

I have read the VRS Investment Department Code of Ethics and Standards of Professional Conduct Policy. I understand the requirements of this document, recognize that I am subject to this Policy, understand the penalties for non-compliance and agree to comply with this Policy.

Investment Associate Signature: \_\_\_\_\_

Name: \_\_\_\_\_  
(Please Print)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by RLO or CAO: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Return this completed form to the RLO

**EXHIBIT C**

**VRS Investment Department  
Code of Ethics and Standards of Professional Conduct Policy**

**ANNUAL CERTIFICATION FORM**

For the Period \_\_\_\_\_

I certify that to the best of my knowledge for the period stated above:

1. I was in compliance with the requirements of the VRS Investment Department Code of Ethics and Standards of Professional Conduct Policy.
2. I was in compliance with the requirements of the VRS Investment Department Personal Trading Policy.
3. I was in compliance with the requirements of the VRS Investment Department Material Non-Public Information Policy.
4. I was in compliance with the requirements of the VRS Investment Department Policy on Gifts.
5. I am not aware of any conflict of interest between myself (or members of my immediate family) and entities conducting business, either directly or indirectly, with the VRS Investment Department. These entities include, but are not limited to: investment managers, placement agents, consultants, broker/dealers, and related vendors.

Investment Associate  
Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Reviewed by RLO  
or CAO: \_\_\_\_\_  
Date: \_\_\_\_\_

Reviewed by Supervisor:  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Return this completed form to the RLO

**VRS Investment Department  
Material Non-Public Information Policy  
Effective Date – July 1, 2015**

**Introduction**

Investment associates (i.e., VRS Investment Department personnel), as employees of a public entity, a fiduciary, and a major market participant, should exemplify the highest standards of ethical conduct in all matters related to VRS. While public pension funds are exempt from many of the federal securities laws governing money managers, VRS and investment associates are not exempt from important anti-fraud provisions under federal securities laws that prohibit insider trading and other manipulative and dishonest behavior that threatens the integrity of the market.

This Policy applies to all VRS investment associates. This Policy cannot and is not intended to address all insider trading issues that may arise in connection with an investment associate's duties. Investment associates are strongly encouraged to seek the advice of the VRS Investments Regulatory and Legal Officer (RLO) if they have questions related to this Policy or issues it addresses.

**Policy**

Material, Non-Public Information

In the course of employment and potentially from other sources, VRS investment associates may come into possession of non-public information relating to publically traded securities. Trading on inside information is not a basis for legal liability unless the information is material. Both positive and negative information can be material. The underlying factor is whether the information could have a market impact.

Federal insider trading laws and regulations generally prohibit those who possess material, non-public information from buying or selling securities or passing on such information to others who may be induced to buy or sell securities on the basis of such information. Such information is of special importance under the anti-fraud sections of the federal and state securities laws, and misuse of that information can lead to civil and criminal penalties for VRS and investment associates. Whether information is material and non-public is not always obvious. This Policy section, therefore, starts with a short discussion of what might constitute material, non-public information.

Material Information

Information is deemed material if it would be considered important by a reasonable investor in deciding whether to buy, sell or refrain from any activity regarding that security. In addition, such information would be material if it were likely to have a significant impact on the market price or value of that company's securities. Whether information is material is established by reviewing all the facts and circumstances.

Information provided by a company could be material because of its expected effect on a particular class of securities, all of a company's securities, the securities of another company, or the securities of several companies. The prohibition against misusing material, non-public information applies to all types of financial instruments including, but not limited to, stocks, bonds, warrants, options, futures, forwards, swaps, and commercial paper.

Those covered under this Policy who are aware of material, non-public information regarding a company are prohibited from, directly or indirectly, making investment decisions on behalf of VRS or any other transactions, related to that company. If an investment associate is uncertain whether the information is material, the safest course of action is for the employee to treat the information as material. In such a situation, the investment associate should consult the RLO before initiating any transactions with respect to the subject security.

The following partial list illustrates types of information that would generally be considered material:

- Projections of future earnings or losses or other financial results;
- A gain or loss of a material contract, customer or supplier or material changes in the profitability status of a current contract;
- Merger, acquisitions, tender offers, or joint ventures;
- A significant sale of assets, write-downs or write offs or disposition of a subsidiary;
- Expansion or curtailment of company or major division operations;
- Innovative products, processes, or discoveries;
- New licenses, patents, or other intellectual property milestones;
- Regulatory approval or rejection of a product;
- Changes in management;
- Events regarding the issuer's securities (i.e. defaults on senior securities, changes in dividends, or stock repurchases);
- Debt service or liquidity problems or unannounced plans to file for a bankruptcy;
- Criminal, civil and government investigations and indictments;
- Undisclosed regulatory or law enforcement proceedings;
- Pending labor disputes;
- Undisclosed plans to issue restatement of financial statements; and
- Undisclosed order for large trades before they are executed.

This list of examples is not intended to be exhaustive, and other types of information may also be material. As discussed further below, after information such as that listed above becomes public, it generally no longer creates a risk of insider trading.



## Non-Public Information

Non-public information is information that is not generally known or available to the general public. Once information has been effectively communicated in the marketplace, it is no longer considered non-public. However, the distribution of material, non-public information must occur through commonly recognized channels for the classification to change. One must be able to point to some fact to show that the information is generally public. For example, information found in a report filed with the SEC, or appearing in Dow Jones, Reuters Economic Services, The Wall Street Journal, Bloomberg or other publications of general circulation would be considered public. In addition, there must be adequate time for the public to receive and evaluate the information. When material information has been publicly disclosed, you should continue to refrain from buying or selling securities in question until the information has been adequately disseminated to the public so that investors have had the opportunity to evaluate the information. Adequate dissemination requires allowing enough time after the announcement for the market to react to the information.

Non-public information does not change to public information solely by selective dissemination. Corporations that disclose information on a limited basis create the potential for insider-trading violations. Information concerning a public company's financial statements or regulatory filings prior to completion is non-public. Similarly, disclosure to a room full of analysts does not necessarily make the disclosed information public until it is made available to investors in general. The confirmation by an insider of unconfirmed rumors, even if the information in question was reported as rumors in a public form, may be non-public information.

Examples of the ways in which non-public information might be transmitted include, but are not limited to:

- In person;
- In writing;
- By telephone;
- During a presentation;
- By email, instant messaging, or Bloomberg messaging;
- By text message or through Twitter; or
- On a social networking site such as Facebook or LinkedIn.

### Definition of an Insider

The term insider trading is not specifically defined under the federal securities laws (most guidance in this area can be found under case law and related judicial decisions). The term insider is generally used to refer to trading in securities on the basis of material, non-public information. Insiders are not limited to officers, directors and employees (corporate officials) of a company and major shareholders. A person can be a “temporary insider” if he or she enters into a special confidential relationship in the conduct of a company’s affairs and as a result is given access to information solely for the company’s purpose.

A person could be liable for insider information simply by possessing inside information regarding a given security, breaching a fiduciary duty to the source of the information, and then trading it with a self-serving intent, even if he or she would have made the trade anyway. The Securities and Exchange Commission (“SEC”), which is the primary U.S. regulator under the federal securities laws, takes the view that the mere fact that a person knows the information is enough to bar him or her from trading, even if the reasons for the potential trade are not based on that information.

This duty may be imputed to others. For example in cases where an insider “tips” another person about material, non-public information likely to have an effect on the company’s share price, the duty the insider owes is now imputed to the recipient of the information. This person would be in violation if he/she trades on the basis of this information. A restricted person, who tips information to a person who then trades, is subject to the same penalties, even if the restricted person did not trade and did not profit from the trading.

### Prohibition/Penalties

Each investment associate is required to adhere to this Policy. Failure to comply could result in VRS sanctions, the level of which will depend on the severity of the infraction. Sanctions may include, but not be limited to: a written reprimand; demotion of job duties; disgorgement of profits; and/or, termination of employment.

In addition to VRS penalties, the consequences of insider trading violations can be severe under U.S. law. The SEC takes the position that these laws apply to all transactions in shares or options of companies listed for trading in the U.S., whether or not the actual trades take place in the U.S. For individuals who trade on inside information (or tip information to others), possible penalties include:

- A civil penalty of disgorgement, or return, of profit gained or loss avoided, plus a fine of up to three times the profit gained or loss avoided.
- Criminal fine (no matter how small the profit) of up to \$1 million; and
- A jail term of up to ten years for felony convictions.

An entity that knowingly and recklessly disregards the fact that an employee is likely to engage in illegal trading and fails to take appropriate steps to prevent the illegal activity is currently subject to possible penalties which may include:

- A civil penalty of the greater of \$1 million or three times the profit gained or the loss avoided as a result of the employee's violation; and/or
- A criminal penalty of up to \$2.5 million.

#### External Managers

As part of the normal course of business, VRS investment staff employs outside third-party managers to invest a portion of VRS assets. VRS may receive information about these managers' investment strategies and trading activities. Some of this information could be considered material non-public information and limit VRS's ability to trade in that issuer's public securities.

If a VRS investment associate expects that discussions with an outsider might involve the transmission of material, non-public information, the investment associate should inquire whether or not this information would make VRS an insider and should seek a representation regarding the counterparty's status as a potential insider. When practicable, this disclosure and representation should be communicated by email. It is recognized that VRS may enter into confidentiality agreements with third-parties through which investment associates of VRS may receive non-public information. In these instances, appropriate controls must be implemented through the use of information barriers.

#### Information Barriers/Chinese Walls

Federal and state securities laws generally prohibit VRS from trading in a security while in possession of material, non-public information related to the traded security or issuer. The federal securities laws, however, permit institutional investors to trade while one or more of its employees possess material, non-public information if the individual or group of individuals making the investment decision on behalf of the institutional investor is not aware of that information. Furthermore, the institutional investor must have implemented reasonable policies and procedures that ensure that the individual or group of individuals making an investment decision on behalf of the institutional investor is not aware of material, non-public information related to that investment decision.

All investment associates must consider material, non-public information as highly confidential and use information barriers to protect the confidentiality of such information. Furthermore, such information should be disclosed only to employees on a need to know basis to carry-out their job responsibilities.

Investment associates must safeguard non-public information whether generated internally or acquired from outside sources. Investment associates must use this information only for VRS related matters and not share this investment related information or resources with other VRS investment programs. In order to control access to this non-public information, business related communications

between VRS investment staff and other VRS employees should be kept to a minimum. Investment associates should be highly sensitive to the potential for disclosure of any non-public information.

Other VRS investment programs not privy to material, non-public information may still be permitted to trade in securities of an issuer so long as appropriate informational barriers exist and the guidelines in the Procedures for Protection of Material, Non-Public Information section of this document are followed.

