



June 9, 2023

MEMORANDUM

TO: VRS Board of Trustees

FROM: Patricia S. Bishop
Director

RE: Agenda Materials for June 15th Board Meeting

We are looking forward to the June 15th Board meeting beginning at 1:00 p.m. in the VRS Boardroom located at 1111 East Main Street, Bank of America - Pavilion Building, 3rd floor. Enclosed are the agenda and meeting materials. Boxed lunches will be available beginning at noon.

For your reference, the Administration, Finance and Talent Management Committee will meet on Tuesday, June 13th, at 10:30 a.m. In addition, the Audit and Compliance Committee will also meet on Tuesday, June 13th, at 1:00 p.m. The Benefits and Actuarial Committee is scheduled to meet on Wednesday, June 14th at 1:00 p.m.

Again, we look forward to seeing you next week. If you have any questions, please feel free to contact me.

Attachments

cc: The Honorable Stephen E. Cummings, Secretary of Finance
Craig Burns, Department of Taxation
Michael Jay, House Appropriations Committee
April Kees, Senate Finance Committee
Mike Tweedy, Senate Finance Committee
Zack Borgerding, Auditor of Public of Accounts
Jon Howe, Department of Planning and Budget
Dean Lynch, VA Association of Counties
Katie Boyle, VA Association of Counties
Bea Snidow, VA Education Association
Jamie Bitz, Joint Legislative Audit & Review Commission
Kimberly Sarte, Joint Legislative Audit & Review Commission
Hal Greer, Joint Legislative Audit & Review Commission
Elizabeth B. Myers, Office of the Attorney General
Josette Bulova, VA Municipal League
Lawrence Kochard, VRS Investment Advisory Committee
Bonnie Atwood, VA Retired Teachers Association



Board of Trustees Meeting
VRS, 1111 E. Main St., 3rd Floor Board Room
Thursday, 6/15/2023
1:00 - 3:30 PM ET

I. Approve Minutes

- **April 20, 2023**

Board Minutes 4.20.23 - Page 4

II. Report of the Chief Investment Officer

CIO Report - Page 16

Asset Allocation Report 4.30.23 - Page 24

Daily Asset Allocation Report 6.6.23 - Page 25

Performance Summary 4.30.23 - Page 26

Plan Tracking Error 3.31.23 - Page 27

New Investments and Terminations - Page 28

- **RBA – Approve Benchmarks for Credit Strategies, Private Equity and Private Investment Partnerships**

RBA - Approve Credit Strategies Private Equity and PIP Investments Benchmarks - Page 29

III. Asset Liability Modeling Discussion

- **Presentations by Agilis and VRS Staff**

Agilis Asset-Liability Analysis - Page 31

Strategic Asset Allocation - Next Steps - Page 71

- **RBA – Approve FY 2024 Defined Benefit Strategic Asset Allocation and Allowable Ranges**

RBA - FY2024 DB Plan Asset Allocation - Page 90

- **RBA – Select and Approve a Long-Term Defined Benefit Plan Strategic Asset Allocation**

RBA - DB Plan Long Term Asset Allocation - Page 92

IV. Report of the Defined Contribution Plans Advisory Committee

Report of the DCPAC - Page 94

- **RBA – Review Amendments to 457 Plan Document**

RBA - Approve Amendments to 457 Plan - Page 96

- **RBA – DC Plans Recordkeeper**

RBA - Appointment of VRS DC Plans TPA - Page 98

DCP - RFP Proposal Review Summary Board - Page 100

V. Report of the Administration, Finance and Talent Management Committee

Report of the AFT Committee - Page 106

- **RBA – Review and Approve FY 2024 Agency Performance Outcomes and Operational Measures**

RBA - Approve FY24 APOs and OMs - Page 107

FY24 APOs Draft - Page 109

FY24 Operational Measures Draft - Page 115

VI. Report of the Benefits and Actuarial Committee

Report of the B&AC - Page 133

VII. Report of the Audit and Compliance Committee

Report of the A&CC - Page 134

VIII. Report of the Director

FY 2023 Agency Roadmap Update - May - Page 136

Director's Report - Page 138

• **DPB Deficit Provision Acknowledgement Form**

Deficit Provision Acknowledgment Form - Page 146

Item 4-3.01 (Deficits) HB29 - Chapter 1 - Page 147

Minutes

A regular meeting of the Virginia Retirement System Board of Trustees was held on April 20, 2023, in Richmond, Virginia with the following members participating:

Board members:

A. Scott Andrews, Chair
Joseph W. Montgomery, Vice Chair
Hon. J. Brandon Bell, II (*remotely under § 2.2-3708.3(B)(1)*)
John M. Bennett (*remotely under § 2.2-3708.3(B)(1)*)
Michael P. Disharoon
Susan T. Gooden, Ph.D.
W. Brett Hayes
Jessica L. Hood
Lindsey K. Pantele

Investment Advisory Committee:

Lawrence E. Kochard, Ph.D., Chair

VRS Staff:

Patricia Bishop, Andrew Junkin, Jennifer Schreck, John Alouf, Advait Apte, Rory Badura, Parham Behrooz, Erica Billingslea, Kevin Bliss, Judy Bolt, Caroline Cardwell, Jeanne Chenault, Michael Cooper, Perry Corsello, David Cotter, Juanita Cribbs, Sara Denson, Valerie Disanto, Laurie Fennell, Laura Fields, Antonio Fisher, Josh Fox, Jay Gentry, Holly Glass, Katherine Grawe, JT Grier, Mehtab Haleem, Dane Honrado, KC Howell, Ross Kasarda, LaShaunda King, Kristina Koutrakos, Matt Lacy, Vu Le, Chung Ma, Kidus Molla, Walker Noland, Greg Oliff, Angela Payne, Steve Peterson, Laura Pugliese, Steven Ramirez, Paula Reid, Mark Rein, Dan Schlusser, Kristy Scott, Michael Scott, Jillian Sherman, Larry Tentor, Viet Tran, Corey Turner, Leslie Weldon, Dan Whitlock, Cindy Wilkinson and Steve Woodall.

Guests:

Jamie Bitz, Joint Legislative Audit and Review Commission; Tom Cassara and Mike Faulkner, Agilis; Courtney Degen, Pensions & Investments; Gary Gammon and Erin Rodriguez, Auditor of Public Accounts; Emily Grimes, Department of Planning and Budget; Elizabeth Myers, Office of the Attorney General; and Bea Snidow, Virginia Education Association.

The meeting convened at 12:59 p.m.

Opening Remarks

Mr. Andrews called the meeting to order and welcomed everyone to the April 20, 2023, meeting of the Virginia Retirement System Board of Trustees. Mr. Andrews also introduced the newest Board member, Jessica Hood, and thanked her for her commitment to VRS and its members. Mr. Andrews also thanked William Garrett for his service and contributions to the Board.

After noting the meeting was being held in accordance with § 2.2-3708.3(B)(1) of the *Code of Virginia* and the VRS Remote Meeting Attendance Policy, Mr. Andrews took a roll call for attendance:

Mr. Bell: Present
Mr. Bennett: Present
Mr. Disharoon: Present
Dr. Gooden: Present
Mr. Hayes: Present
Ms. Hood: Present
Mr. Montgomery: Present
Ms. Pantele: Present
Mr. Andrews: Present

Approval of Minutes

Upon a motion by Mr. Montgomery, with a second by Mr. Disharoon, the VRS Board of Trustees approved the minutes from its February 9, 2023, meeting, as well as minutes of the March 21, 2023, and March 22, 2023, annual retreat upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

Committee Assignments

Next, Mr. Andrews advised that, in accordance with the Governance Policy, the Board Chair is required to appoint committee members, subject to approval by the Board.

Following a motion by Mr. Andrews, with a second by Mr. Montgomery, the Board approved the proposed committee assignments upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

Report of the Investment Advisory Committee

Lawrence Kochard, Chair of the Investment Advisory Committee (IAC), began his report by noting the IAC met on April 12, 2023, and approved the minutes from its previous meeting. The Committee received the Chief Investment Officer's (CIO) report that included an overview of market conditions, asset allocation, tracking error and total fund performance. The IAC concluded that plan performance has been exceptional over the last decade and praised the efforts of staff.

The Committee received the program reviews and discussed key dynamics and topics unique to each program. The Committee noted that returns, short- and long-term, have been favorable and all asset classes generally remain above their respective benchmarks.

Andrew Junkin, VRS Chief Investment Officer, and Chung Ma, Managing Director, Portfolio Solutions Group, led a discussion on risk profile enhancement to allow for more diversification within the portfolio. The Committee also received a presentation on forward returns and scenario analysis.

Lastly, the Committee discussed proposed changes to the benchmarks related to Private Equity, Credit Strategies and Public Equity. The proposed changes more closely align the benchmarks with the programs' respective objectives and portfolio composition.

Mr. Andrews thanked Mr. Kochard for his report and the IAC for their professionalism, expertise and contribution to the health of the Fund.

Report of the Chief Investment Officer

Mr. Junkin began his report with a market overview and discussed asset allocation, total fund performance and tracking error, concluding that risk measures are within Board-approved levels. Mr. Junkin then discussed the New Investments and Terminations report, the Diverse Investment Manager Engagement (DIME) report and the Quarterly External Investment Manager Referral report.

Mr. Andrews thanked Mr. Junkin for his report.

Report of the Investment Policy Committee

The Board received the report of the Investment Policy Committee and placed it on file.

Approval of Minutes

Mr. Andrews began his report by noting the Committee approved the minutes of its February 9, 2023, meeting.

Discussion on Portfolio Diversification

In preparation for the upcoming discussion of the Asset Liability Study, Andrew Junkin, VRS Chief Investment Officer, and Chung Ma, Managing Director, Portfolio Solutions Group, led a discussion on portfolio diversification.

Report of the Defined Contribution Plans Advisory Committee

The Board received the report of the Defined Contribution Plans Advisory Committee (DCPAC) and placed it on file.

DC Plans Overview

Senator Bell began his report by noting staff provided an overview of the DC Plans, as well as an update on administrative reports for the fourth quarter of 2022. An overview of assets and accounts across the various defined contribution plans, as well as account trends, was also provided. It was also noted that a refresh was completed in December for the DCP website.

Staff advised the Committee that assets in the COV 457 and Cash Match Plans increased approximately 5% from the previous quarter. Hybrid Retirement Plan assets and accounts have increased 15% and 3%, respectively, during the same timeframe. Additional updates regarding voluntary participation rates, contribution elections and auto-escalation were also provided to the Committee. Further, staff provided details on plan asset allocation, ORPHE and upcoming DC Plans events.

DC Plans Unbundled Recordkeeper RFP Update

Staff provided an update on the DC Plans Recordkeeper RFP. Responses were due on December 2, 2022, and finalists will be determined by April 2023.

INVESTMENTS

Performance Reports

Staff provided an overview of the February 28, 2023, performance reports to the DCPAC, including the unbundled DC plans investment options and the bundled TIAA investment menu in the Retirement Choice (RC) contract for ORPHE.

Callan 2023 Defined Contribution Trends Survey Highlights

Staff provided an overview of highlights from the Callan 2023 DC Trends survey, which was included in the meeting materials Appendix for the Committee to review. The Callan 2023 DC Trends survey results represented 99 large DC plan sponsors that span a range of industries across corporate, tax-exempt and government organizations.

Retirement Income Industry Update

Staff provided an update on the retirement income industry. Staff noted that public and corporate DC plan sponsors are focusing more on the distribution phase due to the shift in retirement income trends. Additional trends in retirement income were also presented to the Committee.

OTHER BUSINESS

Legislative Update

Staff reviewed the legislation that passed during the 2023 regular session of the General Assembly. Staff also reviewed the recently enacted SECURE 2.0 Act with the Committee, including the potential impacts to VRS plans.

DCPAC Appointments

Staff informed the Committee of the request for reappointment of Shannon Irvin, Rick Larson and David Winter to the DCPAC. The Committee made a motion to support the recommendation for reappointments by the Administration, Finance and Talent Management Committee.

DISCUSSION OF NEW IDEAS

Dr. Arun Muralidhar shared an article written by a colleague regarding retirement planning. The article, titled, "*The Crisis in Retirement Planning*" was shared with the Committee. Dr. Muralidhar indicated his intention to discuss this topic further at the Committee's June meeting.

2023 MEETINGS

Senator Bell confirmed the remaining DCPAC meeting dates in 2023, all at 1:00 p.m.:

- Thursday, June 1st
- Thursday, September 7th
- Thursday, November 30th

Mr. Andrews thanked Senator Bell for his report.

Report of the Audit and Compliance Committee

The Board received the report of the Audit and Compliance Committee and placed it on file.

APPROVAL OF MINUTES

Mr. Montgomery began his report by noting the Committee approved the minutes of its December 8, 2022, meeting.

AUDIT REPORTS

The Committee received two audit reports:

- The annual review of VRS' *Conformance with VITA's IT Security Program* determined as of January 1, 2023, VRS' Security Policies and Standards generally conform with VITA's mandatory Information Technology security program. There were no formal recommendations as a result of this review.
- The review of *Credit Strategies and Private Investment Partnerships Programs* determined VRS provided appropriate oversight and monitoring of the programs. There were no formal recommendations as a result of this review.

ANNUAL REPORT ON CODE OF ETHICS

The Internal Audit Director noted the Internal Audit department's adherence to the VRS Code of Ethics, Institute of Internal Auditor's Code of Ethics, and similar frameworks required by professional designations and memberships.

The Chief Operating Officer and the Regulatory and Legal Officer provided annual reports on their respective processes for communicating VRS' Code of Ethics and Conduct and for monitoring

compliance, as required by the Audit and Compliance Committee Charter. Both indicated compliance with the reporting and certification requirements for their respective programs as of the meeting date.

AUDIT PLAN PROGRESS AS OF DECEMBER 31, 2022

The Internal Audit Director reported on the progress on the annual Audit Plan as of December 31, 2022, the mid-point of the fiscal year.

MISCELLANEOUS UPDATES

The Committee received the following miscellaneous updates:

Quarterly Report on Fraud, Waste and Abuse Hotline Cases

It was shared there were no Fraud, Waste and Abuse Hotline complaints reported to Internal Audit via the Office of the State Inspector General or other sources during the period of November 1, 2022, through January 31, 2023.

Internal Audit's Review of Cost of Living Adjustments

Internal Audit noted its review of the proposed "Cost of Living Adjustments" as calculated by VRS' plan actuary, Gabriel, Roeder, Smith & Company, was completed and the results were provided to the Benefits and Actuarial Committee and Board of Trustees at their respective meetings in February 2023.

Management's Quarterly Travel Expense and Per Diem Report

The Committee received Management's Quarterly Travel Expense and Per Diem report.

Next Committee Meeting Date

The Committee's next meeting is scheduled for Tuesday, June 13, 2023, at 1:00 p.m.

Mr. Andrews thanked Mr. Montgomery for his report.

Asset Liability Management Discussion

Next, Mr. Junkin introduced Tom Cassara and Mike Faulkner with Agilis, who led a discussion on asset liability management (ALM). VRS conducts asset liability modeling studies every three years to review strategic asset allocation, examine alternative asset allocations and confirm expected future rates of return. In addition, the study provides information regarding future trends in financial outcomes, anticipated future cash flow needs and identifies possible risks and mitigation strategies.

Mr. Cassara noted the asset liability study produces 20 years of 10,000 trials for each given investment scenario and stressed the importance of establishing decision criteria for reviewing the output and guiding decisions. These criteria must align with the goals of the Board. For the current study, the key measures of focus were future funded status, employer contribution levels as a percentage of payroll and cash flow needs. Mr. Cassara reviewed the key measures under several economic scenarios using the current fund allocation and noted that the current fund allocation supports the 6.75% long-term rate of return. Mr. Cassara also noted that the cash flow needs of the plans were expected to increase over the short- to mid-term as more members reach retirement age, which could require additional cash requirements over that time period. Mr. Cassara also reviewed alternate allocations and outcome observations for the funded status, contribution rates and cash flow needs for the State Plan. Next, Mr.