#### Procedures for Protection of Material, Non-Public Information

Investment associates who may be in possession of material, non-public information should take protective steps to preserve the confidentiality of that information and prevent its intentional or inadvertent disclosure. These steps may include, but are not limited to, the following:

- Immediately report the potential receipt of material, non-public information to the RLO and immediate Supervisor;
- Not discuss any potentially material, non-public information with colleagues, except as specifically required by their position;
- Not trade the securities of any company about which they may possess material, non-public information;
- Refrain from discussing any potentially material, non-public information with any person who is outside of the barrier/Chinese wall;
- Refrain from, directly or indirectly, participating in, recommending or supervising any decisions to buy, sell or hold the securities of the issuer; and
- Safeguard all files, file cabinets and other storage areas that contain information concerning material non-public information.

#### Review and Determination

It is the responsibility of every VRS investment associate to notify his/her immediate supervisor and the RLO when in receipt of material, non-public information or whenever he/she has questions as to whether they are in possession of material, non-public information. The RLO will conduct research to determine if the information is likely to be considered material, and whether the information has been publicly disseminated. The RLO will keep a file describing the information, its source, and the date that the information was received.

After the RLO has reviewed the matter, a determination will be made as to whether the information is material and non-public. If a determination is made that the information is material and non-public, the security in question will be placed on a restricted list for the particular investment program that came into possession of such information. The RLO will provide notice of such determination in written format via e-mail to all employees known to have access to such information

and to the employees within the specific investment program. These employees are prohibited from placing any trades in such security and must adhere to the Procedures for Protection of Material, Non-Public Information previously covered.

Investment associates with such information have the responsibility to notify the RLO when they believe the security should be considered for removal from the restricted list. The RLO has the ultimate responsibility for maintaining a restricted list and no person, other than the RLO and the Chief Administrative Officer, can make a determination to exclude an issuer from VRS's restricted list. The restricted list shall be distributed to a limited number of investment associates on a need to know basis only.

Trading in affected securities may resume when the RLO or Chief Administrative Officer determines that the information has become public and/or immaterial. At such time, the RLO will notify in writing via e-mail the applicable investment associates that the restriction has been removed.

#### Initial Certification Form

Upon implementation of this Policy, all current and prospective investment associates (including new hires and interns) will be required to sign an Initial Certification form that they: have read the VRS Investment Department Material Non-Public Information Policy; understand this document; acknowledge there are penalties for non-compliance; and, agree to comply with this Policy – see Exhibit A. In addition, an annual certification of compliance with this Policy is required as part of the Investment Department Code of Ethics and Standards of Professional Conduct Policy.

**Exhibit A**

**VRS Investment Department  
Material Non-Public Information Policy**

**INITIAL CERTIFICATION FORM**

I have read the VRS Investment Department Material Non-Public Information Policy. I understand the requirements of this document, recognize that I am subject to this Policy, understand the penalties for non-compliance and agree to comply with this Policy.

Investment Associate Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by RLO or CAO: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Return this completed form to the Regulatory and Legal Officer

**VRS Investment Department  
Personal Trading Policy  
Effective Date – July 1, 2015**

**Purpose**

Investment associates (i.e. VRS Investment Department personnel), as employees of a public entity, a fiduciary, and a major market participant, should exemplify the highest standards of ethical conduct in all matters related to VRS. The interests of assets managed by VRS (“VRS Fund”) are of paramount importance and all investment associates must exercise care and caution always to place the interests of VRS before their own. It is integral to the culture of the VRS Investment Department to prohibit investment associates from undertaking personal transactions that may give rise to a conflict of interest, insider dealing or breach of confidentiality by virtue of an activity carried out on behalf of VRS.

This Personal Trading Policy applies to all VRS Investment Department personnel. This Policy is put forth to guard against improprieties or conflicts of interest involving an investment associate’s personal trading activities that could harm or adversely affect the credibility or reputation of VRS. This Policy is designed to provide guidance and direction to investment associates on the types of personal trading activities permitted or prohibited.

**With the adoption and implementation of this updated Policy, investment associates will no longer be permitted to conduct personal securities transactions in covered securities for their own personal accounts.** For purposes of this Policy, a personal security transaction is defined as any transaction in individual securities for an investment associate’s own account or for an account in which the associate has beneficial ownership and decision making authority for the account.

At the date of implementation of this Policy, any investment associates holding covered securities may continue to hold these securities indefinitely or may sell such securities with pre-clearance (as described below), from the Regulatory and Legal Officer (RLO) or the Chief Administrative Officer (CAO). This process is also applicable to new hires within the Investment Department.

**Covered Securities**

VRS investment associates are strictly prohibited from the purchase of individually traded equities or debt instruments of corporate issuers for their own personal accounts, including but not limited to the following:

- Stocks;
- Corporate bonds;
- Preferred stock;
- IPOs;
- Private Placements;
- Master Limited Partnerships;

- Short Sales;
- Convertible securities;
- Derivatives based on non-permitted securities; and
- Options, warrants, puts, calls and rights relating to publicly traded equity or debt securities.

Transactions where the investment associate has no decision making authority involving a covered security are permissible. Neither pre-clearance nor the reporting requirements (discussed further below) apply to these transactions. Examples include, but are not limited to, the following:

- Automatic dividend reinvestment plans;
- Acquisition of a covered security through a gift or bequest;
- Purchase, sale or other acquisition of a covered security in a trust in which the VRS investment associate holds beneficial ownership, but holds no decision making authority with respect to selection of investments (i.e. blind trust); and
- Discretionary management of personal account(s) by a portfolio manager (PM) or registered investment advisor (RIA). A discretionary account is defined as an account giving power of attorney to the PM or RIA to buy and sell securities with no prior communication with the account owner with respect to purchases or sales.

This Policy cannot address every situation that might confront VRS investment associates and as such, investment associates are strongly encouraged to seek advice of the RLO should there be a question as to the status of the potential transaction or a related situation.

#### **Administration of the Policy**

The RLO will be responsible for the administration of this Policy. The RLO will receive and review all reports required to be submitted pursuant to this Policy (reporting requirements are detailed below). The RLO will review the reports to determine that investment associates' trades are consistent with the requirements and restrictions set forth in this Policy and do not otherwise indicate improper trading activities. The RLO will also ensure that all books and records relating to this Policy are properly maintained.

#### **Pre-Clearance for Selling Covered Securities**

Pre-clearance is required for any sale involving a previously held covered security where an investment associate has decision making authority to conduct a sale. Immediate family members of VRS investment associates are not required to formally apply for pre-clearance unless the investment associate has beneficial ownership and decision making authority for the account. For the purposes of this Policy, "immediate family" means a spouse and any child who lives at home and who is a dependent of the investment associate. VRS investment associates will exercise reasonable care to protect and preserve confidential or sensitive information related to VRS matters. Communications involving such



confidential or sensitive information will not be shared with immediate family members or others and must only be used for legitimate business purposes. All VRS investment associates are also subject to the requirements of the Investment Department's separate policy on material non-public information.

An investment associate with an existing holding in a covered security must get pre-clearance in writing from either the RLO or the CAO prior to selling such security. The RLO or CAO may under certain temporary situations delegate the pre-approval process to another individual within the Compliance Department as appropriate (i.e. both out of the office). This temporary approval must be in writing and identify the compliance person prior to the approval or denial of any covered security transaction(s). No individual authorized to pre-clear transactions may pre-clear a transaction for a covered security in which he or she has beneficial ownership. The RLO will obtain pre-clearance from the CAO, if necessary.

Prior consent must be sought using the Personal Trading Pre-Clearance Form - see Exhibit D. This form must be signed by the employee seeking approval, the immediate supervisor, and the RLO or CAO. **No trading is permitted until approval is received.** Transactions that appear upon reasonable inquiry and investigation to present no likelihood of harm to VRS will be entitled to pre-clearance. Pre-clearance approval is valid for a period of five business days following the day approval is granted. After such time, pre-clearance approval will no longer be valid. The VRS investment associate will provide the RLO or CAO with a trade confirmation (or equivalent and acceptable documentation) within ten days of completion of such transaction. If no transaction occurs, the investment associate will provide written notification to the RLO or CAO as soon as reasonably practical upon expiration of the approval period.

#### **Policy Distribution and Certifications**

The RLO will provide a copy of this updated Policy to all investment associates no less frequently than annually or when substantive changes are made to this Policy. Investment associates will attest to compliance with this Policy through initial and quarterly certifications as described below.

#### **Initial Certification Form**

Upon implementation of this updated Policy, all current investment associates will certify that they have received, read and will comply with this Policy. All new hires to the Investment Department will receive a current copy of this Policy promptly after being employed. The RLO will meet with new investment associates to provide an overview of this Policy. All new investment associates will be required to acknowledge they are subject to this Policy and have read and understand this Policy as evidenced by the Initial Certification Form - see Exhibit A.

#### **Quarterly Certification Form**

Every investment associate must submit a Quarterly Certification Form (see Exhibit B) to the RLO following each quarter-end. The certification requires investment associates to indicate whether or not transactions in covered securities occurred during the previous quarter for an investment associate's

own account or for an account in which the associate has beneficial ownership and decision making authority for the account. **In the event an investment associate has no reportable trades to disclose, he or she will still be required to submit the report to the RLO certifying that no reportable trades occurred during the previous quarter.** A fully completed Transaction Report for Covered Securities (see Exhibit C) along with the Personal Trading Pre-Clearance Form (see Exhibit D) must be completed if trades occurred in covered securities during the previous quarter.

### **Violations**

Investment associates must immediately report any known violation of this Policy to the RLO. All reports will be treated confidentially and investigated promptly and appropriately. VRS will not retaliate against any investment associate that reports a violation in good faith and any retaliation constitutes a further violation of this Policy.

Each investment associate is required to adhere to this Policy. Failure to comply could result in sanctions, the level of which will depend on the severity of the infraction. Sanctions may include, but not be limited to: a written reprimand; demotion of job duties; disgorgement of profits; and/or, termination of employment. Additionally, improper or illegal actions could result in criminal penalties and/or civil liabilities.

### **Training**

The RLO will provide an overview related to this Policy to all employees at the time they begin employment at VRS and to VRS investment associates periodically thereafter. However, failure to provide this training or the failure of an employee to attend training will not excuse noncompliance with this Policy. The provisions of this Policy are intended to be read in conjunction with other VRS policies.

**Exhibit A**

**VRS Investment Department  
Personal Trading Policy**

**INITIAL CERTIFICATION FORM**

I have read the VRS Investment Department Personal Trading Policy. I understand the requirements of this document, recognize that I am subject to this Policy, understand the penalties for non-compliance and agree to comply with this Policy.

Investment Associate Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by RLO or CAO: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Return this completed form to the Regulatory and Legal Officer



**Exhibit B**

**VRS Investment Department  
Personal Trading Policy**

**Quarterly Certification Form – Quarter Ending \_\_\_\_\_**

By checking this box, I certify that I have attached the Transaction Report for Covered Securities (see Exhibit C) for applicable trades done in my personal accounts and/or accounts whereby I exercise investment discretion for the time period indicated. To the best of my knowledge, the execution of this/these trade(s) does not violate the VRS Investment Department's Personal Trading Policy.

OR

By checking this box, I certify that no trades of such covered securities were executed for the time period indicated.

---

AND

By checking this box, I certify that to the best of my knowledge I was in compliance with all requirements of the Personal Trading Policy.

Investment Associate Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by RLO or CAO: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Return this completed form to the Regulatory and Legal Officer

---

Exhibit C

VRS Investment Department  
Transaction Report for Covered Securities

Quarter Ended \_\_\_\_\_

During the quarter referred to above, the following transactions were effected in covered securities which are required to be reported pursuant to the VRS Investment Department Personal Trading Policy.

Date of Transaction	Security Name	Security Symbol	Nature of Transaction (i.e. Sale)	Number of Shares	Share Price	Dollar Amount of Transaction

This Transaction Report excludes transactions not required to be reported by the Personal Trading Policy (i.e. non-covered securities). I hereby certify that the information contained in this Transaction Report is accurate and complete to the best of my knowledge.

Investment Associate  
Signature: \_\_\_\_\_

Reviewed by RLO  
or CAO: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

Reviewed By Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Exhibit D

VRS Investment Department  
 Personal Trading Pre-Clearance Form

Before trading (selling) in any covered security prior approval must be obtained from either the Regulatory and Legal Officer (RLO) or the Chief Administrative Officer (CAO) as evidenced by completion of this form.

Security Name	Security Symbol	Nature of Transaction (i.e. Sale)	Description of Requested Transaction Dollar Value or Quantity to be Sold

I hereby certify that the information contained in this Pre-Clearance Form is accurate and complete to the best of my knowledge.  
 I agree to provide a brokerage statement or trade confirmation for the transaction(s) listed above within ten business days of completion of the trade(s).  
 I will notify the RLO promptly if the approved transaction(s) does not occur.

Investment Associate  
 Signature: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 Title : \_\_\_\_\_  
 Date: \_\_\_\_\_

Reviewed by  
 Supervisor: \_\_\_\_\_  
 Date: \_\_\_\_\_

Reviewed by RLO  
 or CAO: \_\_\_\_\_  
 Date: \_\_\_\_\_

Approval:  Granted  Denied  Trade did not occur  
 If Granted, this pre-clearance approval is good through close of business on \_\_\_\_\_.

**VRS INVESTMENT DEPARTMENT  
POLICY ON GIFTS  
Effective July 1, 2015**

***I. PURPOSE***

It is the intent of the VRS Investment Department to be a national leader in the area of internal governance and to display a high level of ethical conduct. The Department will strive to remain above reproach as it discharges the duties related to investments that have been assigned by the VRS Board of Trustees.

It is also the intent of the VRS Investment Department to treat the sections of the State and Local Government Conflict of Interests Act (“COIA”) relating to gifts as the minimum acceptable standard. Therefore, the policy on gifts that will govern the Department will strive to meet or exceed this standard.

In furtherance of these intents, this policy is established to define the behavioral guidelines within which all members of the VRS Investment staff are expected to conduct themselves.

***II. PROHIBITED CONDUCT UNDER COIA***

Generally, COIA prohibits the following conduct relating to gifts:

- A. Soliciting or accepting money or other thing of value for services performed within the scope of one’s official duties, except the compensation, expenses or other remuneration paid by the agency of which one is an officer or employee.
- B. Accepting any money, loan, gift, favor, service, or business or professional opportunity that reasonably tends to influence one in the performance of his official duties.
- C. Accepting a gift from a person who has interests that may be substantially affected by the performance of the officer's or employee's official duties under circumstances where the timing and nature of the gift would cause a reasonable person to question the officer's or employee's impartiality in the matter affecting the donor.
- D. Accepting gifts from sources on a basis so frequent as to raise an appearance of the use of one’s public office for personal gain.

***III. GIFT-RELATED DISCLOSURE REQUIREMENTS UNDER COIA***

A “required filer” under COIA must make the following annual disclosures:

- A. Lodging, transportation, money, or any other thing of value (excluding meals or drinks coincident with a meeting) with a combined value exceeding \$200 for the presentation of

a single talk, participation in one meeting, or publication of a work in his or her capacity as an officer or employee of the agency.

- B. Payments under (III. A) must be listed even if they are donated to charity.
- C. Generally, payments under (III. A) need not be listed if they are returned within 60 days after receipt.
- D. Any gift or entertainment at a single event where the value received by you from any business, governmental entity, or individual exceeds \$50 and for which you neither paid nor rendered services in exchange.
- E. Any gift or entertainment in any combination where the value received by you from any business, governmental entity, or individual exceeds \$100 and for which you neither paid nor rendered services in exchange.
- F. When completing the VRS Travel Expense Reimbursement Request form, VRS Investment staff must complete that portion of the form titled Detailed Record of Items for Conflict of Interest Reporting, if applicable.

#### ***IV. VRS INVESTMENT DEPARTMENT POLICY ON GIFTS***

In light of the standard of conduct enunciated under COIA and the desire of the VRS Investment Department to strive to meet or exceed this standard, the VRS Investment Department Policy on Gifts will be as follows (for purposes of this policy the term “gift” includes entertainment):

- A. No member of the VRS Investment staff, while acting in his or her official capacity, will solicit or arrange a gift for him or herself or for any other person from any current, prospective, or potential external investment manager, placement agent, consultant, broker/dealer, or related vendor, or any affiliate thereof.
- B. No member of the VRS Investment staff will accept any unsolicited gift from any current, prospective, or potential external investment manager, placement agent, consultant, broker/dealer, or related vendor, or any affiliate thereof, unless it is a token, educational, promotional or advertising item of nominal value (i.e., estimated market value of less than \$50), and does not compromise, or appear to compromise, the independence or judgment of the VRS Investment staff member. Examples of token, educational, promotional or advertising items of nominal value include, but are not limited to: a hat, coffee mug, pen, tin of popcorn, nylon duffle bag, etc.
- C. No member of the VRS Investment staff will accept any gift through an intermediary, if he or she knows, or has reason to know, that the gift has originated from a source that would make the gift prohibited under this policy.
- D. In no event will a member of the VRS Investment staff accept a gift if the source of the gift is not identified. If the source of any gift cannot be ascertained, the gift will be donated to a suitable charitable organization.



- E. No member of the VRS Investment staff will accept any complimentary work or analysis offered or performed by a current, prospective, or potential external investment manager, placement agent, consultant, broker/dealer, or related vendor, or any affiliate thereof, that is intended to benefit personally the involved VRS Investment staff member if such work or analysis is offered to or performed for such VRS Investment staff member because of his or her official capacity.
- F. No cash, cash equivalents or securities of any value may ever be accepted.
- G. Any gift, the receipt of which is prohibited by this policy, will either be returned to its source immediately or donated to a suitable charitable organization.
- H. Meals and drinks that are coincident with a meeting are not considered to be items of value that implicate this policy.
- I. Sponsored paid travel is permitted under this policy where the VRS Investment staff member serves in an advisory capacity (i.e. Advisory Board) for current investments where these travel expense have been effectively paid by VRS through the management fees.

Where considered appropriate, the VRS Investment staff will inform current, prospective, or potential external investment managers, placement agents, consultants, broker/dealers, and related vendors, or any affiliate thereof, of the existence of this policy and request, wherever possible, that such entities refrain from placing VRS Investment staff in situations that would implicate this policy and its enforcement.

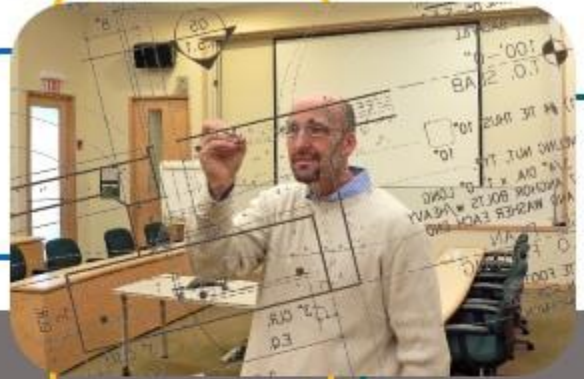
# Quarterly Reports on the Modernization Program - Phase Four