Faulkner provided an overview of four different economic scenarios and compared the cumulative expected returns and results for each. Mr. Faulkner noted the impact on funded status is somewhat mitigated by the level of contributions and all scenarios indicate an increase in cash flow needs over the next ten years. Lastly, Mr. Faulkner reviewed next steps, which include developing and refining risk measures, choosing alternative asset allocations to be modeled and performing an analysis summarizing the results.

Mr. Andrews thanked Mr. Cassara and Mr. Faulkner for their presentation.

Reports of the Administration, Finance and Talent Management Committee

The Board received the reports of the Administration, Finance and Talent Management Committee and placed them on file.

APPROVAL OF MINUTES

Mr. Andrews noted the Administration, Finance and Talent Management (AFT) Committee met on March 29, 2023, and approved the minutes of its December 8, 2022, meeting.

REAPPOINTMENT OF INVESTMENT ADVISORY COMMITTEE (IAC) MEMBERS AND CHAIRPERSON

Andrew Junkin, Chief Investment Officer, advised the Committee that the terms for two members of the IAC are set to expire. Michael Beasley and Rod Smyth both expressed interest in continuing their service on the IAC. In addition, Mr. Junkin informed the Committee that the term of the IAC Chairperson is also set to expire, and that Lawrence Kochard indicated his interest in continuing to serve in that role.

Request for Board Action 2023-04-3: The Board reappoints to the Investment Advisory Committee: Michael Beasley for a two-year term ending June 20, 2025, and Rod Smyth for a two-year term ending June 20, 2025. The Board also reappoints Lawrence E. Kochard as Chairperson of the Investment Advisory Committee for a two-year term ending on May 31, 2025.

Upon a motion by Mr. Montgomery, with a second by Ms. Pantele, the VRS Board of Trustees approved the action upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

REAPPOINTMENT OF DEFINED CONTRIBUTION PLANS ADVISORY COMMITTEE (DCPAC) MEMBERS

Trish Bishop, Director, presented the recommendations for the reappointment of three members of the DCPAC. Ms. Bishop advised the Committee that Shannon Irvin, Rick Larson and David Winter all indicated their willingness to continue serving on the DCPAC.

Request for Board Action 2023-04-4: *The Board reappoints Shannon T. Irvin, Rick Larson and David A. Winter to the Defined Contribution Plans Advisory Committee (DCPAC), each for a two-year term ending June 20, 2025.*

Upon a motion by Mr. Montgomery, with a second by Dr. Gooden, the VRS Board of Trustees approved the action upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

APPROVE REVISED INVESTMENT PROFESSIONALS' PAY PLAN

Paula Reid, Director of Human Resources, provided an overview of the proposed amendments to the Investment Professionals' Pay Plan. Ms. Reid noted that the revisions include the removal of the Chief Managing Director position as it is no longer needed in the pay plan. Further, Ms. Reid advised the Committee that Item 483 of the 2022 Appropriation Act requires the Department of Human Resource Management to increase by 5% the minimum and maximum of each of the salary bands in the Commonwealth's Classified Compensation Plan. Generally, the VRS Board of Trustees also adjusts the salary scales of its pay plans in accordance with the requirements of the Appropriation Act. This change, effective June 10, 2023, is consistent with the changes to be made to the Commonwealth's Classified Compensation Plan.

Ms. Reid also informed the Committee that if, subsequent to the approval of the RBA, an Appropriation Act is enacted in 2023 that provides any additional changes other than the 5% salary scale adjustments contained in Item 483 of the 2022 Appropriation Act, the Investment Professionals' Pay Plan will be amended to remain consistent with the changes made to the Commonwealth's Classified Compensation Plan.

Request for Board Action 2023-04-5: *The Virginia Retirement System Board of Trustees approves an amended Investment Professionals' Pay Plan ("Pay Plan"), effective June 10, 2023.*

Upon a motion by Mr. Montgomery, with a second by Ms. Pantele, the VRS Board of Trustees approved the action upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye

Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

APPROVE REVISED ADMINISTRATIVE PAY PLAN AND INVESTMENT OPERATIONS AND ADMINISTRATION PAY PLAN

Ms. Reid next updated the Committee on proposed revisions to the Administrative and Investment Operations and Administration Pay Plans. Similar to the changes for the Investment Professionals' Pay Plan, a 5% increase to the minimum and maximum of the salary scales is proposed for both plans, consistent with changes made to the Commonwealth's Classified Compensation Plan. Further consistent with the proposed changes to the Investment Professionals' Pay Plan, should an Appropriation Act be enacted in 2023, subsequent to the approval of the RBA, that provides any additional changes other than the 5% salary scale adjustments contained in Item 483 of the 2022 Appropriation Act, the Administrative Pay Plan and Investment Operations and Administration Pay Plan will be amended to be consistent with the changes made to the Commonwealth's Classified Compensation Plan.

Request for Board Action 2023-04-6: The VRS Board of Trustees approves an amended Administrative Pay Plan and Investment Operations and Administration Staff Pay Plan, effective June 10, 2023.

Upon a motion by Mr. Montgomery, with a second by Dr. Gooden, the VRS Board of Trustees approved the action upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

QUARTERLY BUDGET UPDATE

Jon Farmer, Budget and Performance Reporting Manager, provided an update on the FY 2023 budget. Mr. Farmer advised the Committee that VRS began the fiscal year with approximately \$119 million and through February 2023 has expended approximately \$69 million. Mr. Farmer noted that the agency is on track to conclude the fiscal year with an estimated \$14.8 million in unexpended appropriation.

CLOSED SESSION

The Committee next convened a closed meeting under the Virginia Freedom of Information Act to discuss information that describes the design, function, operation or access control features of a security system which is used to control access to or use of an automated data processing system, pursuant to the public safety exemption at § 2.2-3711(A)(19) of the *Code of Virginia*, and for consultation with legal counsel pursuant to § 2.2-3711(A)(8) of the *Code of Virginia*.

Next, Mr. Andrews presented the AFT Committee report following its meeting on April 20, 2023.

APPROVAL OF MINUTES

The Committee approved the minutes of its March 29, 2023, meeting.

APPROVE REVISED ADMINISTRATIVE PAY PLAN

Paula Reid, Director of Human Resources, presented the proposed changes to the Administrative Pay Plan. Ms. Reid advised the Committee that CBIZ Compensation Consulting (CBIZ) conducted a comprehensive compensation study for administrative staff with the objective of enhancing the agency's ability to attract, retain and motivate qualified individuals, establish structures that are flexible in meeting changing needs, and is well-aligned with broader agency goals and strategies.

Ms. Reid outlined the recommendations offered by CBIZ, including:

- Increase the compensation of all applicable employees to the minimum of their respective proposed salary ranges.
- Implement the compensation plan uniformly across all positions.
- Consider compression-based pay adjustments as appropriate in the future.
- Implement additional methods to reward employee performance and move individuals through pay grades.
- Conduct a comprehensive market review every three to five years.

Regarding changes specific to the Administrative Pay Plan, Ms. Reid advised the Committee of the following recommendations:

- Institute a new job grade system to replace the current plan to create a consistent system for evaluating employee roles and providing more flexibility in rewarding employees based on their skills.
- Add in-grade salary adjustments for changes in job duties and employee retention, consistent with recent changes made to the Department of Human Resource Management Compensation Policy 3.05.

Request for Board Action 2023-04-7: The Virginia Retirement System Board of Trustees approves an amended Administrative Pay Plan ("Pay Plan"), effective May 10, 2023, and approves the adoption of the recommendations of the compensation market study conducted by CBIZ, Inc.

Upon a motion by Mr. Montgomery, with a second by Ms. Pantele, the VRS Board of Trustees approved the action upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye

Ms. Pantele: Aye
Mr. Andrews: Aye

Commending Resolution for William A. Garrett

Mr. Andrews presented the following commending resolution of service of Chief William A. Garrett:

WHEREAS, William A. Garrett was appointed to serve on the Virginia Retirement System Board of Trustees beginning February 2018 and concluding February 2023; and

WHEREAS, Chief Garrett served as a Member and then as Chair of the Benefits and Actuarial Committee, evaluating information presented on plan benefits, funding, and actuarial principles, contributing to committee discussions, and serving in these roles with commitment and distinction; and

WHEREAS, Chief Garrett also served as a Member of the Chief Investment Officer Search Committee, evaluating candidates and the skills that are needed to sustain the system in the future; and

WHEREAS, Chief Garrett served the members and retirees of the system with steady leadership, paired with experience in and extensive knowledge of the essential roles performed by local government employees in the Commonwealth and demonstrated servant leadership by unfailingly supporting and acknowledging the accomplishments and contributions of VRS staff; and

NOW, THEREFORE, BE IT RESOLVED, that on April 20, 2023, we, the members of the Board of Trustees of the Virginia Retirement System, hereby acknowledge Chief Garrett's loyal and faithful service to the Board of Trustees, the Virginia Retirement System, its members, retirees, and the Commonwealth of Virginia, and are grateful for his contributions, stewardship, and commitment as a member of the Board of Trustees.

Report of the Director

Ms. Bishop began her report with an update on the agency roadmap for FY 2023, noting all projects are progressing as planned with the exception of the Hyper Converged Infrastructure (HCI) data center migration. This project is delayed due to a change in the data center cage relocation. Ms. Bishop then reviewed the new Employer Coverage Elections.

Next, Ms. Bishop announced the National Conference on Public Employee Retirement Systems (NCPERS) recently presented VRS with a Certificate of Transparency for furthering open disclosure, increasing the range of available data and contributing to the public's understanding of public retirement systems.

Lastly, Ms. Bishop advised that the Conflict of Interests Act (COIA) training must be completed by May 1, 2023, and filings were due to the Virginia Ethics Council on February 1, 2023.

FOIA Update

Next, Cindy Wilkinson, Director of Policy, Planning and Compliance, provided an overview of the changes to the Freedom of Information Act (FOIA) related to remote attendance. Ms. Wilkinson advised the General Assembly adopted the changes, effective September 1, 2022, which include four reasons for which individual members of a public body may participate remotely, however, a physical quorum is still

required. In addition, Ms. Wilkinson discussed the circumstances under which public bodies may meet electronically due to a declared state of emergency or other specified reason.

Mr. Andrews thanked Ms. Bishop and Ms. Wilkinson for their presentations.

Other Business

Lastly, Mr. Andrews reviewed the following upcoming meeting schedule:

- Defined Contribution Plans Advisory Committee – June 1
- Administration, Finance and Talent Management Committee – June 13
- Audit and Compliance Committee – June 13
- Benefits and Actuarial Committee – June 14
- Board of Trustees – June 15

Adjournment

Upon a motion by Mr. Montgomery, with a second by Ms. Pantele, the VRS Board of Trustees agreed to adjourn the meeting upon the following roll call vote:

Mr. Bell: Aye
Mr. Bennett: Aye
Mr. Disharoon: Aye
Dr. Gooden: Aye
Mr. Hayes: Aye
Ms. Hood: Aye
Mr. Montgomery: Aye
Ms. Pantele: Aye
Mr. Andrews: Aye

The meeting concluded at 2:25 p.m.