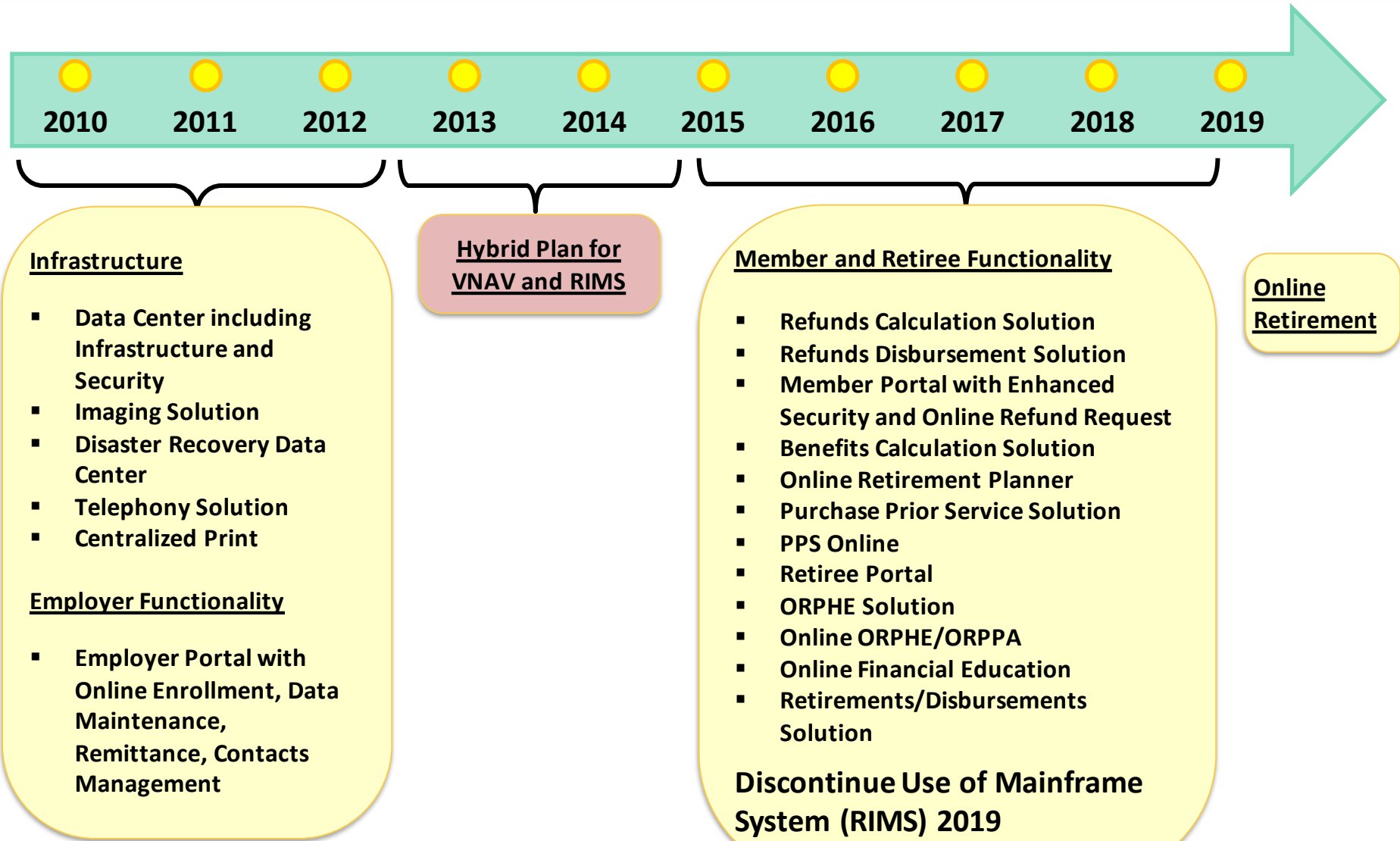


Virginia  
Retirement  
System

# Modernization Phase 4

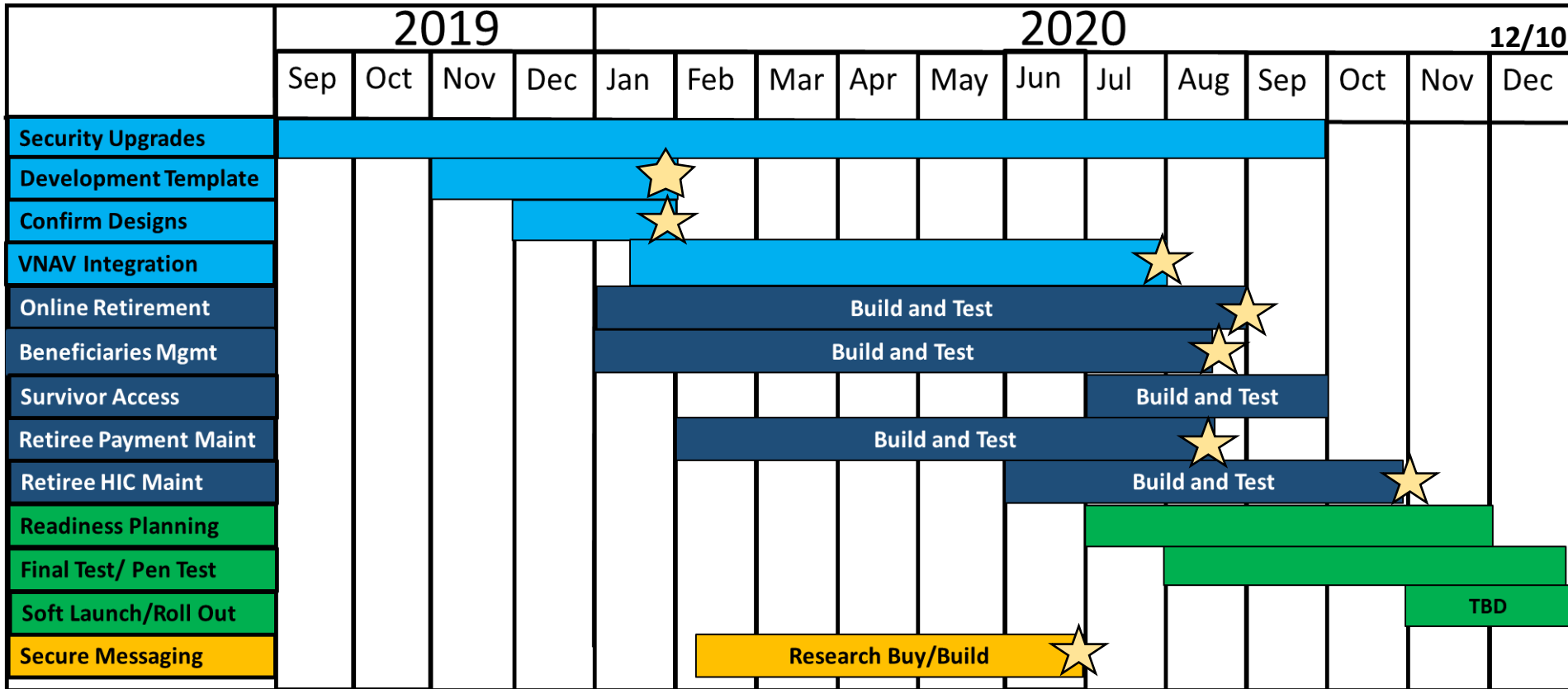
Audit Committee  
March 16, 2021





- Modernization Program
  - The final deliverable under the Modernization Program is a set of new features for myVRS
    - Online retirement
    - Beneficiaries management
    - Retiree payment maintenance
    - Retiree health insurance credit maintenance
    - Survivor access
- This status report reflects progress as of 2/15/2021

# Original Project Plan



- Security upgrades are complete

# Current Software Status



<b>myVRS Feature</b>	<b>Window Build</b>	<b>Integration Build</b>	<b>System Testing</b>	<b>Acceptance Testing</b>
<b>Online Retirement</b>	Complete	Complete	Complete	Complete
<b>Payment Maintenance</b>	Complete	Complete	Complete	3/18/21
<b>Beneficiary Management</b>	Complete	Complete	Complete	5/20/21
<b>Health Insurance Credit Maintenance</b>	Complete	Complete	Complete	3/18/21
<b>Survivor Access</b>	4/2/21	4/2/21	4/9/21	5/20/21

# Rollout Plan

	2020	2021					
	Dec	Jan	Feb	Mar	Apr	May	Jun
Online Retirement Pilot	■						
Online Retirement Wave 1		■					
Online Retirement Wave 2			■				
Online Retirement Wave 3				■			
Enhanced Security	■	■					
Payment Maintenance Waves					■	■	
Health Insurance Credit Waves					■	■	
Beneficiary Management Waves							■
Survivor Registration Waves							■

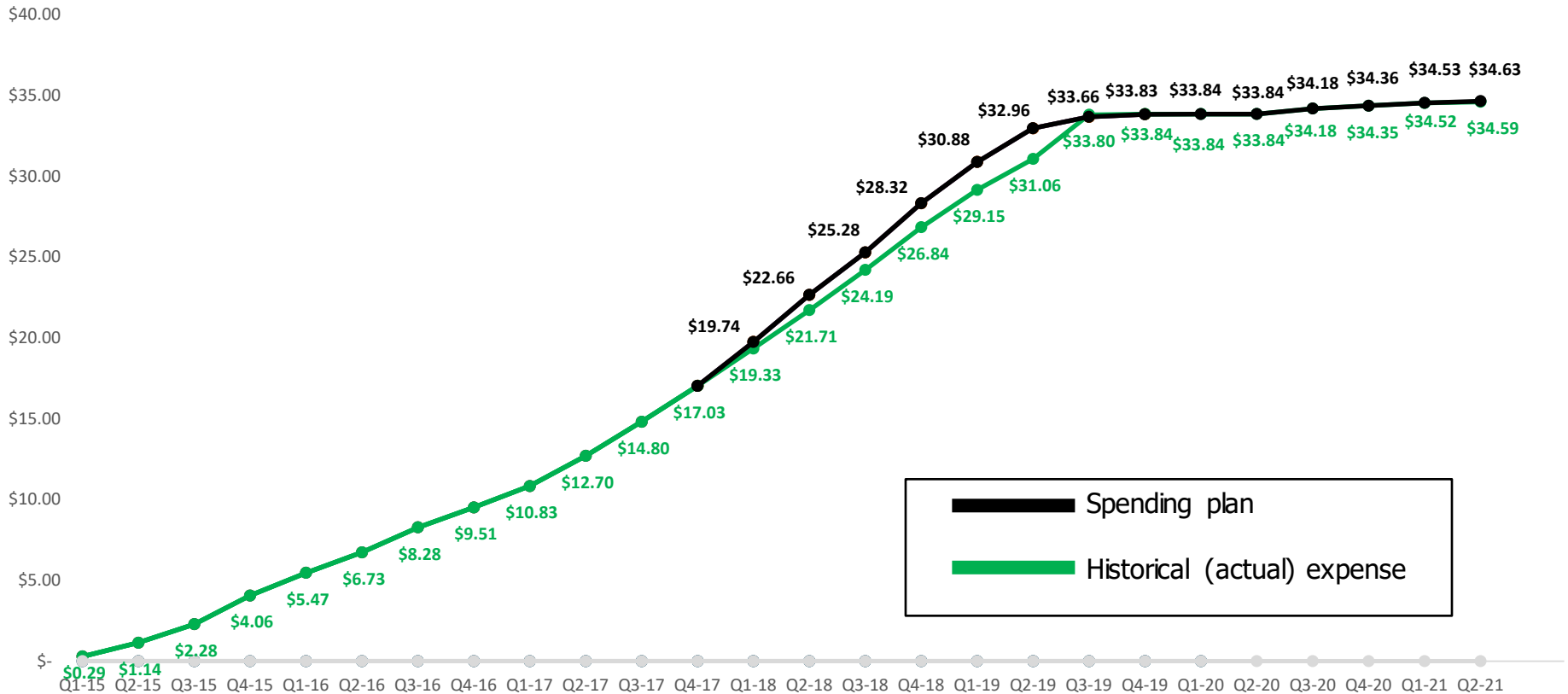
- Rollout will occur feature by feature and done in a manner that does not impact year end processing.