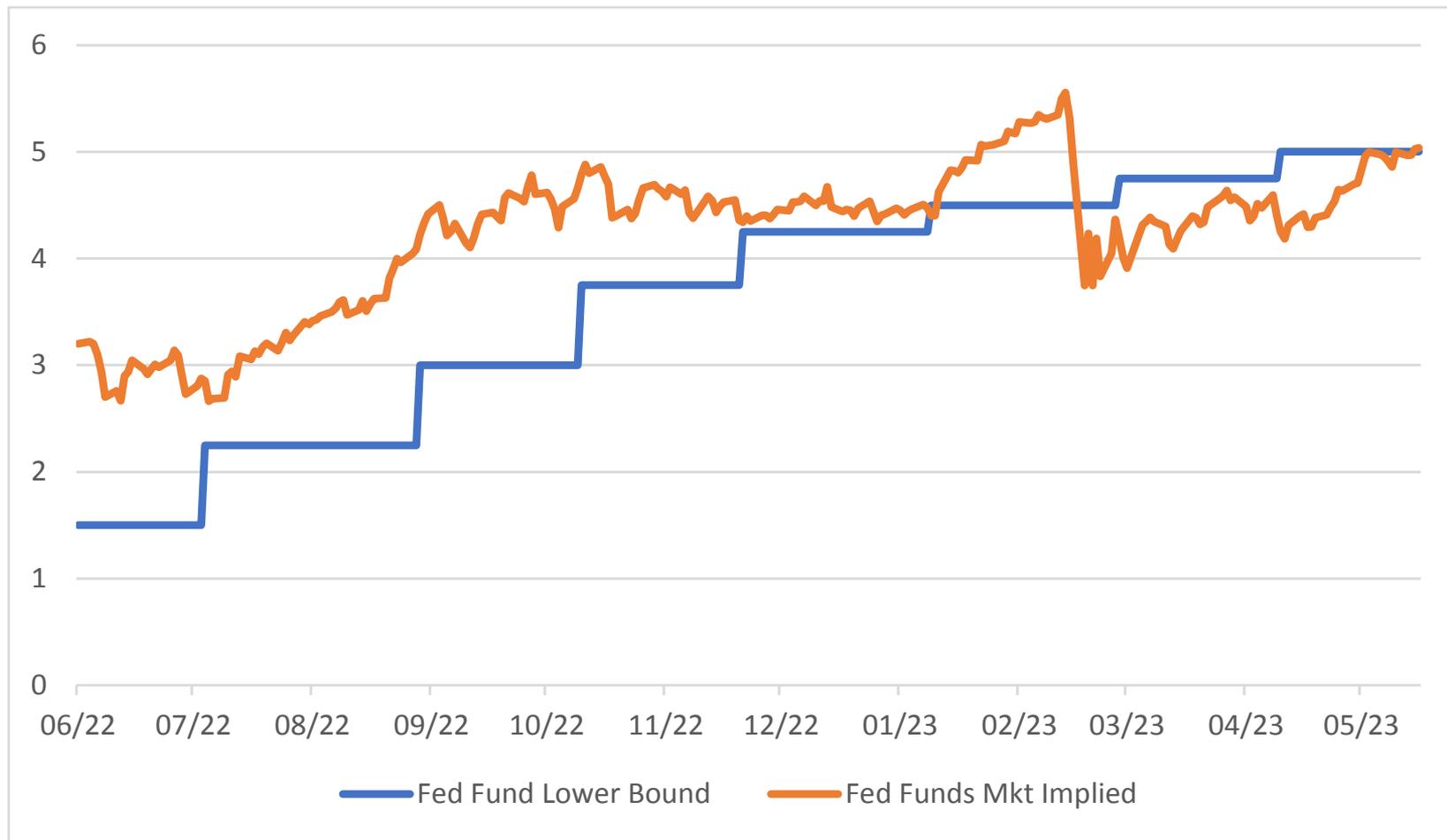
Chair

Secretary

Chief Investment Officer Report Andrew Junkin

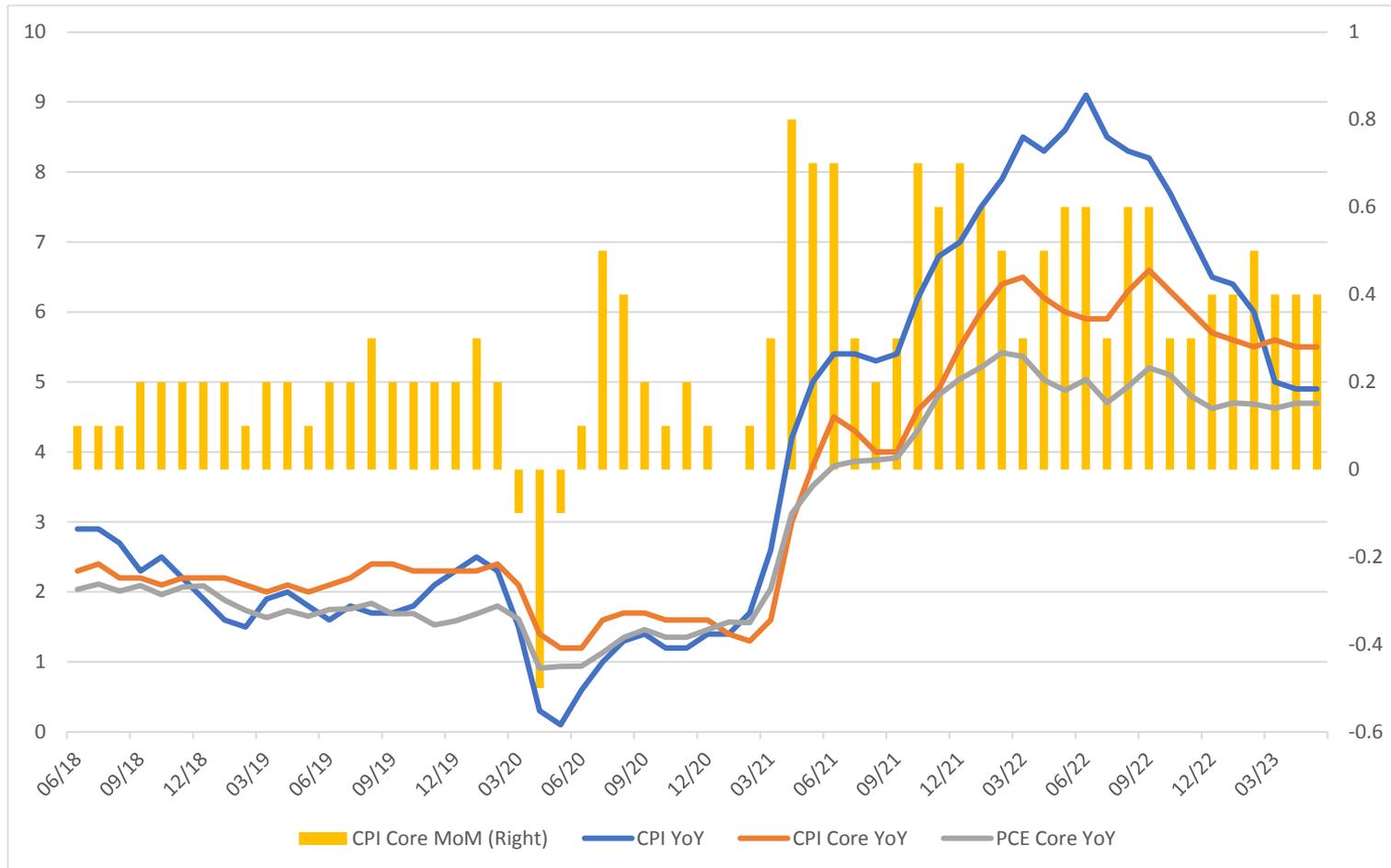


How Quickly Discounting Can Change



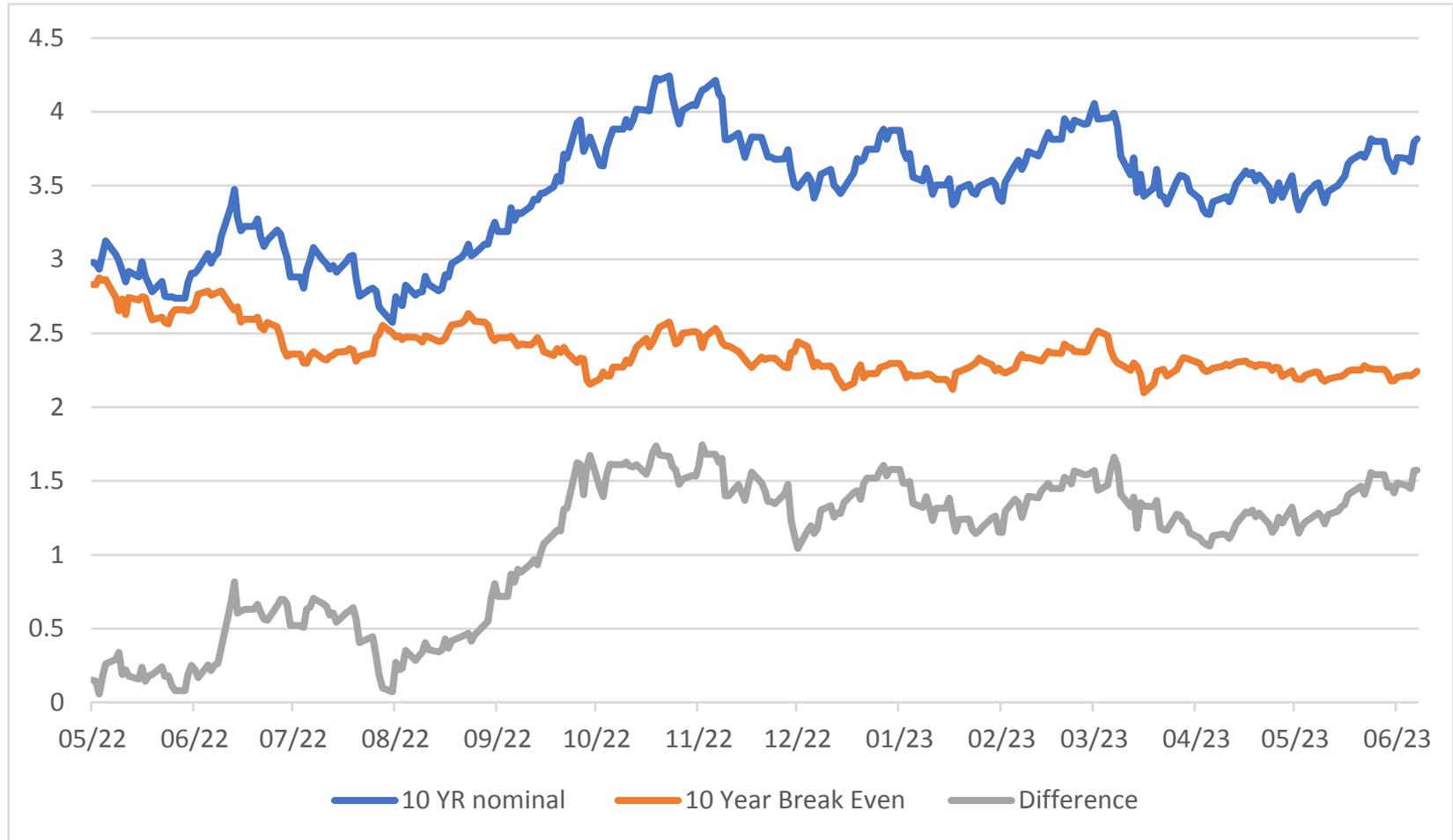
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Any Signs of Inflation Slowing?



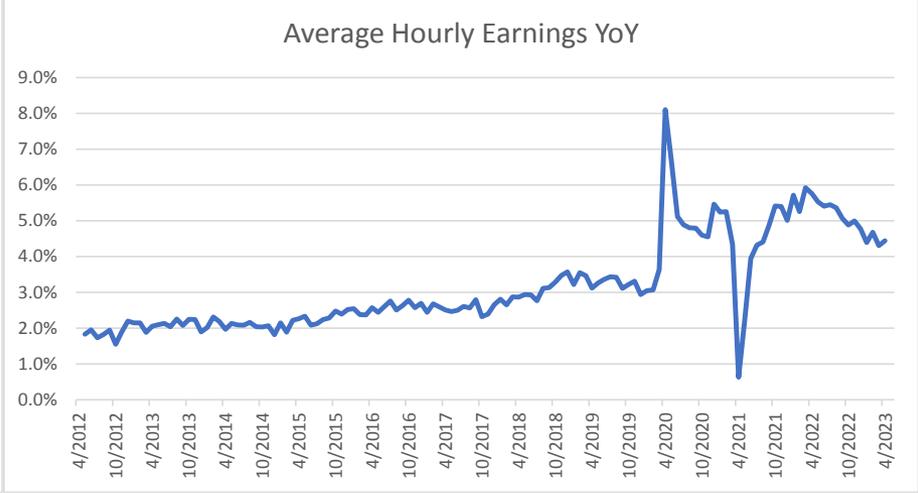
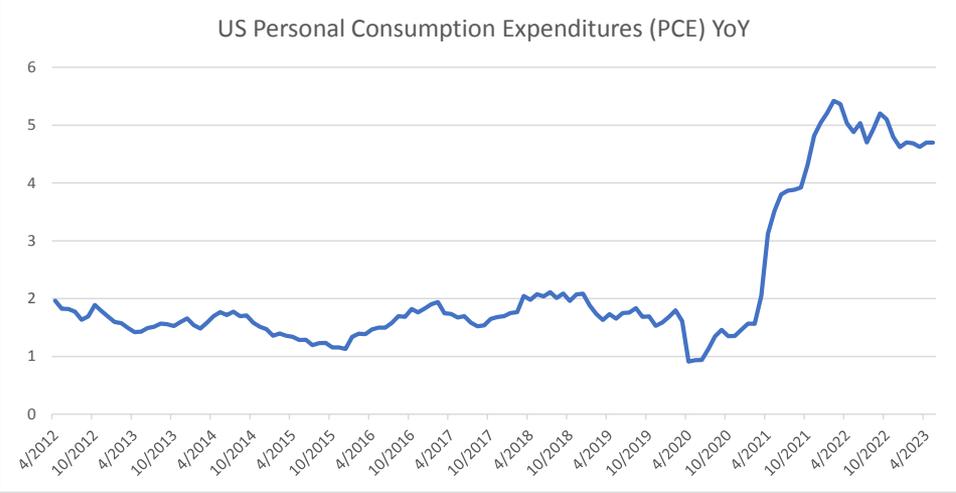
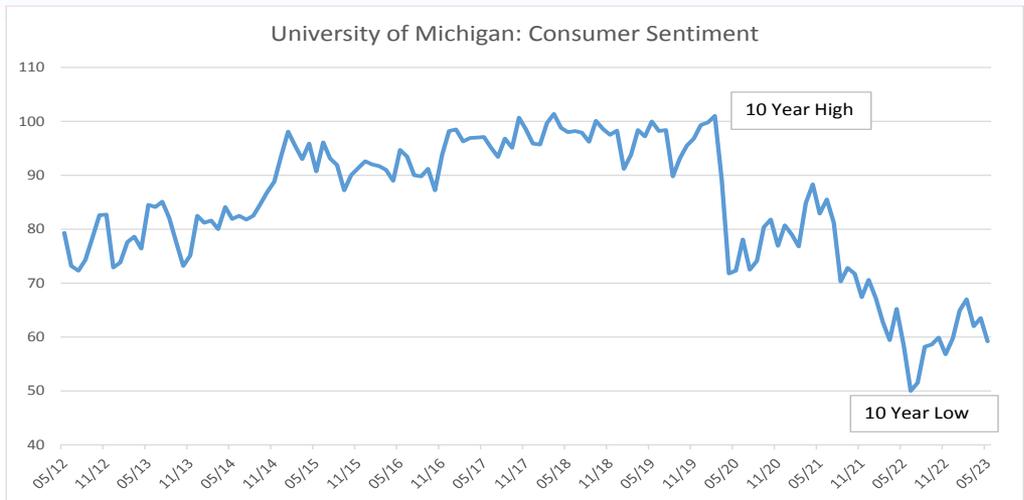
Data Source: Bloomberg

Rate Moves (10Y Nominal, Real & BEI)



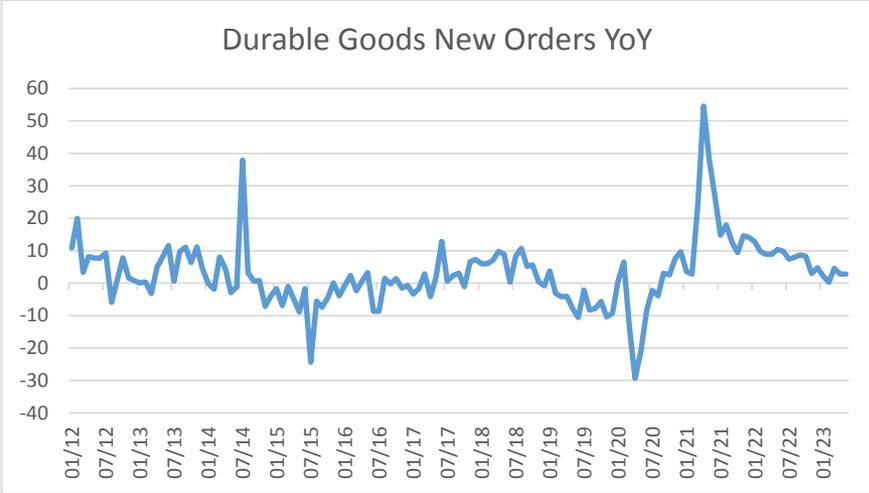
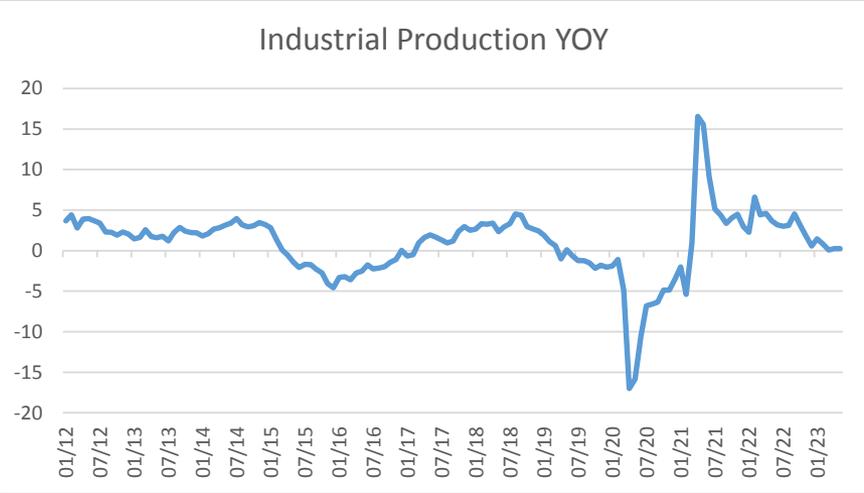
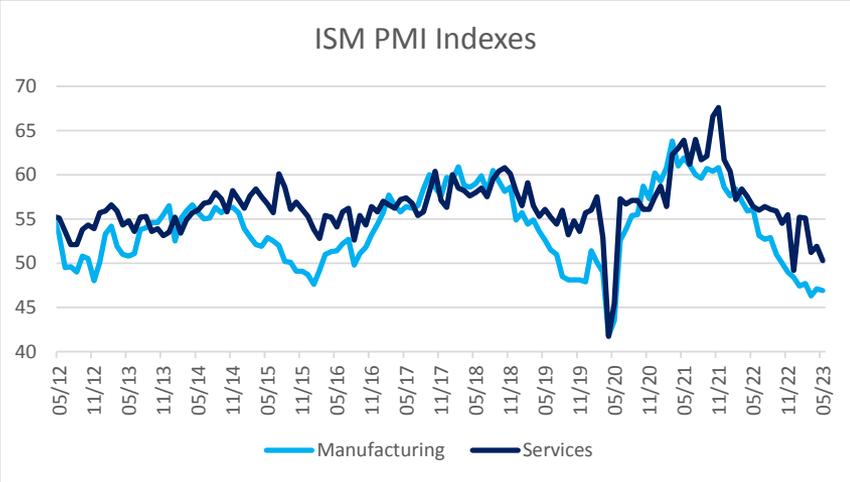
Data Source: Bloomberg

Consumer Activity



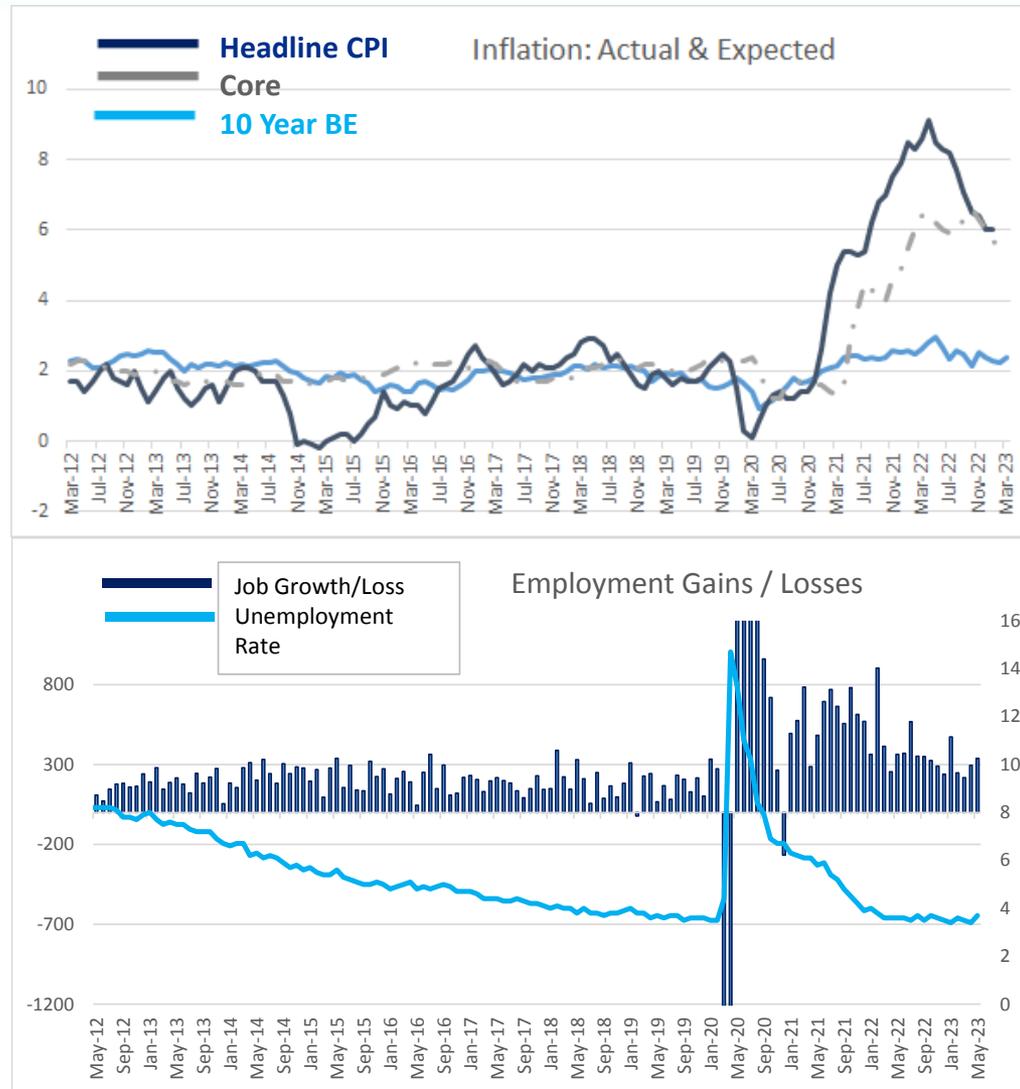
Data Source: Bloomberg

Business Activity

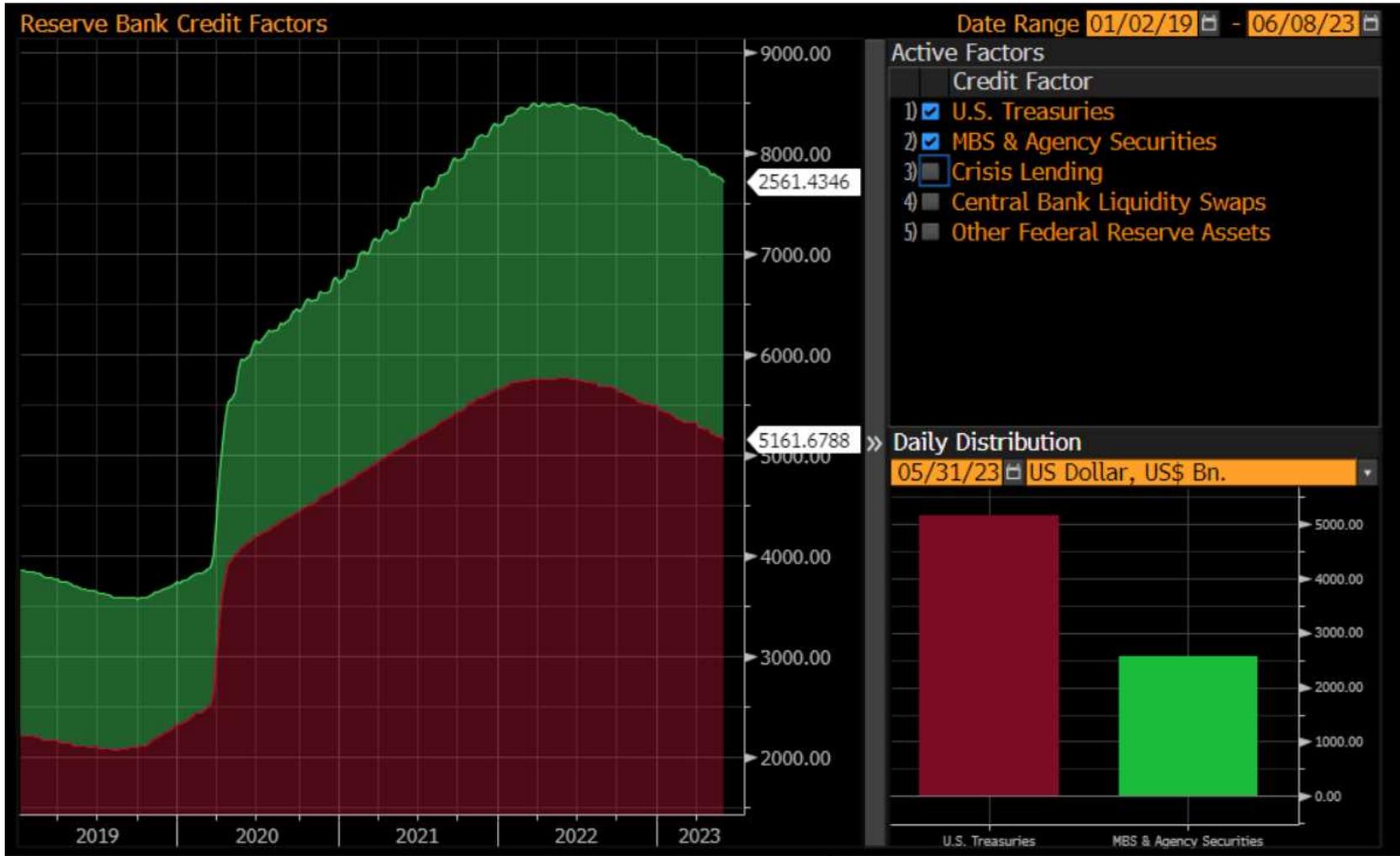


Data Source: Bloomberg

Inflation and Employment



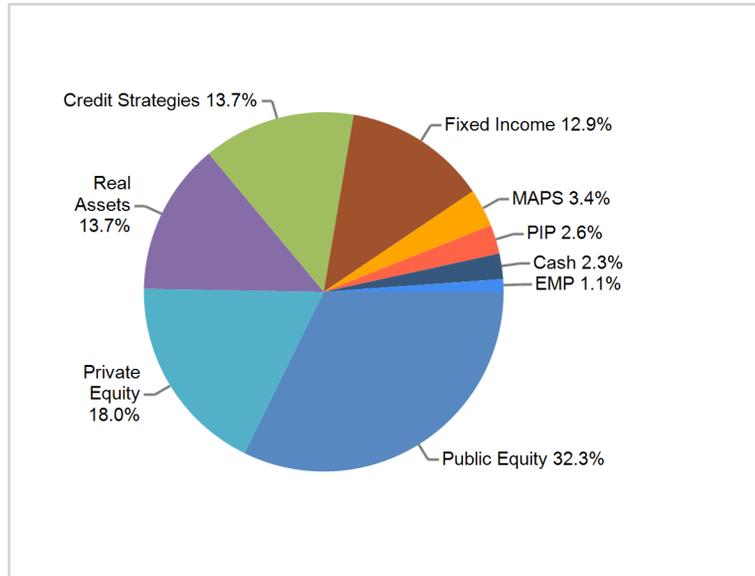
Federal Reserve Balance Sheet



Asset Allocation Report

April 30, 2023

For Internal Investment Purposes Only



Tracking Error	
3Yr-Total Fund:	2.60%
3Yr-Total Public:	1.89%
5Yr-Total Fund:	2.21%
5Yr-Total Public:	1.50%

	Current \$Bil	Current Weight	Policy Weight	Variance	Allowable Range		Internal %
Total Fund	103.6						27.2%
Public Equity	33.4	32.3%	34.0%	-1.7%	-5%	+5%	46.6%
Fixed Income	13.4	12.9%	15.0%	-2.1%	-3%	+5%	94.7%
Credit Strategies	14.2	13.7%	14.0%	-0.3%	-5%	+5%	
RS Credit	3.2	3.1%	5.6%	-2.5%			
NRS Credit	11.0	10.6%	8.4%	2.2%			
Real Assets	14.2	13.7%	14.0%	-0.3%	-5%	+5%	
Private RE	9.4	9.1%					
Other RA	4.8	4.6%					
Private Equity	18.7	18.0%	16.0%	2.0%	-5%	+5%	
MAPS	3.5	3.4%	4.0%	-0.6%	-2%	+2%	
DSTRAT	1.7	1.6%					
RBI	1.9	1.8%					0.5%
PIP	2.7	2.6%	2.0%	0.6%	-2%	+2%	
EMP	1.2	1.1%	0.0%	1.1%		+3%	
Cash	2.4	2.3%	1.0%	1.3%	-1%	+4%	

<u>High-Level Exposure</u>	Current \$Bil	Current Weight	Policy Weight	Variance	Allowable Range	
Total Equity	52.1	50.3%	50.0%	0.3%	-10%	10%
Fixed Income + Cash	15.7	15.2%	16.0%	-0.8%	-4%	9%

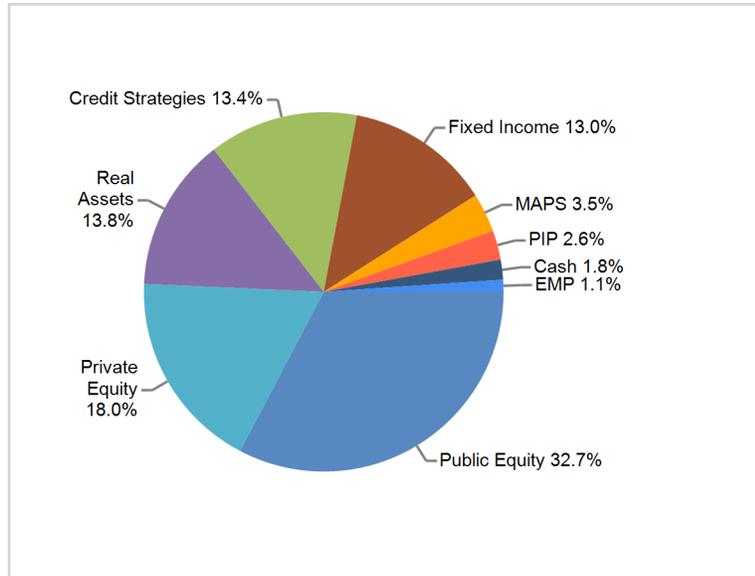
	Current \$Bil	Current Weight	Policy Limit
Hedge Funds	9.8	9.5%	15.0%

* Total Fund includes the following amt held by the Treasurer of VA: \$ 421 million

• The values shown for each asset class on this report may differ from the VRS Monthly Performance Report due to adjustments related to derivative positions in the Rebalance Account, pending transactions, and certain accruals. The values on this report are a more descriptive representation of the Virginia Retirement System's true economic exposure to each asset class.(3 adjustments applied)

*Total Fund and Total Public annualized tracking error is calculated using compounded quarterly returns as of 3/31/2023

* Differences in totals are due to rounding.



Tracking Error	
3Yr-Total Fund:	2.60%
3Yr-Total Public:	1.89%
5Yr-Total Fund:	2.21%
5Yr-Total Public:	1.50%

	Current \$Bil	Current Weight	Policy Weight	Variance	Allowable Range		Internal %
Total Fund	102.9						27.7%
Public Equity	33.7	32.7%	34.0%	-1.3%	-5%	+5%	46.7%
Fixed Income	13.4	13.0%	15.0%	-2.0%	-3%	+5%	94.7%
Credit Strategies	13.8	13.4%	14.0%	-0.6%	-5%	+5%	
RS Credit	2.7	2.6%	5.6%	-3.0%			
NRS Credit	11.1	10.8%	8.4%	2.4%			
Real Assets	14.2	13.8%	14.0%	-0.2%	-5%	+5%	
Private RE	9.5	9.2%					
Other RA	4.8	4.7%					
Private Equity	18.5	18.0%	16.0%	2.0%	-5%	+5%	
MAPS	3.6	3.5%	4.0%	-0.5%	-2%	+2%	
DSTRAT	1.7	1.6%					6.5%
RBI	1.9	1.9%					0.4%
PIP	2.7	2.6%	2.0%	0.6%	-2%	+2%	
EMP	1.1	1.1%	0.0%	1.1%		+3%	
Cash	1.9	1.8%	1.0%	0.8%	-1%	+4%	

<u>High-Level Exposure</u>	Current \$Bil	Current Weight	Policy Weight	Variance	Allowable Range	
Total Equity	52.2	50.7%	50.0%	0.7%	-10%	10%
Fixed Income + Cash	15.3	14.8%	16.0%	-1.2%	-4%	9%

	Current \$Bil	Current Weight	Policy Limit
Hedge Funds	9.8	9.5%	15.0%

* Total Fund includes the following amt held by the Treasurer of VA: \$ 89 million

• The values shown for each asset class on this report may reflect adjustments related to derivative positions in the Rebalance Account, pending transactions and certain accruals, in order to provide a more descriptive representation of the true economic exposure to each asset class (3 adjustments applied)

*Total Fund and Total Public annualized tracking error is calculated using compounded quarterly returns as of 3/31/2023

* Differences in totals are due to rounding.