- Outreach and training
  - Development of embedded educational videos is in progress
- VRS is utilizing a soft launch approach
  - Each feature will be rolled out in waves
  - Allows for careful monitoring and correction of any issues before they impact a larger population
  - Implementation Risk Mitigation Strategy Plan is being development
    - Quality Monitoring
    - Controlling volumes
- Post wave business rollout
  - Risk mitigation approach during the May thru August time period
  - Control volume to ensure operations are not impacted by new processes

- Online Retirement
  - Pilot complete
  - 26 applications submitted and approved
  - Activities ongoing to identify more members to apply online
- Enhanced Security
  - Implementation complete
  - Quality monitoring continues
  - 7,114 existing users signed up
  - 1,683 new registrations

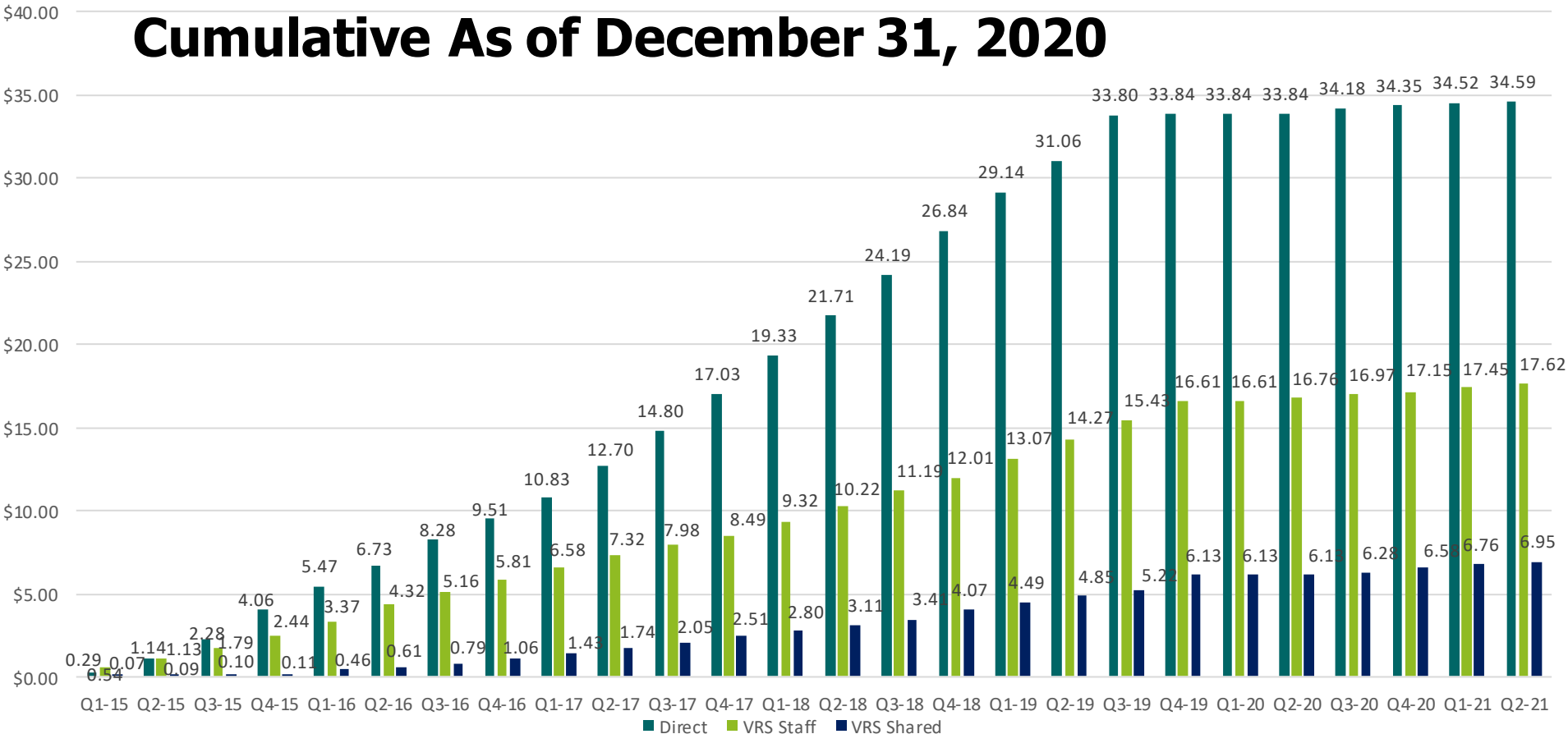
# Budget as of 12/31/2020



# Total (Direct and Indirect) Cost



## Cumulative As of December 31, 2020





# Modernization Program Phase Four

*Internal Audit's Quarterly Review  
As of February 22, 2021*

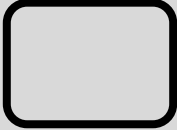
THIS REPORT IS INTENDED SOLELY FOR THE USE OF THE VRS BOARD OF TRUSTEES AND THE MANAGEMENT OF VRS AND IS NOT INTENDED FOR OTHER PURPOSES.



# Phase Four's Scope

---

- To decommission the Retirement Information Management System (RIMS) by converting business functionality in RIMS over into VNAV.
- To implement a new online customer portal for members and retirees.



# Phase Scope Changes

---



## This Quarter

- *None.*

## Previous Scope Changes

- *Quarterly Report as August 27, 2018 (reduction)*
  - Interactive Voice Response (IVR) Self-Service Replacement removal from phase scope.
- *Quarterly Report as of May 1, 2018 (reduction)*
  - Removal of Disability Retirement Case Management Functions. Case Management Functions will be handled by the new Medical Board vendor
- *Quarterly Report as of August 1, 2017 (increase)*
  - Incorporation of three individual projects under Phase Four scope for resource efficiencies.
    - ORPHE/ORPPA
    - Financial Education Resources within myVRS Portal
    - Retiree Portal Payment and Health Insurance Maintenance
- *Quarterly Report as of February 1, 2016 (increase)*
  - Addition of Online Assistance Tool for the Customer Contact Center within CSS #1 (Member Portal)

# Observations

---



**VRS will release Online Retirements Plus Suite in two main stages.**



## **Feature Rollout Stage**

- VRS has created individual roll-out plans for each feature; however, each plan has similar schedules with waves being introduced for vetting by a sub-population of participants prior to its release.
- Each feature's rollout risks will be mitigated by staggering roll-outs and slowly introducing volume and feature types.
- Starting in April 2021, once rollouts are complete, features will be turned over to the business for release, either soft launch or full release, with the Phase Four team's support.



# Observations

---



## Feature Rollout Stage: Online Retirements

- In December 2020, VRS began introduction of the Online Retirement roll-out with the commencement of a pilot phase.
- After a successful pilot phase, VRS began the waves portion of the roll-out.
  - Each wave focuses on slowly increasing the volume and complexity of application types submitted.
  - The wave segments are progressing positively while VRS is focusing on increasing application volumes.
- Once the wave roll-out is completed in March 2021, this functionality will be ready for release by the business with support of the Phase Four team.
- Starting in April 2021, implementation and operations risk will continue to be mitigated by only allowing invited employers and slowly increasing access to the population during the soft launch period.

# Observations



## Feature Release Stage

- Once rollouts are completed, features will be turned over to the business for release (Soft or Full) with support by the Phase Four team.



- Soft launches will be used for three of the feature releases to 1) mitigate implementation and operations risk by throttling access and 2) allow VRS to continue to validate the quality of processing within features' functionality.

## Post Phase Release Schedule

<b>Payment Maintenance</b> Full Release: June 2021	<b>Beneficiary Management</b> Full Release: July 2021	<b>HIC Maintenance</b> Soft Launch: June 2021 Full Release: Aug. 2021	<b>Online Retirements</b> Soft Launch: April 2021 Full Release: Oct. 2021	<b>Survivor Registration</b> Soft Launch: July 2021 Full Release: TBD
---	--	---	---	---

# Phase Schedule

---

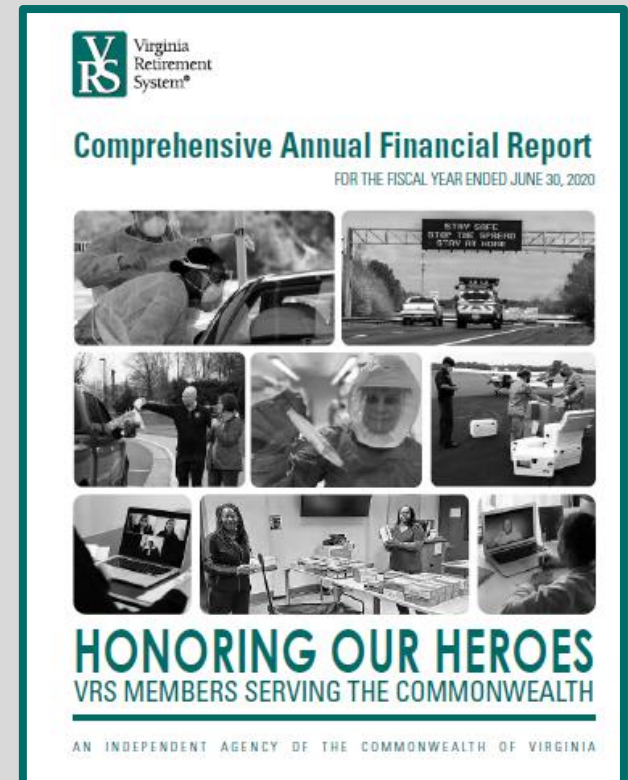


- VRS mitigation strategies are appropriately based on the agency's current environmental context.
- VRS will most likely need to continue to be *agile* with each feature's full release implementation date based on actual performance, busy operational time periods and competing priorities to ensure it has the bandwidth to properly address all necessary aspects of the implementation.
- We support and encourage VRS' continued cautious approach and ongoing monitoring through implementation and afterwards.
- At this time, we are in agreement with management's representation of Phase Four's overall status and progress to date.

# Phase Budget

---

- We are in agreement with Phase Four expenditures to date represented in management's presentation.
- At this time, we believe Phase Four is on budget to complete the outstanding functionality and close out Phase Four.



# Methodology

---



## Purpose

- To provide an objective assessment of the Modernization Program Phase Four's progress, free from influence, guidance and control of the development effort.
- To provide validation of the accuracy of management's quarterly status presentation.