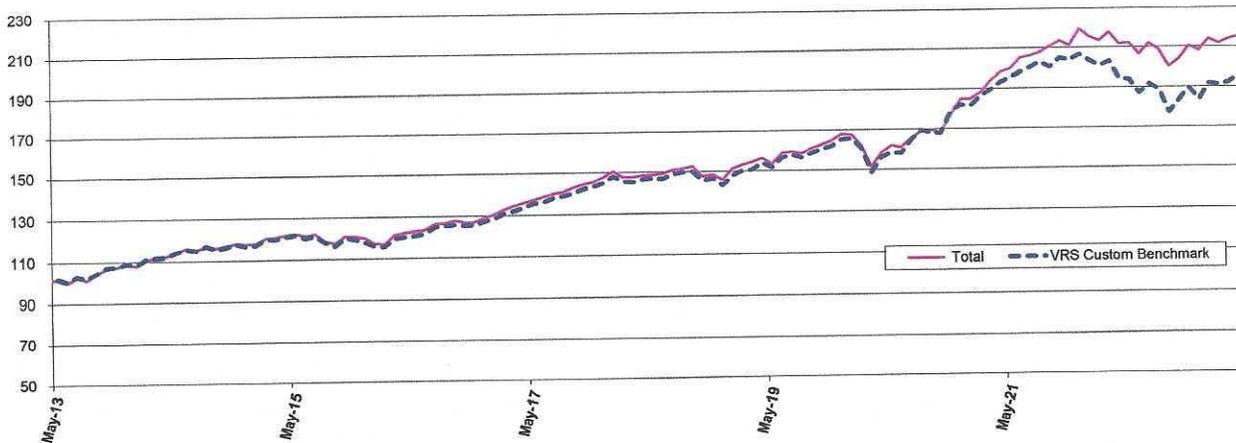
PERFORMANCE SUMMARY
Rolling Periods Ending
April 30, 2023



TOTAL FUND PERFORMANCE

	10 Yr	5 Yr	3 Yr	1 Yr	Qtr	Month	Fiscal YTD	Cal YTD	Market Value (\$MM)
Total Public Equity Strategies	8.1	6.5	12.7	2.7	0.7	1.2	11.4	7.2	33,443
<i>Benchmark</i>	8.1	7.0	12.6	2.0	1.0	1.3	11.5	8.5	
Total Fixed Income	2.1	2.3	-1.2	0.0	0.5	0.6	1.6	3.7	13,352
<i>Benchmark</i>	1.3	1.2	-2.7	-0.3	0.4	0.6	1.2	3.6	
Total Credit Strategies	5.7	6.0	8.5	1.7	1.6	0.7	3.5	2.8	14,190
<i>Benchmark</i>	4.4	4.2	5.5	2.7	1.3	1.0	7.8	4.3	
Total Real Assets	10.1	9.3	10.8	6.6	-1.2	0.0	2.3	-1.0	14,200
<i>Benchmark</i>	8.1	7.0	8.2	2.6	-2.6	-0.4	0.3	-3.6	
Total Private Equity	16.2	17.5	19.8	-2.7	1.5	0.2	-3.3	1.6	18,659
<i>Benchmark</i>	11.7	8.5	8.1	-7.2	11.2	7.4	-7.0	18.1	
Total Private Investment Partnerships	n/a	9.5	10.9	2.5	2.1	0.0	0.9	2.1	2,695
<i>Benchmark</i>	n/a	7.4	7.8	0.6	3.1	2.6	1.2	5.9	
Total Multi-Asset Public Strategies	n/a	n/a	7.4	0.6	-0.1	0.9	5.0	2.4	3,544
<i>Benchmark</i>	n/a	n/a	5.6	1.2	1.2	0.8	5.4	4.2	
Total Fund	7.8	7.8	10.8	1.7	0.6	0.6	4.2	3.4	103,609
<i>VRS Custom Benchmark</i>	6.7	6.0	7.8	0.7	2.2	1.9	4.7	6.7	

10-Year Performance
Indexed to 100



Effective July 2013, the VRS Custom Benchmark is a blend of the Asset Class Benchmarks at policy weights.

The VRS Cash Account, the Treasurer Short-Term Investment Account, the VRS Rebalancing Account, transition activity and accounts with market values of less than \$1 million are included in the Total Fund's market value. Differences in market value totals are due to rounding.

Total Fund Tracking Error

Figure 1: Policy Tracking Error Rolling Three Year - Plan (as of 03/31/2023)

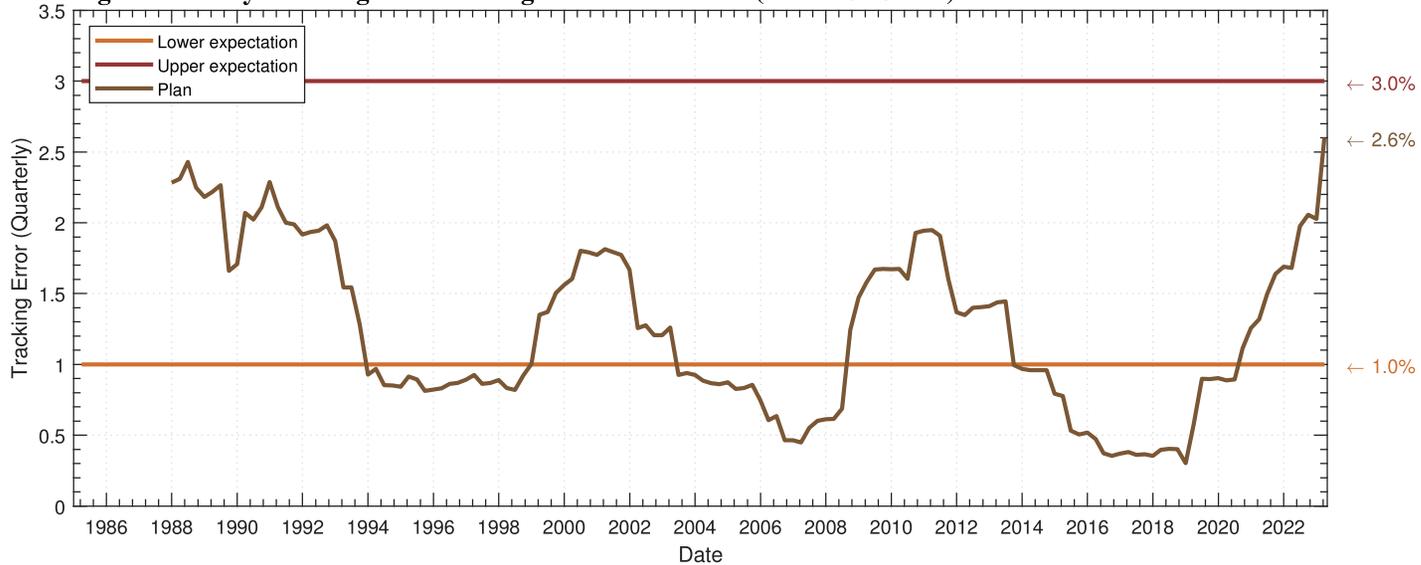
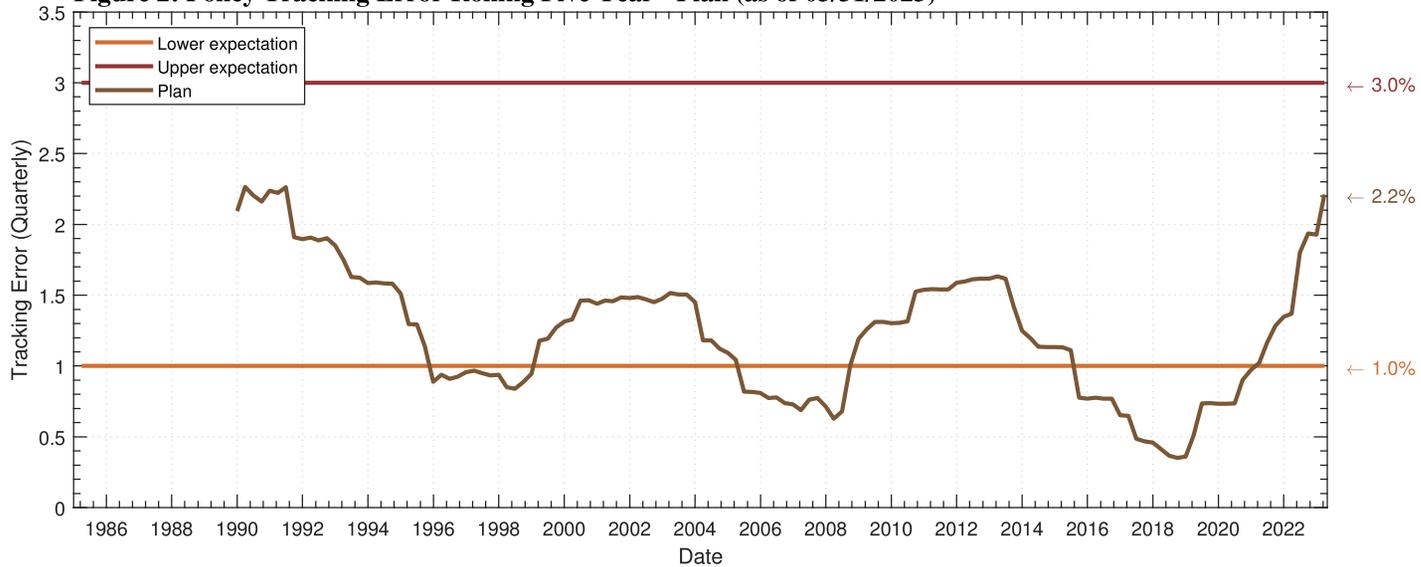


Figure 2: Policy Tracking Error Rolling Five Year - Plan (as of 03/31/2023)



The VRS Defined Benefit Plan Investment Policy Statement established the total fund tracking error range as the allowable observed tracking error calculated quarterly using 5 years of history.

Program	Action	Effective Date	Commitment/Current Value	Funding/Defunding Period	Description
Real Assets	Hired	05/09/2023	\$50 Million	Immediate	Lime Rock Resources Fund VI – A closed-end commingled fund investing in domestic oil and gas assets.
Real Assets	Hired	05/15/2023	\$125 Million	Immediate	Westbrook Real Estate Fund XII – A value-add closed-end commingled fund investing in existing real estate assets.
Real Assets	Hired	06/01/2023	\$200 Million	Immediate	Carson JV IV – An Industrial Joint Venture.

Approve Benchmarks for Credit Strategies, Private Equity, and Private Investment Partnerships.

Requested Action

The VRS Board of Trustees approves the recommended benchmarks for Credit Strategies, Private Equity, and Private Investment Partnerships.

Description/Background

The Board previously approved the Credit Strategies benchmark at the November 20, 2019 meeting, and the Private Equity and Private Investment Partnerships benchmarks at the June 11, 2020 meeting.

Current Benchmarks:

Credit Strategies	A blend of the Morningstar LSTA Performing Loan Index (60%), Bloomberg US High Yield Ba/B 2% Issuer Cap Index (30%), and Bloomberg US Aggregate Bond Index (10%). <i>(Effective date: January 1, 2020)</i>
Private Equity	The MSCI ACWI IMI Index (net VRS tax rates) lagged by three months. <i>(Effective date: July 1, 2020)</i>
Private Investment Partnerships	The weighted average of the custom Private Equity Benchmark (MSCI ACWI IMI Index (net VRS tax rates) lagged by three months) (33%), the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) (25%), the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months) (8%), the Bloomberg US High Yield Ba/B 2% Issuer Cap Index (17%), and the Morningstar LSTA Performing Loan Index (17%). <i>(Effective date: July 1, 2021)</i>

The CIO is recommending changes to these benchmarks. Specifically:

- The recommended change to the Credit Strategies benchmark makes the benchmark more representative of the opportunity set targeted by the program, while remaining an investable benchmark. In addition, the removal of the investment grade component from the program will free up capital that will be deployed into strategies with higher levels of income and that are less correlated with existing plan exposures.
- The recommended change to the Private Equity benchmark adjusts the regional weights of the current benchmark to better reflect the global private equity opportunity set. The adjustment of the geographic allocation removes unintended risks while still comparing returns to the component pieces of the existing MSCI ACWI IMI benchmark.
- The recommended change to the Private Investment Partnerships benchmark simply incorporates the recommended change of the Private Equity benchmark.

Recommended Benchmarks:

Credit Strategies	A blend of the Morningstar LSTA Performing Loan Index (50%) and Bloomberg US High Yield Ba/B 2% Issuer Cap Index (50%). Effective date: July 1, 2023
Private Equity	The regional benchmarks of the MSCI ACWI IMI Index (net VRS tax rates) lagged by three months, weighted to reflect the Private Equity opportunity set (currently 75% North America, 20% Europe, and 5% Asia and Emerging Markets). Effective date: January 1, 2024
Private Investment Partnerships	The weighted average of the custom Private Equity Benchmark (the regional benchmarks of the MSCI ACWI IMI Index (net VRS tax rates) lagged by three months, weighted to reflect the Private Equity opportunity set (currently 75% North America, 20% Europe, and 5% Asia and Emerging Markets)) (33%), the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) (25%), the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months) (8%), the Bloomberg US High Yield Ba/B 2% Issuer Cap Index (17%), and the Morningstar LSTA Performing Loan Index (17%). Effective date: January 1, 2024

Rationale for Requested Action

The changes more closely align the benchmarks with the programs’ respective objectives and portfolio composition.

Authority for Requested Action

The Board is authorized to approve these recommendations pursuant to the provisions of *Code of Virginia* §§ 51.1-124.22 and -124.30.

The above action is approved.

A. Scott Andrews, Chair
VRS Board of Trustees

Date



Asset/Liability Analysis Virginia Retirement System

June 15, 2023

Tom Cassara

Mike Faulkner

Actuarial and investment consulting – Macro investment strategies – Pension annuity purchases
Pension plan termination – Derivative strategies – Pooled employer plan consulting – OCIO

Agenda

- Background
- Asset Allocations Reviewed
- Initial Analysis
- Stress Testing
- Summary



Background

Background

- Purpose of the asset / liability study is to:
 - Define goals and objectives for VRS
 - Review the strategic asset allocation as it relates to those goals
 - Examine alternative asset allocations
 - Recommend any changes to the strategic allocation
- The process used to provide this analysis has been:
 - Define long term goals and objectives with the Board and VRS staff
 - Develop economic assumptions regarding asset classes
 - VRS developed assumptions and Agilis independently reviewed
 - Define asset allocations to be reviewed
 - Define risk metrics
 - Run asset / liability modeling results for larger two pension plans (State and Teachers)
 - VRS performed the modeling with Agilis reviewing results
 - Present result finding along with recommendation
- The time period for the analysis is 20 years (through Fiscal 2043)

Goals and Objectives

- The following strategic goals and objectives were established for the study:
 - Longer term goals
 - Reduce percentage of chance that the employer contribution rate exceeds 20% of payroll
 - Improve the plan(s) funded status over 10 and 20 years respectively
 - Reduce percentage of times benefit payments offset by contributions, exceeds 5% of the market value of assets
 - Shorter term goals
 - Reduce percentage of chance that the market value declines by 20% in any year
- Additional questions to address in study:
 - When is fund expected to be 100% funded?
 - What is peak negative cash flow?



Asset Allocations Studied

Current Asset Allocation

	Target Allocation	Expected Return	CF Yield	Standard Deviation
Public Equity	34%	7.0%	2.8%	18.1%
Fixed Income	15%	4.9%	4.8%	5.6%
Credit Strategies	14%	7.9%	0.0%	6.4%
Real Assets	14%	6.5%	6.2%	14.3%
Private Equity	16%	9.0%	0.0%	23.1%
PIP	2%	7.8%	0.0%	19.4%
MAPS	4%	6.4%	0.0%	8.7%
Cash	1%	3.7%	0.0%	0.5%
Currency Return Addition		0.1%		
Fund Total:	100%	7.1%	2.5%	12.6%

The current portfolio is well diversified and meets the desired long term expected return target of 6.75%. The probability of exceeding 6.75% over 20 years is 55%

Alternative Portfolios

	(1) Current	(2) Less Equity	(3) More Diversification	(4) More Equity	(5) Leveraged Diversification	(6) Leveraged Diversification with Less Equity
Public Equity	34%	29%	32%	36%	32%	29%
Fixed Income	15%	20%	15%	10%	16%	18%
Credit Strategies	14%	14%	15%	15%	16%	16%
Real Assets	14%	14%	15%	16%	15%	16%
Private Equity	16%	15%	15%	16%	15%	15%
PIP	2%	1%	1%	1%	1%	1%
MAPS	4%	5%	5%	5%	6%	6%
Cash	1%	2%	2%	1%	2%	2%
Total	100%	100%	100%	100%	103%	103%
<i>Leverage included in the Total</i>	0%	0%	0%	0%	3%	3%

	(1) Current	(2) Less Equity	(3) More Diversification	(4) More Equity	(5) Leveraged Diversification	(6) Leveraged Diversification with Less Equity
Expected Annualized Return	7.14%	6.96%	7.07%	7.22%	7.14%	7.09%
Expected Annualized Volatility	12.63%	11.33%	11.93%	12.88%	12.00%	11.63%
Return Greater Than 6.75% - 10 Years	53%	52%	53%	54%	55%	55%
Return Greater Than 6.75% - 20 Years	55%	53%	54%	56%	61%	61%

- Alternative portfolios do not introduce new asset classes but rather further diversification, with two alternatives utilizing a small degree of leverage
- Assumptions for portfolios with leverage do not include any benefit from increased efficiency in rebalancing
- Green represents an increase in that particular asset class, while red represents a decrease from the current portfolio

Comments on Alternative Portfolios

- Portfolios developed were to answer three specific questions
 - Does adding or reducing equity add value?
 - Portfolios labeled “Less Equity” and “More Equity” will primarily illustrate this as compared to the current portfolio
 - Does further diversification add value?
 - Comparison of the portfolio labeled “More Diversification” to the current allocation will primarily illustrate this
 - Does utilizing leverage add value?
 - Comparison of the two leveraged portfolios to both the “Current” and the “More Diversification” portfolios address this question
- Portfolios were developed using a practical constraint of not deviating more than 5% within any asset class from the current portfolio along with continuing to support a 6.75% long term expected rate of return



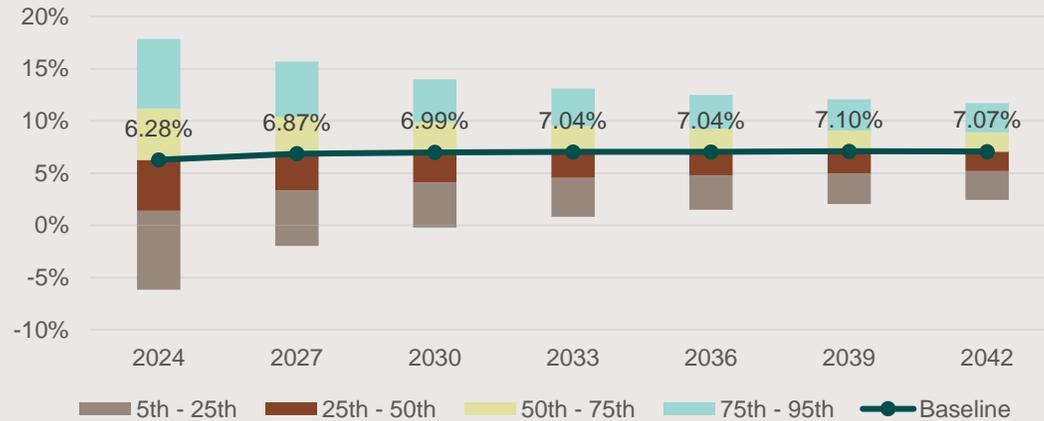
Initial results

Comments on Initial Results

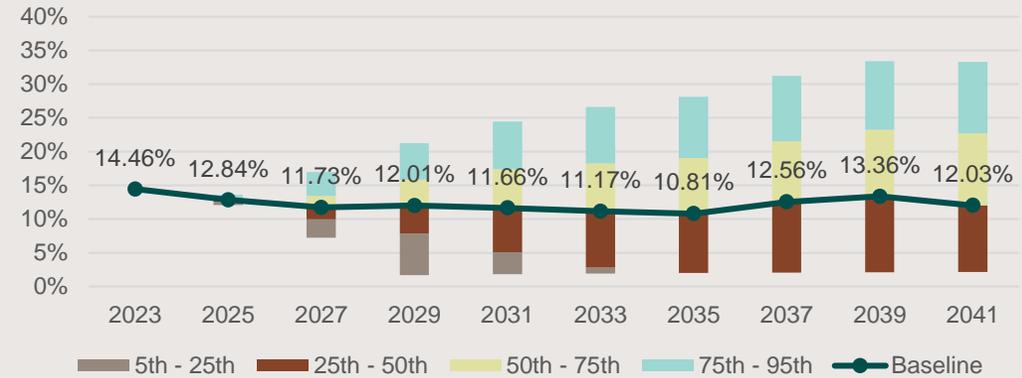
- The following pages present a summary of the findings in relation to the goals and objectives previously described
- Given the current and the alternative portfolios are efficient, we looked at the results to find portfolios that are expected to produce consistently better results than the current portfolio
- What is shown on the following pages is that adding further diversification, including the potential of adding leverage is expected to be more efficient than the current portfolio in terms of managing risk
- Of these portfolios with increased diversification, the Leveraged Diversification(5) portfolio was the only one that didn't result in an expected increase in contributions vs. the current portfolio
- Increasing or decreasing equity exposure, without further diversification, is simply a trade off between risk and reward
- Please note, the differences in the outcomes was relatively small across the portfolios, thus we have summarized the results and left the detailed results in a separate supplementary report

Initial Summary – (1) Current Portfolio

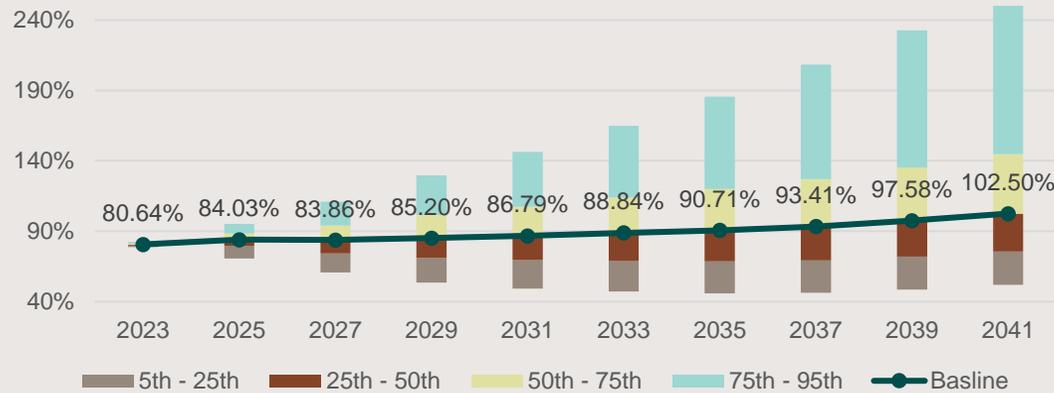
(1) Current - Projected Cumulative Fund Returns



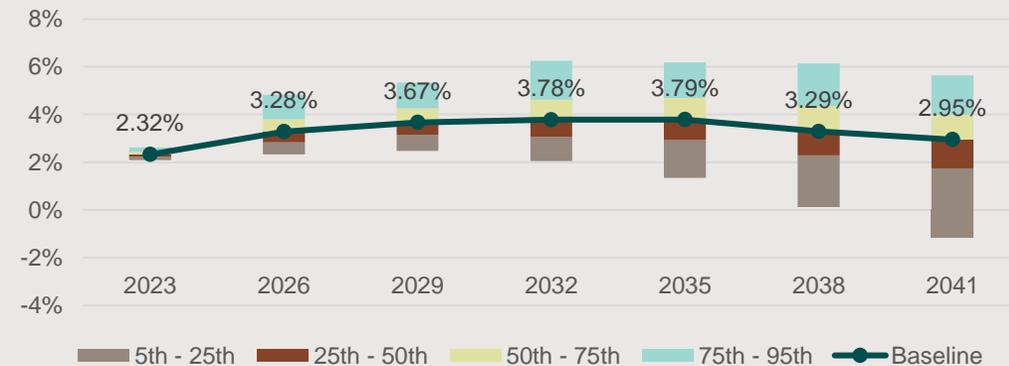
(1) Current - Projected Contribution Rates State Plan



(1) Current - Projected Funded Status State Plan



(1) Current - Projected Cash Flow Needs Pension Plans in Aggregate



All alternative portfolios follow the same general trend

Projections shown under 'Baseline' economic scenario as end June in years displayed. Asset class returns are stochastically generated, such that the median return and volatility is consistent with those presented on page 8. Asset class returns and results generated by VRS and reviewed by Agilis.

Initial Summary – Equity Change & Diversification

In the tables to follow, green represents an improvement of at least 0.2%, red represents a decline of at least 0.2% and yellow represents a change that is 0.2% or less

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	11.0%	2.9%	6.6%	10.3%	10.9%	53.3%	61.3%
(2) Less Equity	10.1%	1.9%	5.4%	8.9%	10.5%	52.2%	59.7%
(3) More Diversification	10.5%	2.4%	5.9%	9.5%	10.6%	53.0%	60.9%
(4) More Equity	11.0%	3.1%	6.7%	10.3%	10.9%	54.1%	62.0%

Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	12.5%	2.5%	5.0%	7.8%	10.9%	57.2%	63.0%
(2) Less Equity	11.6%	1.6%	3.9%	6.5%	10.5%	56.2%	61.9%
(3) More Diversification	11.9%	1.9%	4.3%	7.0%	10.6%	57.0%	62.7%
(4) More Equity	12.5%	2.6%	5.1%	7.9%	10.9%	57.8%	63.8%

- Both plans produce similar findings
- Changing the equity allocation does produce the expected result of increasing the funded status over time for the more equity portfolio, but at the expense of introducing more risk in terms of increasing the chance of material market value falls
- For portfolio (3) More Diversification, downside risk is reduced when compared to the (1) Current, but it is expected to reduce the increase in the funded status. This is partially due to fewer contributions during that time

Initial Summary – Adding Leverage

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	11.0%	2.9%	6.6%	10.3%	10.9%	53.3%	61.3%
(2) Less Equity	10.1%	1.9%	5.4%	8.9%	10.5%	52.2%	59.7%
(3) More Diversification	10.5%	2.4%	5.9%	9.5%	10.6%	53.0%	60.9%
(4) More Equity	11.0%	3.1%	6.7%	10.3%	10.9%	54.1%	62.0%
(5) Leveraged Diversification	10.2%	2.4%	5.9%	9.3%	10.5%	53.5%	61.6%
(6) Leveraged Diversification with less equity	10.0%	2.1%	5.5%	8.9%	10.4%	53.2%	61.2%

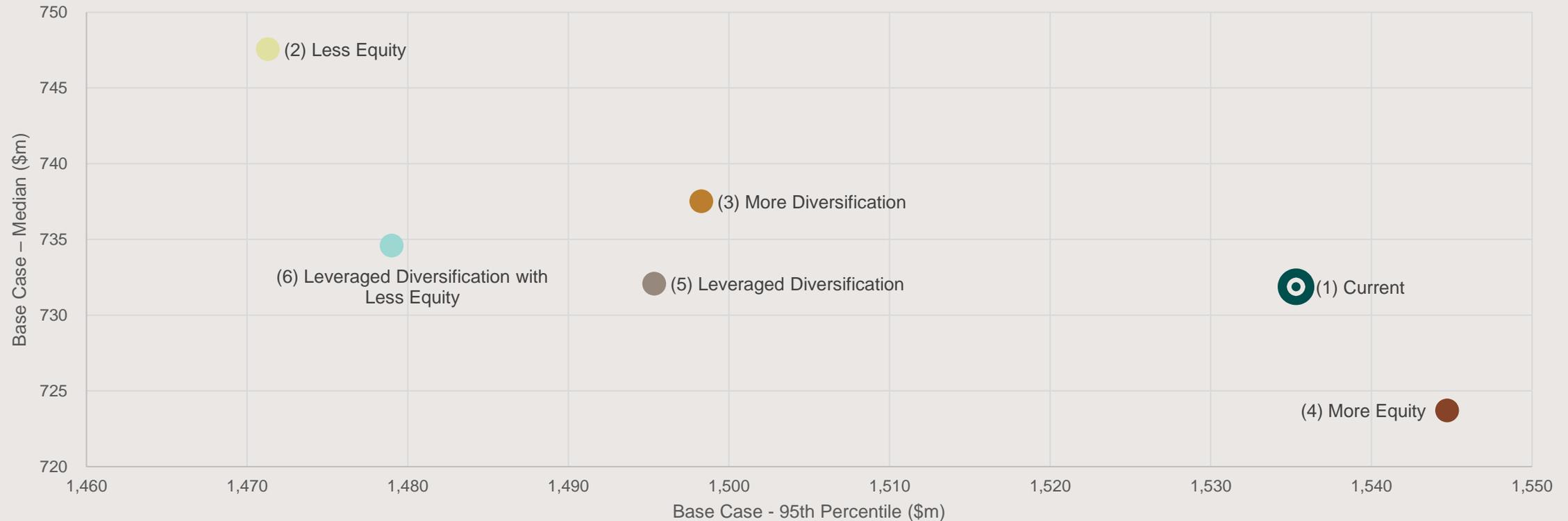
Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	12.5%	2.5%	5.0%	7.8%	10.9%	57.2%	63.0%
(2) Less Equity	11.6%	1.6%	3.9%	6.5%	10.5%	56.2%	61.9%
(3) More Diversification	11.9%	1.9%	4.3%	7.0%	10.6%	57.0%	62.7%
(4) More Equity	12.5%	2.6%	5.1%	7.9%	10.9%	57.8%	63.8%
(5) Leveraged Diversification	11.7%	2.0%	4.3%	6.9%	10.5%	57.6%	63.4%
(6) Leveraged Diversification with less equity	11.5%	1.7%	4.0%	6.5%	10.4%	57.3%	63.2%

- Similar to the prior page, both the teacher’s plan and state plan produce similar results
- Adding leverage in (5) Leveraged Diversification improves results vs. (1) Current. Upside potential is also improved as compared to (3) More Diversification with a small improvement in the downside risk measures
- Portfolio (6) Leveraged Diversification with less equity, improves vs. the (5) Leveraged Diversification portfolio in majority of risk measures but with less improvement in the long-term funded status improvement