# Methodology continued...

---

## **Process**

Gain an understanding of the purpose and progress of Phase Four through:

- Review of the Phase Four Microsoft SharePoint site or document management repository (applicable release documents)
- Interview of the Modernization Program Manager and other relevant personnel
- Attendance at ESC and other relevant meetings

## **Approach and Timing**

- Focus on specific areas active during the period of review
- Performed quarterly through the end of Phase Four

# Questions



# Annual Audit Plan Progress Report



# Internal Audit FY2021 Annual Audit Plan Progress Report

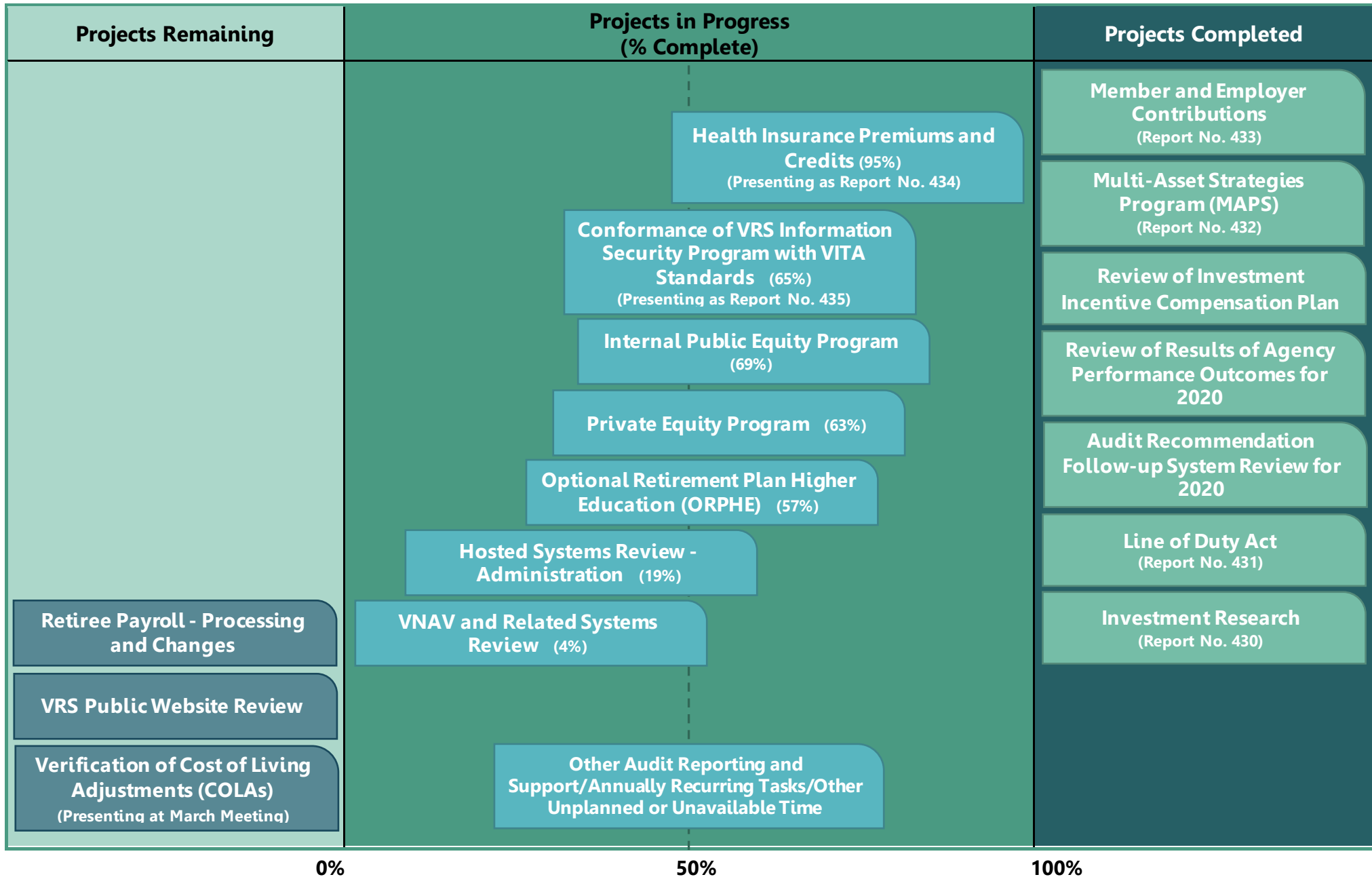
As of December 31, 2020



Progress Summary.....	1
Detailed Analysis.....	2-3
Explanatory Notes and Acronyms.....	4

# FY2021 Annual Audit Plan – Progress Report – Summary

As of December 31, 2020 (A detailed Budget vs. Actual analysis follows)



We are currently on track to complete the Annual Audit Plan, as modified and explained in the notes on page 4.

**FY2021 Annual Audit Plan - Progress Report - Detailed Analysis**  
**Budget vs. Actual - As of December 31, 2020**

Project/Activity	For FY2020		In FY2020		For the Project		For FY2021
	Budgeted Hours	Status	Total Actual Hours to Date	Estimated Remaining Hours	Actual or Estimate of Total Hours Needed	Estimated Variance Over/ (Under)	Planned Carryover Hours
<b>RISK BASED PROJECTS</b>							
<b>Carry Over from Prior Long-Range Plan</b>							
Line of Duty Act	50	Complete	61	-	61	11	-
Member and Employer Contributions	200	Complete	246	-	246	46	-
Investment Research (Portfolio Intelligence Team)	100	Complete	127	-	127	27	-
<b>Investments</b>							
Internal Public Equity Program <sup>(1)</sup>	550	In Progress	380	375	755	205	-
Private Equity Program	600	In Progress	377	223	600	-	-
<b>Benefits</b>							
Health Insurance Premiums and Credits	400	Reporting	379	50	429	29	-
Optional Retirement Plan Higher Education (ORPHE) <sup>(2)</sup>	600	In Progress	344	358	702	102	-
Retiree Payroll - Processing and Changes <sup>(3)</sup>	800	In Planning	-	550	800	-	250
<b>Operations</b>							
<b>Information Technology</b>							
Conformance of VRS Information Security Program with VITA Standards	150	Reporting	98	42	140	(10)	-
Hosted Systems Review - Administration	500	In Progress	97	403	500	-	-
VNAV and Related Systems Review <sup>(3)</sup>	800	In Progress	31	594	800	-	175
VRS Public Website Review <sup>(3)</sup>	500	Not Started	-	250	500	-	250
<b>OTHER AUDIT REPORTING AND SUPPORT</b>							
<b>Other Reporting</b>							
Audit Quality Assurance Improvement Program	150	Complete	168	-	168	18	-
Audit Recommendation Follow-Up System Annual Review <sup>(4)</sup>	150	FY20 Complete	37	113	150	-	-
Audit Recommendation Follow-Up System Quarterly Monitoring	25	In Progress	21	8	29	4	-
Modernization Program Monitoring	200	In Progress	104	80	184	(16)	-
Report on Fraud, Waste and Abuse Hotline Cases	75	In Progress	32	30	62	(13)	-
Review of Investment Incentive Compensation Plan	75	Complete	73	-	73	(2)	-
Review Results of Agency Performance Outcomes (APOs) <sup>(4)</sup>	75	FY20 Complete	41	34	75	-	-
Verification of Cost of Living Adjustments (COLAs) <sup>(4)</sup>	20	Not Started	-	20	20	-	-

**FY2021 Annual Audit Plan - Progress Report - Detailed Analysis**  
**Budget vs. Actual - As of December 31, 2020**

Project/Activity	For FY20		In FY20		For the Project		For FY2021
	Budgeted Hours	Status	Total Actual Hours to Date	Estimated Remaining Hours	Actual or Estimate of Total Hours Needed	Estimated Variance Over/ (Under)	Planned Carryover Hours
<b>OTHER AUDIT REPORTING AND SUPPORT, Continued</b>							
<b>Audit Support</b>							
Coordination with the APA	40	Ongoing	15	10	25	(15)	-
Data Analytics and Support	900	Ongoing	462	438	900	-	-
Develop and Update Annual and Long-Range Plans	125	Ongoing	72	53	125	-	-
Monitor Annual and Long-Range Plan Progress	100	Ongoing	42	58	100	-	-
<b>Audit and Compliance Committee Support</b>							
Review, Compile and Publish Meeting Materials	300	Ongoing	206	150	356	56	-
Attend Audit and Compliance Meetings	80	Ongoing	40	40	80	-	-
Prepare Committee Report and Meeting Minutes	80	Ongoing	33	40	73	(7)	-
<b>ONGOING ACTIVITIES</b>							
<b>Risk Monitoring Activities</b>							
Attend Board and other Committee Meetings	170	Ongoing	99	71	170	-	-
Attend Executive Team Meetings (DEC, Roadmap, C-suite)	100	Ongoing	55	45	100	-	-
Monitor and Review Professional Literature	90	Ongoing	51	39	90	-	-
Participate in Professional Organizations	90	Ongoing	20	50	70	(20)	-
<b>Other Administrative Activities</b>							
Continuing Professional Education	360	Ongoing	221	150	371	11	-
Continuing Professional Education Administration	150	Ongoing	38	50	88	(62)	-
External Reporting and Other Interactions (OSIG/VITA)	10	Ongoing	14	5	19	9	-
Internal Audit Staff Meetings and Mentoring	300	Ongoing	187	150	337	37	-
Manage Budget, Departmental Files, SPCC, and Purchasing	100	Ongoing	34	50	84	(16)	-
Participate in VRS Events/Committees	150	Ongoing	97	53	150	-	-
Performance Standards and Evaluations	60	Complete	53	-	53	(7)	-
<b>OTHER TIME</b>							
Annual Leave	750	Ongoing	632	400	1,032	282	-
Holidays	648	Ongoing	456	192	648	-	-
Other Leave (Sick, Personal, Volunteer, etc)	660	Ongoing	357	303	660	-	-
Unplanned Hours <sup>(5)</sup>	1,197	Ongoing	540	663	1,203	6	-
<b>TOTAL TIME</b>	<b>12,480</b>		<b>6,340</b>	<b>6,140</b>	<b>13,155</b>	<b>675</b>	<b>675</b>

# Fiscal Year 2021 - Annual Audit Plan Progress – Detailed Analysis

## Budget vs. Actual – as of December 31, 2020

### Explanatory Notes:

- (1) This program was last reviewed in 2014. Anticipated overages are due to expanded scope and testwork over operational activities closely aligned to this program not originally envisioned for the project. Given the duration since the last audit, the enhancements to the program and changes in leadership and focus for the program, these expansions are not unusual and help to enrich our audit coverage and address additional audit risks within the program and administration of investments.
- (2) This program was last reviewed in 2010. Anticipated overages are due to expanded scope and testwork over operational activities closely aligned to this program not originally envisioned for the project. Given the duration since the last audit, the adjustments to the program and changes in leadership, these expansions are not unusual and help to enrich our audit coverage and address additional audit risks within the program.
- (3) These projects are expected to or have started later than originally anticipated either to address internal or organizational resource considerations and needs. They will therefore carry over into the next audit plan year to be reported either at the September or December Audit and Compliance Committee meetings. Adjustments will be made when developing the proposed audit plan for FY2022 to accommodate them.
- (4) These projects reflect annually recurring tasks which require testwork to be initiated in one audit plan year and the conclusion and reporting to occur in the next. The actual hours to date reflect time spent completing the FY2021 projects and initiating the FY2022 projects.
- (5) The unplanned hours reported reflect departmental items not explicitly planned for in our original budget, such as
  - (A) Administrative and computer issues;
  - (B) VRS provided training;
  - (C) Internal Audit's involvement in VRS' Enterprise Risk Management and Enterprise Performance Management Initiative;
  - (D) Internal Audit's support of the development of an agency performance objective and operational measure dashboard;
  - (E) Review and enhancement of departmental policies and procedures and supporting tools; and
  - (F) Continued enhancement of SharePoint capabilities to store and manage audit documentation.