Initial Summary – Contribution Efficient Frontier 10 Years

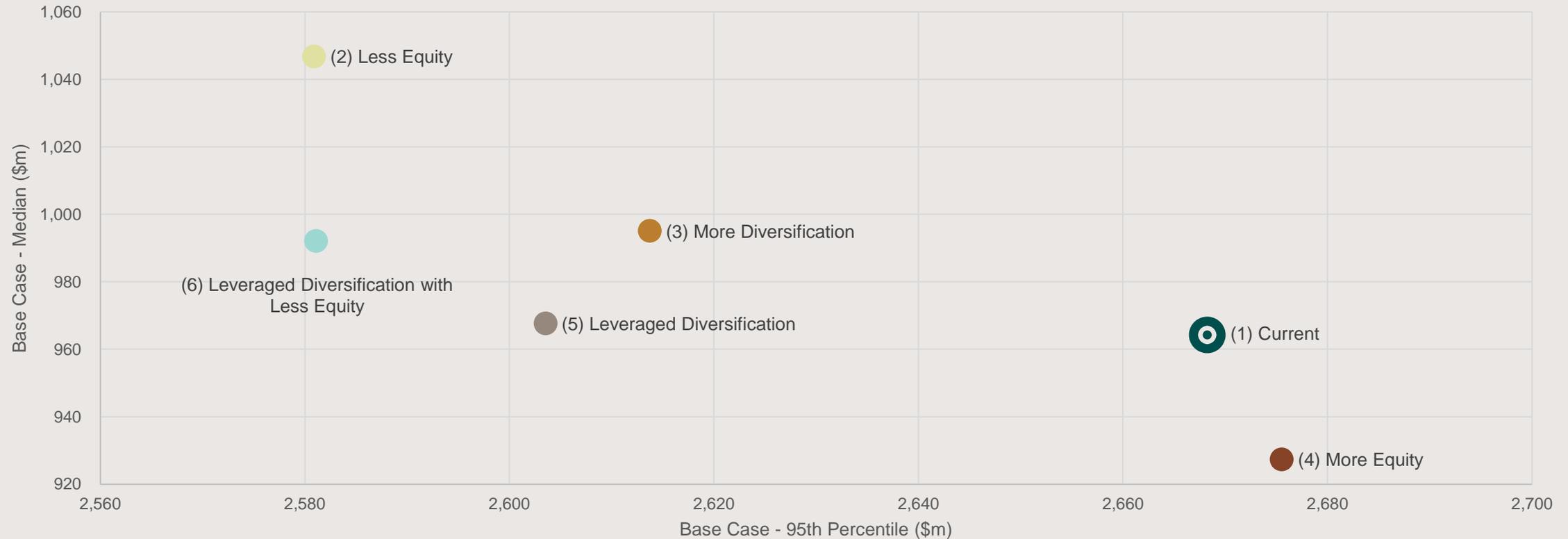
Contributions (annualized, millions)
10 Years - State Plan



- The three alternative, non-levered portfolios are efficient to one another. All portfolios, other than (4) More Equity, reduce risk but typically with increase in expected contributions
- However, adding leverage with diversification (5), maintains a similar expected outcome
- The Teacher’s Plan had similar results

Initial Summary – Contribution Efficient Frontier 20 Years

Contributions (annualized, millions)
20 Years - State Plan



- Similar to the 10-year chart, the chart illustrates that the three alternative, non levered portfolios are efficient to one another
- The Leveraged Diversification portfolio (5) retains its similar expected outcome vs. Current (1) but with reduced risk

Stress Testing

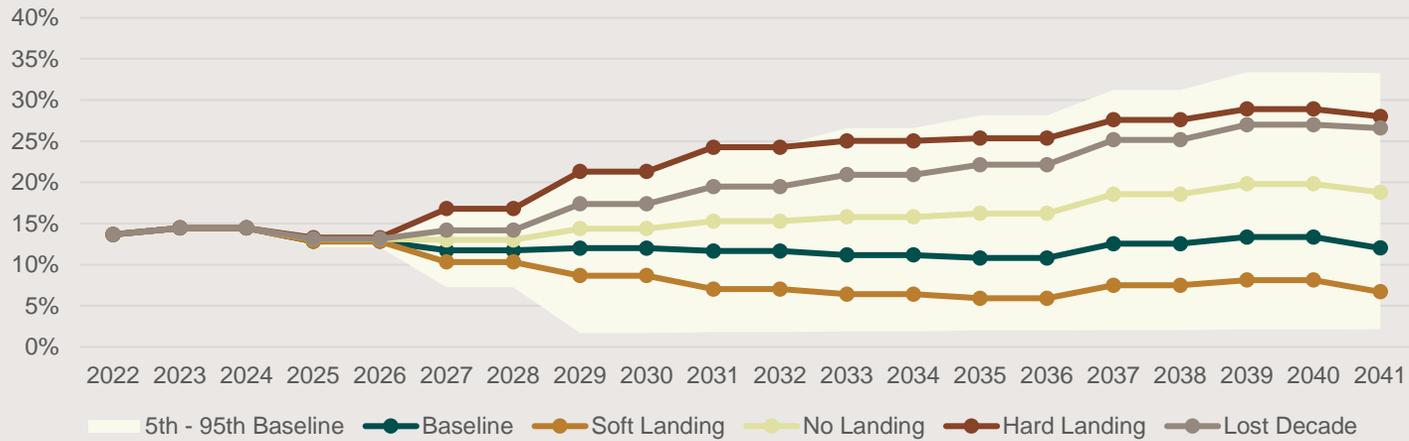


Comments on Stress Testing Results

- This section examines how the portfolios will compare under the 4 alternative economic scenarios that were previously developed and discussed
- These scenarios are typically downside risk scenarios with the exception being the Soft Landing scenario
- Contribution risk and short-term market value drops should be the main viewpoint on these scenarios as it will demonstrate the most volatility
 - Higher contributions will dampen the liquidity risk of benefit payments exceeding incoming cash flow
 - Higher contributions will drive the funded status once the economies are projected to recover in each scenario

Economic Scenarios – Expected results

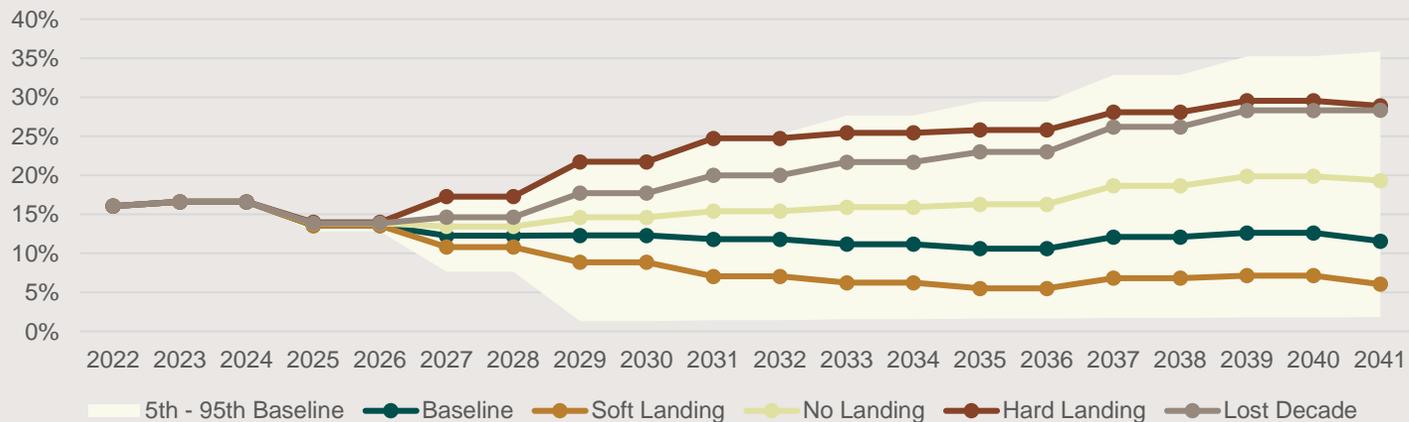
Estimated Employer Contribution Rates
State Plan



The charts on the left show the 50th percentile (expected result) for each scenario vs. the full distribution of results from the Baseline Scenario.

Hard Landing and Lost Decade would produce the worst results of the scenarios reviewed, and lie between the 75th and 95th percentile of outcomes in the Baseline distribution.

Estimated Employer Contribution Rates
Teacher Plan



Economic Scenarios – No Landing

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	19.6%	3.0%	11.5%	16.7%	13.2%	39.0%	51.4%
(2) Less Equity	19.7%	2.0%	10.5%	16.0%	12.4%	35.0%	48.5%
(3) More Diversification	19.6%	2.5%	11.0%	16.3%	12.8%	36.9%	50.1%
(4) More Equity	19.4%	3.2%	11.5%	16.6%	13.3%	40.1%	52.5%
(5) Leveraged Diversification	19.5%	2.5%	11.0%	16.2%	12.8%	37.3%	50.9%
(6) Leveraged Diversification with less equity	19.6%	2.2%	10.8%	16.0%	12.5%	36.0%	50.1%

Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	<60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	21.3%	2.5%	8.7%	13.2%	13.2%	42.7%	52.9%
(2) Less Equity	21.6%	1.6%	7.8%	12.3%	12.4%	39.1%	50.5%
(3) More Diversification	21.4%	2.0%	8.2%	12.7%	12.8%	40.9%	51.9%
(4) More Equity	21.0%	2.7%	8.8%	13.2%	13.3%	43.7%	54.0%
(5) Leveraged Diversification	21.3%	2.0%	8.2%	12.6%	12.8%	41.2%	52.6%
(6) Leveraged Diversification with less equity	21.4%	1.8%	8.0%	12.4%	12.5%	40.1%	52.0%

- The No Landing scenario has inflation persisting, risk assets performing higher than expectations but fixed income investments trailing expectations
- In this scenario, the risk of a material increase in contributions exists. Future expected contribution rates are mostly not materially impacted by the various portfolios; however, market falls produces a larger change amongst the portfolios
- Similar to the Baseline, portfolios with more diversification are fairing slightly better on the downside metrics

Economic Scenarios – Hard Landing

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	42.1%	6.6%	37.6%	38.3%	11.2%	17.5%	40.0%
(2) Less Equity	42.0%	5.3%	35.8%	37.5%	10.5%	15.3%	37.0%
(3) More Diversification	41.9%	5.9%	36.7%	37.6%	10.8%	16.6%	39.1%
(4) More Equity	41.7%	6.8%	37.6%	37.9%	11.3%	18.4%	41.5%
(5) Leveraged Diversification	41.9%	5.9%	36.8%	37.5%	10.9%	16.8%	39.6%
(6) Leveraged Diversification with less equity	41.9%	5.6%	36.4%	37.4%	10.7%	16.1%	38.8%

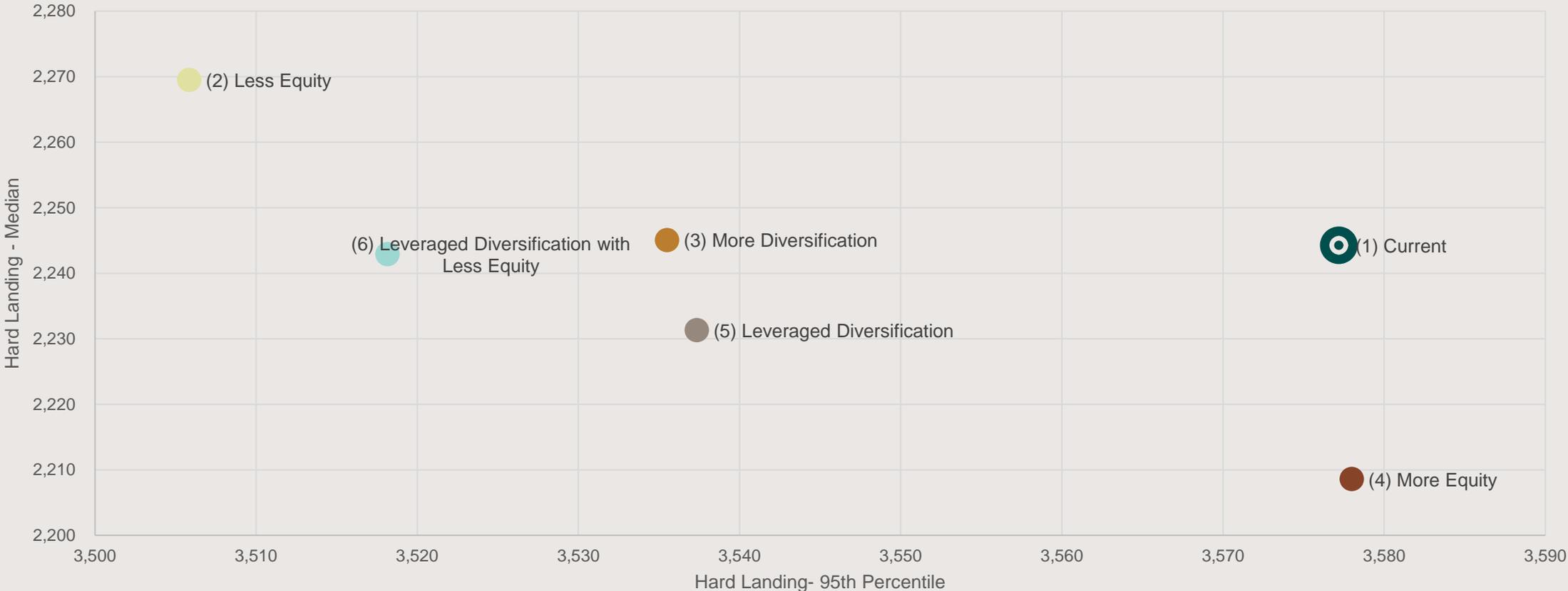
Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
(1) Current	43.6%	5.6%	32.5%	32.5%	11.2%	20.4%	42.8%
(2) Less Equity	43.8%	4.4%	30.4%	31.3%	10.5%	18.1%	39.9%
(3) More Diversification	43.6%	4.9%	31.4%	31.7%	10.8%	19.4%	42.0%
(4) More Equity	43.3%	5.8%	32.6%	32.2%	11.3%	21.4%	44.6%
(5) Leveraged Diversification	43.5%	5.0%	31.6%	31.6%	10.9%	19.6%	42.4%
(6) Leveraged Diversification with less equity	43.7%	4.7%	31.1%	31.4%	10.7%	18.8%	41.6%

- The Hard Landing scenario results in persistent inflation with higher nominal rates and risky assets being hit hard with downward real economic growth
- Contribution rates are expected to materially increase, which offsets the risk of cash flow needs
- Additional diversification improves the downside metrics with the levered portfolios keeping close to the current allocation in terms of funded status improvement over the long term

Economic Scenarios – Hard Landing – Efficient Frontier

Contributions (annualized, millions)
20 Years - State Plan



- Risk is reduced for portfolios with less equity with some portfolios increasing the expected cost of contributions. The Leveraged Diversification (5) portfolio and the More Equity (4) portfolio reduce the expected cost during a Hard Landing scenario over the 20-year horizon

Economic Scenarios – Hard Landing – Comparison of Baselines

Contributions (annualized, millions)
20 Years - State Plan



- Equities perform better than fixed income in the Hard Landing scenario in the long run, making higher equity allocations relatively beneficial as compared to the median expectations under both the Hard Landing scenario and the baseline

Economic Scenarios – Soft Landing

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	4.5%	1.2%	1.6%	4.0%	12.6%	69.6%	68.6%
(2) Less Equity	3.5%	0.6%	0.9%	2.9%	12.9%	70.3%	68.0%
(3) More Diversification	3.9%	0.8%	1.2%	3.3%	12.7%	70.3%	68.7%
(4) More Equity	4.5%	1.4%	1.7%	4.1%	12.5%	70.0%	69.3%
(5) Leveraged Diversification	3.8%	0.9%	1.1%	3.2%	12.2%	71.1%	69.9%
(6) Leveraged Diversification with less equity	3.5%	0.7%	1.0%	2.9%	12.2%	71.6%	69.8%

Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	5.4%	1.0%	1.6%	4.0%	12.6%	72.5%	70.2%
(2) Less Equity	4.4%	0.5%	0.5%	1.8%	12.9%	73.8%	69.7%
(3) More Diversification	4.8%	0.7%	0.7%	2.2%	12.7%	73.5%	70.4%
(4) More Equity	5.4%	1.1%	1.1%	2.9%	12.5%	73.0%	70.9%
(5) Leveraged Diversification	4.6%	0.7%	0.7%	2.1%	12.2%	74.4%	71.4%
(6) Leveraged Diversification with less equity	4.3%	0.5%	0.5%	1.8%	12.2%	74.9%	71.5%