### Acronyms (Not defined elsewhere):

APA	Auditor of Public Accounts
ARFUS	Audit Recommendation Follow-Up System
C-suite	Chief Executives for VRS, including the Executive Director and Chief Investment Officer
DEC	Director's Executive Committee
IIA	Institute of Internal Auditors
ISACA	Information Systems Audit and Control Association
OSIG	Office of the State Inspector General
Roadmap	Program management tool used by VRS management to monitor critical organizational activities
SPCC	Small Purchase Charge Card
VITA	Virginia Information Technologies Agency

# Quarterly Report on Fraud, Waste and Abuse Hotline Cases

# Report of Alleged Fraud, Waste and Abuse Hotline Cases

**For Complaints Received During the Period  
November 1, 2020 through January 31, 2021**

## SUMMARY OF CASES REVIEWED AND CLOSED

During the period November 1, 2020 through January 31, 2021, we received one case of potential Fraud, Waste and Abuse from the Office of the State Inspector General. The case alleged abuse of short-term disability benefits. The case was unfounded and thus closed.

VRS Control Number	Date Complaint Received	Noted Concern	VRS Personnel Assisting with Allegation	Case Closed	Resolution	Source of the Complaint	Report to OSIG
42	11/17/2020	There was an allegation of Short-Term Disability abuse.	Mike Pote	No	The case was unfounded.	OSIG	No



## Background

Fraud, Waste and Abuse relating to VRS can be comprised of any number of concerns. Such items can be reported to VRS' Internal Audit Department directly or through the Office of the State Inspector General (OSIG) State Employee Fraud, Waste and Abuse Hotline. (A majority of complaints are received through OSIG.)

All matters that relate to Fraud, Waste and/or Abuse reported are reviewed to determine the proper protocol for investigation.

## Committee Reporting

Cases of a serious and/or significant nature will be reported to the VRS Audit and Compliance Committee immediately. At a minimum, a summary of all Hotline cases will be reported to the Audit and Compliance Committee on a quarterly basis.

## Retention

Hardcopy documents, including handwritten notes, are stored in a secure location until the case is closed, upon which they are shredded. Electronic files are stored on Internal Audit's secured drive. Documentation containing case details are labeled "**CONFIDENTIAL – STATE FRAUD, WASTE AND ABUSE HOTLINE DOCUMENTS**" and sensitive items are labeled FOIA Exempt. As appropriate, files are disposed of in accordance with the Library of Virginia's retention policy.

# FRAUD, WASTE AND ABUSE CASE MANAGEMENT

## PROCESSING OF COMPLAINTS

When received, the Audit Director and Hotline Auditor perform a preliminary review of the complaint. After initial discussion, the Hotline Auditor determines whether a formal response is required by OSIG (cases referred by OSIG may or may not require a formal response, depending on the nature of the complaint) and adds the case to Internal Audit's Hotline Tracking System.

The Hotline Auditor sets up a case file on Internal Audit's secured and restricted drive to maintain confidentiality. The Hotline Auditor then evaluates the case details and may review information available in VRS' systems to obtain further details about the subject of the complaint. Additionally, the Hotline Auditor may forward the details of the case to other VRS personnel for review. The Hotline Auditor also notifies the VRS Director of the case.

Complaints regarding disability benefits constitute the large majority of the Hotline cases received by VRS. The Hotline Auditor will meet with appropriate VRS staff, as necessary, to discuss details of the case in order for all parties to proceed forward with their portion of the investigation. Complaints forwarded to others are monitored for resolution. Actions and determinations for cases are reviewed for reasonableness by the Hotline Auditor. Once a determination of appropriate action has occurred, such action is documented in the Internal Audit case file and on the Hotline Tracking System. The Internal Audit Director is apprised of all actions and determinations.

For other complaints, such as internal fraud, waste or abuse (examples could include abuses of various types of leave, teleworking policies, employee theft, etc.), the Hotline Auditor investigates the allegation and obtains supporting documentation from management, as needed. If a determination is made that there is a reasonable possibility of fraud, waste or abuse, management is notified of the allegation by the Audit Director and given a reasonable timeframe in which to report back to the Audit Director any actions taken regarding the allegation. The Audit Director determines the reasonableness of such action, reports the actions and resolution of the complaint to the Hotline Auditor who documents the results in the case file and on the Hotline Tracking System.

All investigation results are reported to the VRS Director and members of the VRS Audit and Compliance Committee once a case is resolved, regardless of the outcome.


# Miscellaneous Updates



P.O. Box 2500, Richmond, VA 23218-2500  
Toll-free: 888-827-3847  
Website: varetire.org  
Email: vrs@varetire.org

Patricia S. Bishop  
Director

## MEMORANDUM

**To:** Jennifer P. Schreck, Internal Audit Director  
**From:** Patricia S. Bishop, Director   
**Date:** February 1, 2021  
**Subject:** Summary of Travel Related Expenses

I am attaching the following:

1. Summary of Travel Related Expenses Paid During the Quarter of and Fiscal Year-to-Date Through December 31, 2020.
2. Summary of Other Sponsored Travel Related Expenses Paid During the Quarter of and Fiscal Year-to-Date Through December 31, 2020. *Because of the COVID-19 travel restrictions, there was no reportable Other Sponsored Travel Related Expenses for the period.*
3. Schedule of Selected Travel Related Expenses Paid During the Quarter of and Fiscal Year-to-Date Through December 31, 2020.
4. Record of Attendance and Per Diems for the Quarter Ended December 31, 2020.

This information should be shared with the Audit & Compliance Committee.

If you have any questions, please do not hesitate to ask.

PSB/lbk

Attachments

Schedule of Selected Travel Related Expenses  
 (Board and Committee Members, VRS Executive Staff, and VRS Professional Investment Staff)  
 Paid During the Quarter Ended December 2020

Name of Traveler	Voucher Number	Date(s) of Travel	Location	Sponsor	Purpose	Sponsor Provided	VRS Provided	Total
<b>Board and Committee Members</b>								
<b>Staff</b>								
Bishop, Patricia S.		11/6/20	Fredericksburg, VA		Business Lunch Meeting with William Garrett, VRS Board Member	-	87.03	87.03
<b>Totals</b>						<b>-</b>	<b>87.03</b>	<b>87.03</b>

**Virginia Retirement System**  
**Summary of Other Sponsored Travel Related Expenses**  
**(Staff Not Otherwise Includable in Quarterly Reporting)**  
**Fiscal Year-To-Date Through December 2020**

Name of Traveler	Current Quarter		Fiscal Year-To-Date	
	Value Provided	Sponsor	Value Provided	Sponsor
	-		-	
	-		-	
	-		-	
	-		-	
<b>Totals</b>	<u>-</u>		<u>-</u>	

Virginia Retirement System  
 Summary of Travel Related Expenses  
 (Board and Committee Members, VRS Executive Staff, and VRS Professional Investment Staff)  
 Fiscal Year-To-Date Through December 2020

Name of Traveler	Current Quarter Costs						Fiscal Year-To-Date Prior Report						Fiscal Year-To-Date				
	Total Travel Expenses			Out of State Travel			Total Travel Expenses			Out of State Travel			Total Travel Expenses			Out of State Travel	
	Sponsor Provided	VRS Provided	Total	Number of Trips	Cost	Purpose	Sponsor Provided	VRS Provided	Total	Number of Trips	Cost	Sponsor Provided	VRS Provided	Total	No. of Trips	Cost	
Board of Trustees & Committee Members																	
Bishop, Patricia S.	-	87.03	87.03				-	-	-	-	-	-	87.03	87.03	-	-	
<b>Totals</b>	<b>-</b>	<b>87.03</b>	<b>87.03</b>	<b>-</b>	<b>-</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>87.03</b>	<b>87.03</b>	<b>-</b>	<b>-</b>	

**VRS BOARD OF TRUSTEES AND COMMITTEES  
RECORD OF ATTENDANCE & PER DIEMS  
FOR 4Q2020**

Member	Area	Month Paid: Oct-20					Nov-20					Dec-20		Total Days Attended	Per Diem Rate	Per Diem Payments			Total
		9/29/20	10/7/20	10/13/20	10/14/20	10/15/20	11/10/20	11/16/20	11/17/20	11/17/20	11/19/20	12/10/20	12/10/20			Oct	Nov	Dec	
		A&C	BOT	A&P	B&A	BOT	IAC	B&A	IPC	BOT	DCPAC	A&C	BOT						
J BRANDON BELL, II	BOT	X	-	X	X	X	X	X	-	X	X	-	X	9	\$ 300.00	\$ 1,200.00	\$ 1,200.00	\$ 300.00	\$ 2,700.00
MICHAEL P. DISHAROON	BOT	X	X	X	X	X	X	X	X	X	X	-	X	10	300.00	1,500.00	1,200.00	300.00	3,000.00
WILLIAM A. GARRETT	BOT	X	X	X	X	X	-	X	X	X	-	X	X	8	300.00	1,500.00	600.00	300.00	2,400.00
SUSAN GOODEN	BOT	X	X	-	-	X	X	-	X	X	-	-	X	6	300.00	900.00	600.00	300.00	1,800.00
WALLACE G. HARRIS	BOT	-	X	X	X	X	X	X	X	X	-	-	X	8	300.00	1,200.00	900.00	300.00	2,400.00
W. BRETT HAYES	BOT	X	-	-	-	X	X	-	-	X	-	X	X	5	300.00	600.00	600.00	300.00	1,500.00
O'KELLY E. MCWILLIAMS, III	BOT	X	X	X	X	X	X	X	X	X	X	X	X	10	300.00	1,500.00	1,200.00	300.00	3,000.00
JOSEPH W. MONTGOMERY	BOT	X	X	X	X	X	X	X	X	X	-	X	X	9	300.00	1,500.00	900.00	300.00	2,700.00
TROILEN G. SEWARD	BOT	X	X	X	X	X	X	X	X	X	-	-	X	9	300.00	1,500.00	900.00	300.00	2,700.00
ROBERT C. CARLSON	DCPAC	-	-	-	-	-	-	-	-	-	-	-	-	-	300.00	-	-	-	-
RIVINDRA DEO	DCPAC	-	-	-	-	-	-	-	-	-	X	-	-	1	300.00	-	300.00	-	300.00
SHANNON T. IRVIN	DCPAC	-	-	-	-	-	-	-	-	-	X	-	-	1	300.00	-	300.00	-	300.00
RICK LARSON	DCPAC	-	-	-	-	-	-	-	-	-	X	-	-	1	300.00	-	300.00	-	300.00
BRENDA O. MADDEN	DCPAC	-	-	-	-	-	-	-	-	-	X	-	-	1	300.00	-	300.00	-	300.00
KATHERINE T. SEAY (2)	DCPAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAVID A. WINTER	DCPAC	-	-	-	-	-	-	-	-	-	X	-	-	1	300.00	-	300.00	-	300.00
DEBORAH ALLEN-HEWITT	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
MICHAEL R. BEASLEY	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
THEODORE ECONOMOU (1)	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	-	-	-	-	-
THOMAS S.GAYNER	IAC	-	-	-	-	-	-	-	-	-	-	-	-	-	300.00	-	-	-	-
LAWRENCE E KOCHARD	IAC	-	-	-	-	-	X	-	-	X	-	-	-	2	300.00	-	600.00	-	600.00
NANCY G. LEAKE	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
WILBERT BRYAN LEWIS	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
ROD SMYTH	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
WILLIAM H. WEST	IAC	-	-	-	-	-	X	-	-	-	-	-	-	1	300.00	-	300.00	-	300.00
																<b>\$11,400.00</b>	<b>\$12,000.00</b>	<b>\$ 2,700.00</b>	<b>\$ 26,100.00</b>

Number Attending	8	7	7	7	9	16	7	7	10	8	4	9							
Total Days per Diem Paid (Control Total)	8	7	7	7	9	15	7	7	3	8	4	5	87	x \$300				=	26,100.00

(1) This individual waived the payment of stipend and per diem payments for meetings attended effective 8/2/15.  
(2) This individual waived the payment of per diem payments for meetings attended.

X = Present



**MEMORANDUM**

TO: Patricia S. Bishop, VRS Director

FROM: Jennifer P. Bell Schreck, VRS Internal Audit Director 

DATE: February 3, 2021

RE: Cost of Living Adjustments (COLAs)

Internal Audit has reviewed the amounts referred to as "Cost of Living Adjustments" as set forth in the attached letter and supporting table from VRS' actuary, Cavanaugh Macdonald Consulting, LLC, dated January 14, 2021.

In conducting our review, we independently recalculated the "Cost of Living Adjustments" using data and procedures provided by management and the actuary, while confirming certain external components associated with such calculations. We also examined the Code of Virginia sections referred to in the actuary's letter and supporting table.

Based upon our review, we found the "Cost of Living Adjustments" in the above referenced letter and table to be valid and accurate, based on the data provided, subject to the assumptions included therein with respect to increases in both VSDP LTD benefits and VSDP and VLDP creditable compensation, where the amounts are not specified by statute, but instead are to be recommended by the actuary and approved by the Board.

Please let me know if you have any questions. I ask that you share this information with the Benefits and Actuarial Committee.

Attachment





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

January 14, 2021

Mr. Rory Badura, ASA, EA, MAAA  
Senior Staff Actuary  
Virginia Retirement System  
1200 E. Main Street  
Richmond, VA 23219

## **2021 Cost of Living Adjustments**

Dear Rory:

As requested, we have calculated the Cost of Living Adjustments (COLAs) called for under Virginia Statutes for VRS, VSDP, and VLDP.

In the table enclosed we present the COLAs to be effective July 1, 2021.

By statute, the VRS COLA is based on the ratio of the average of the monthly CPI-U for the 2020 calendar year (258.811) to the average of the monthly CPI-U for the most recent calendar year used in the determination of a COLA, 2019 calendar year (255.657). The result is 1.23%. The VRS COLA formula is applied to the CPI increase to produce COLAs effective July 1, 2021 of 1.23% for Plan 1 members vested as of January 1, 2013 and 1.23% for Plan 1 members not vested as of January 1, 2013 and all Plan 2 and Hybrid Plan members.

Statute also provides a COLA under the Group Life Insurance program in the minimum \$8,000 life insurance amount for members with at least 30 years of creditable service. The increase is the same percentage as the VRS COLA of 1.23% used for Plan 1 members not vested as of January 1, 2013 and all Plan 2 and Hybrid Plan members. Applying this increase to the prior year minimum of \$8,616, the minimum effective life insurance amount for members with at least 30 years of creditable service will increase to \$8,722 effective July 1, 2021.

The VSDP and VLDP COLAs are required by statute but the actual amounts are set by Board resolution. We have calculated the VSDP increase in creditable compensation for VRS pension benefit purposes based on the approach adopted in 2011. As recommended in 2011, the VSDP creditable compensation COLA is based on the increase in the pay rate for State, SPORS and VaLORS VSDP members active at the beginning and the end of the most recent plan year before the date of determination of the COLA. For 2021, it would be the ratio of the annual pays as of June 30, 2020 to the annual pays as of June 30, 2019 for VSDP members who were active in the State, SPORS and VaLORS plans as of both dates. The COLA calculated in this manner may be modified to reflect extraordinary pay adjustments during a given year. On this basis we have determined a VSDP creditable compensation COLA of 2.12% effective July 1, 2021. Our calculation is based on the data provided by VRS for the June 30, 2019 and 2020 actuarial valuations.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

[www.CavMacConsulting.com](http://www.CavMacConsulting.com)

Offices in Kennesaw, GA • Bellevue, NE



Mr. Rory Badura  
January 14, 2021  
Page 2

We used a similar approach to determine the VLDP creditable compensation COLA. That is, we have based the VLDP creditable compensation COLA on the increase in the pay rate for Teachers and non-hazardous Political Subdivision Hybrid plan members active at the beginning and the end of the most recent plan year before the date of determination of the COLA. For 2021, it would be the ratio of the annual pays as of June 30, 2020 to the annual pays as of June 30, 2019 for non-hazardous members who were active in the Teachers and Political Subdivision Hybrid plans as of both dates. The COLA calculated in this manner may be modified to reflect extraordinary pay adjustments during a given year. On this basis we have determined a VLDP creditable compensation COLA of 5.66% effective July 1, 2021. Our calculation is based on the data provided by VRS for the June 30, 2019 and 2020 actuarial valuations. However, as with the current approach with VSDP, we have assumed the VLDP creditable compensation COLA would be capped at 4.00% per year.

The Hazardous Duty Supplement is increased biennially by the Social Security COLAs which were 1.6% in December 2019 and 1.3% in December 2020. The biennial Social Security increase is 2.92%, resulting in an increase in the annual Hazardous Duty Supplement from \$1,187 to \$1,222 per month (\$14,664 annually).

We have enclosed a table showing the calculations of the COLAs in detail.

Please let us know if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LL', with a stylized flourish at the end.

Larry Langer, ASA, FCA, EA, MAAA  
Principal and Consulting Actuary

Enc.

Copy to: Cynthia Wilkinson (VRS)

**Virginia Retirement System (VRS), Virginia Sickness and Disability Program (VSDP), Virginia Local Disability Program (VLDP)  
and Group Life Insurance Program**



**Cost of Living Adjustments (COLAs) Recommendations Effective July 1, 2021**

Item	Code Section(s)	CPI-U		CPI Increase	COLA Calculation		
		2019	2020		100% of First 3%	50% of Next 4%	COLA (maximum 5%)
VRS COLA - Plan 1 vested as of 1/1/2013 - (100% of the increase in the CPI-U up to 3%, plus 50% of the next 4%, with a maximum COLA of 5%)	51.1-166	255.657	258.811	1.23% *	1.23%	0.00%	1.23%
Item	Code Section(s)	CPI-U		CPI Increase	COLA Calculation		
		2019	2020		100% of First 2%	50% of Next 2%	COLA (maximum 3%)
VRS COLA - Plan 1 non-vested as of 1/1/2013, Plan 2 and Hybrid Plan - (100% of the increase in the CPI-U up to 2%, plus 50% of the next 2%, with a maximum COLA of 3%)	51.1-166	255.657	258.811	1.23%	1.23%	0.00%	1.23%
Item	Code Section(s)	Creditable Compensation		Increase in Pay	COLA Calculation		
		2019	2020		100% of First 4%		COLA (maximum 4%)
VSDP increase in creditable compensation for VRS pension benefit purposes (100% of the increase in the pay over the previous plan year for continuing active VSDP members in the State, SPORS and VaLORS plans, with a maximum COLA of 4%)	51.1-1117 51.1-1123 51.1-1128	\$3,849,110,019	\$3,930,790,685	2.12%	2.12%		2.12%
Item	Code Section(s)	Creditable Compensation		Increase in Pay	COLA Calculation		
		2019	2020		100% of First 4%		COLA (maximum 4%)
VLDP increase in creditable compensation for VRS pension benefit purposes (100% of the increase in the pay over the previous plan year for non-hazardous continuing active members in the Teachers and Political Subdivision Hybrid plans, with a maximum COLA of 4%)	51.1-1161 51.1-1169	\$2,824,841,424	\$2,984,804,027	5.66%	4.00%		4.00%
Item	Code Section(s)				COLA Calculation		
							COLA
VSDP increase in net LTD benefit - Plan 1 vested as of 1/1/2013 - (100% of the VRS COLA for Plan 1 vested as of 1/1/2013)	51.1-1112						1.23%
Item	Code Section(s)				COLA Calculation		
							COLA
VSDP increase in net LTD benefit - Plan 1 non-vested as of 1/1/2013, Plan 2 and Hybrid Plan - (100% of the VRS COLA for Plan 1 non-vested as of 1/1/2013, Plan 2 and Hybrid Plan)	51.1-1112						1.23%
Item	Code Section(s)				COLA Calculation		
					Before COLA	After COLA	COLA
Increase in minimum \$8,000 life insurance amount for members with at least 30 years of creditable service - (100% of the VRS COLA for Plan 1 non-vested as of 1/1/2013, Plan 2 and Hybrid Plan)	51.1-505.B.				\$8,616	\$8,722	1.23%
Item	Code Section(s)	Social Security (SS) COLA		Biennial SS COLA Increase	Biennial Hazardous Duty Supplement COLA Calculation		
		2019	2020		Before COLA (monthly)	After COLA (monthly)	After COLA (annual)
Hazardous Duty Supplement	51.1-138.B 51.1-206.B 51.1-217.B	1.60%	1.30%	2.92%	\$1,187	\$1,222	\$14,664

\* CPI-U increase is ratio or percentage increase of CPI-U indices year over year (258,811/255,657 - 1 = 1.23%)