- A Soft Landing produces the most favorable results of all the scenarios with inflation subsiding back to 2.5% by the end of 2023
- As expected, more equity produces favorable upside results and once again, further diversification provides risk reduction
- The levered portfolios add some upside opportunity with minimal change in the downside metrics

Economic Scenarios – Lost Decade

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	33.5%	13.5%	28.9%	37.0%	12.3%	29.1%	32.4%
(2) Less Equity	32.7%	12.1%	27.8%	35.5%	11.7%	28.3%	33.0%
(3) More Diversification	33.4%	12.8%	28.6%	36.5%	12.0%	28.3%	32.2%
(4) More Equity	34.1%	13.8%	29.5%	37.8%	12.5%	28.6%	31.3%
(5) Leveraged Diversification	33.1%	12.8%	28.6%	36.2%	11.9%	28.6%	33.2%
(6) Leveraged Diversification with less equity	32.9%	12.4%	28.3%	35.8%	11.7%	28.4%	33.6%

Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	< 60% Funded		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		in year 10	in year 20
(1) Current	35.4%	12.4%	26.0%	33.6%	12.3%	30.8%	33.9%
(2) Less Equity	34.8%	11.0%	24.8%	31.9%	11.7%	30.2%	34.6%
(3) More Diversification	35.4%	11.7%	25.6%	33.0%	12.0%	30.2%	33.7%
(4) More Equity	36.0%	12.7%	26.7%	34.5%	12.5%	30.3%	32.9%
(5) Leveraged Diversification	35.2%	11.7%	25.6%	32.7%	11.9%	30.4%	34.8%
(6) Leveraged Diversification with less equity	35.0%	11.3%	25.3%	32.1%	11.7%	30.3%	35.1%

- Similar to Japan in the 1990's, equity and real assets are hit hard for a prolonged period
- Contribution rates climb dramatically in this scenario, diversification again provides some relief within the contribution rates and market downfalls

Economic Scenarios – Lost Decade – Efficient Frontier

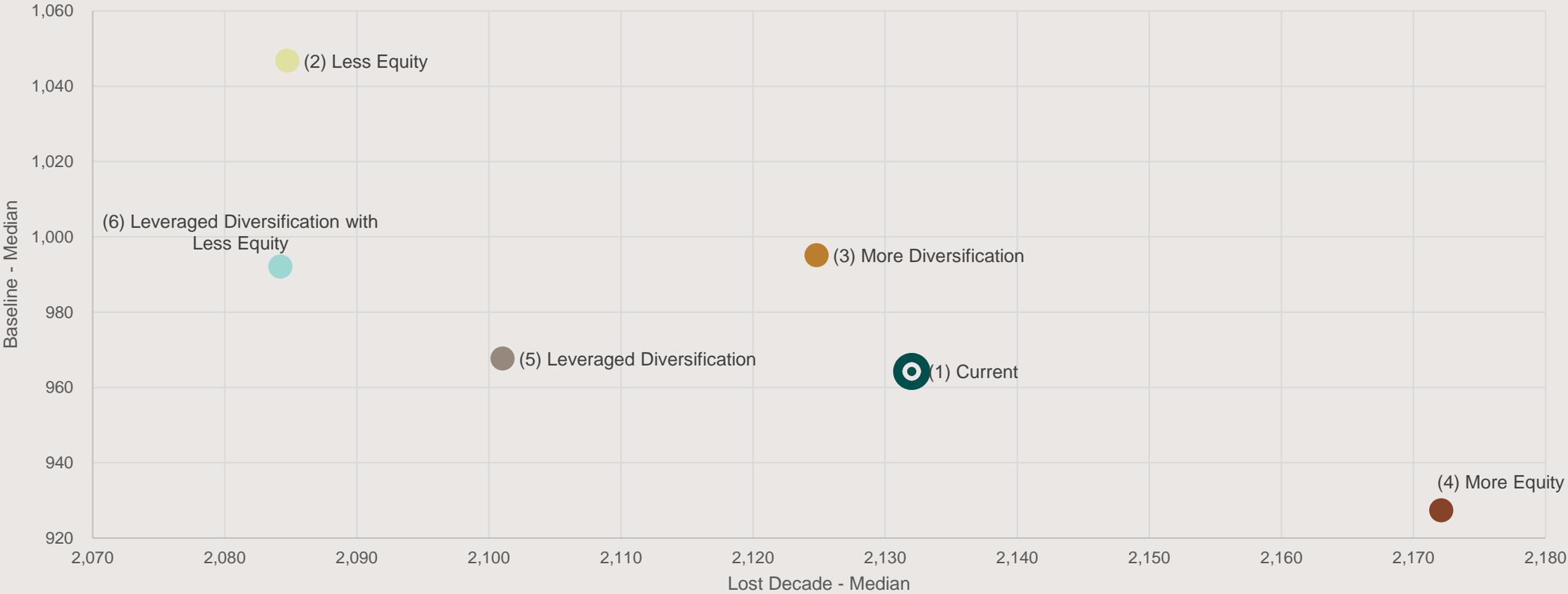
Contributions (annualized, millions)
20 Years - State Plan Lost Decade



- Adding leverage (or holding more fixed income) adds relatively more value in the Lost Decade scenario, as yields and the cost of leverage falls to near zero

Economic Scenarios – Lost Decade – Comparison of Baselines

Contributions (annualized, millions)
20 Years - State Plan



- The portfolios with more fixed income are reducing risk, while the leveraged diversification portfolio (5) maintains expected outcomes under a baseline scenario

Conclusion

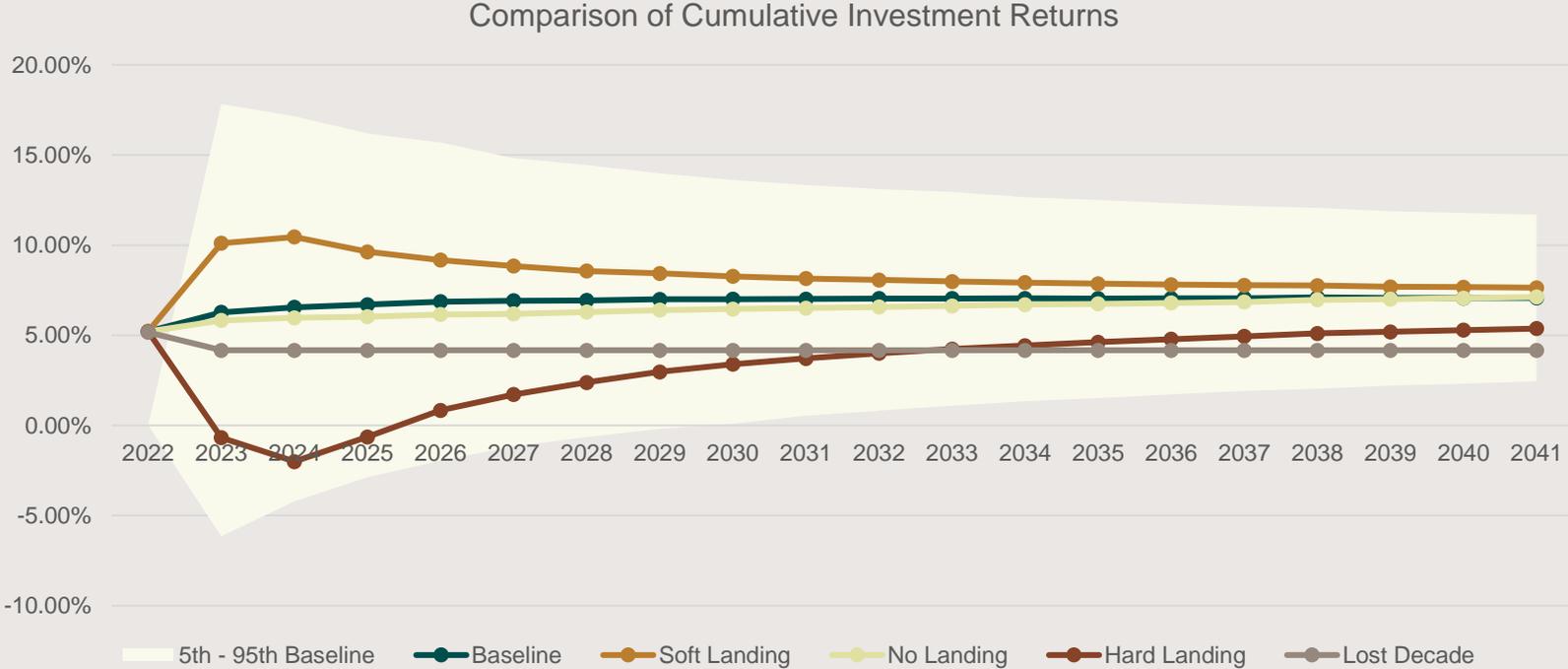
- The current allocation and the alternative asset allocations are viable options and efficient
- If desire is to further reduce potential risk, additional diversification will help reduce risk, but generally comes with an increase in expected required contributions
- The use of leverage to achieve diversification generally mitigates this increase in cost

Appendix



Initial Summary – Additional results

The following shows the projected median asset returns for the various scenarios with the shaded region representing the 5th to 95th percentile of the Baseline

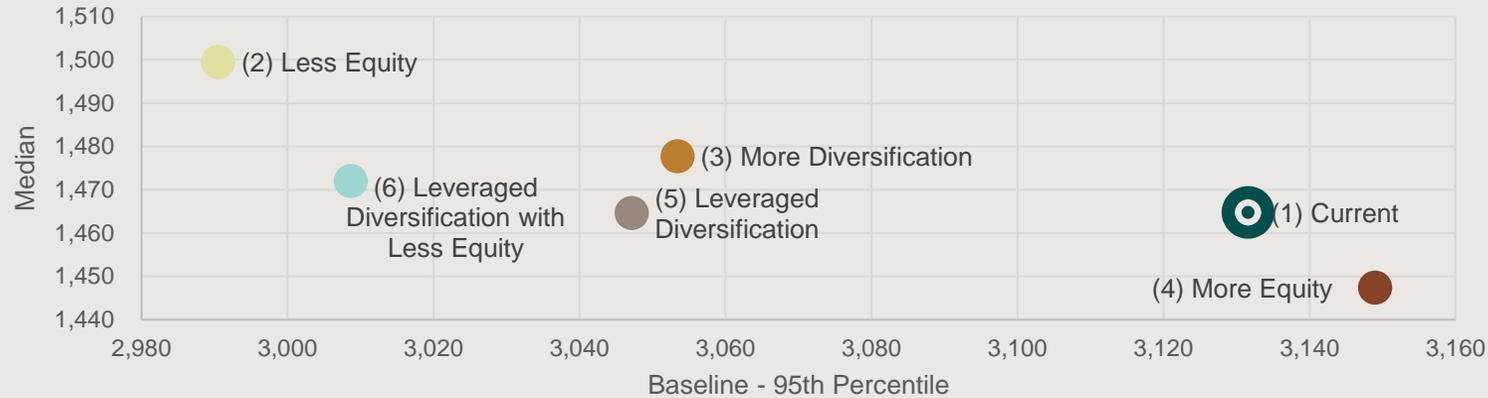


Observations:

- As expected, Soft Landing will produce more favorable outcomes than the Baseline, a Hard Landing produces poor results in short-term, but then rebounds
- Worse scenario, from long-term investment perspective is Lost Decade
- Scenarios depicted tend to focus on poorer outcomes to focus on downside potential

Initial Summary – Additional results

Contributions (annualized, millions)
10 Years - Teachers Plan



The Teachers Plan results look very similar to the State Plan

Contributions (annualized, millions)
20 Years - Teachers Plan



Initial Summary – Additional results

State Plan - Year expected to be 100% funded					
	Baseline	No Landing	Hard Landing	Soft Landing	Lost Decade
(1) Current	2040	2042+	2042+	2034	2042+
(2) Less Equity	2042+	2042+	2042+	2037	2042+
(3) More Diversification	2041	2042+	2042+	2035	2042+
(4) More Equity	2040	2042+	2042+	2033	2042+
(5) Leveraged Diversification	2041	2042+	2042+	2035	2042+
(6) Leveraged Diversification with less equity	2041	2042+	2042+	2035	2042+

Teachers Plan - Year expected to be 100% funded					
	Baseline	No Landing	Hard Landing	Soft Landing	Lost Decade
(1) Current	2039	2042+	2042+	2032	2042+
(2) Less Equity	2041	2042+	2042+	2035	2042+
(3) More Diversification	2040	2042+	2042+	2033	2042+
(4) More Equity	2039	2042+	2042+	2031	2042+
(5) Leveraged Diversification	2040	2042+	2042+	2033	2042+
(6) Leveraged Diversification with less equity	2040	2042+	2042+	2033	2042+

Initial Summary – Additional results

Peak Negative Cashflow					
	Baseline	No Landing	Hard Landing	Soft Landing	Lost Decade
Year Hit - All Allocations	2033	2028	2026	2034	2026
(1) Current	3.81%	3.98%	4.86%	4.19%	4.06%
(2) Less Equity	3.91%	4.06%	4.78%	4.33%	4.07%
(3) More Diversification	3.86%	4.02%	4.83%	4.27%	4.07%
(4) More Equity	3.79%	3.96%	4.87%	4.16%	4.08%
(5) Leveraged Diversification	3.86%	4.02%	4.82%	4.25%	4.08%
(6) Leveraged Diversification with less equity	3.89%	4.04%	4.81%	4.29%	4.08%

These results are for the median results of each scenario

Scenario definitions

- Hard Landing– The Fed fails to achieve a soft landing. While the first half of 2022 was largely about downward revisions in equity valuations, the second half was about downward revisions in (real) earnings forecasts. Growth expectations retracted, inflation is persistent especially in services, and higher nominal rates result in a significant slowdown in housing and consumer durables. Households continue to spend down savings inventoried during the pandemic while real incomes continue to fall off. The Fed is forced into a more aggressive rate hiking cycle that is not priced into the market. Real economic growth is hit hard along with risk assets which take 4 years to recover to pre-landing levels.
- Soft Landing - This is a Goldilocks case in which inflation responds immediately to Fed policy moves and is back to a targeted 2.5% by the end of 2023. Both inflation and real growth surprise to the upside along with earnings growth and sentiment drives returns on all asset classes above expectations for years 1-2 before settling back to the baseline.

Scenario definitions

- No Landing - inflation persists and Fed policy is ineffective at achieving a non-inflationary equilibrium. Short rates (and inflation) therefore remain 'elevated' though not excessive and real growth equilibrates around its historical average of 3%. While risk assets do comparatively well (above expectations), fixed income and credit as well as real assets take several years to return to their long run target returns.
- Lost Decade (Japan) - The economy collapses into an extended low growth, deflationary equilibrium similar to Japan's experience beginning in the 1990's. Risk assets such as public equity and real assets are especially hit hard. Fund returns equilibrate around 2.5% annually with very little volatility. Policy is ineffectual.
- Baseline – current FY 2023 estimates followed by latest forward return estimates.

Liability Risk Factors

Item	Current Assumption	Impact	Contribution Impact	Liquidity Impact
Inflation	2.5%	Benefit payments	20 years	Immediate
Merit increases	Variable	Payroll and normal cost	Immediate	Immediate
Longevity	Improvements each year	Liability	20 years	Small impact immediately
Unanticipated retirement	Based on experience	Benefit payments and payroll	20 years	Immediate
Workforce reduction	Not assumed	Lower normal cost, but lower payroll	Immediate	Smaller contributions
Legislative change	Not assumed	Depends on design	Depends on design	Most likely immediate impact

- Impact on contributions is based on how experience differs from the actuarial assumptions
 - However, changes in payroll and normal cost are impacted immediately
 - Most other changes will have a smaller immediate impact
- The liquidity ratio however is immediately impacted
- Key reminder: Assets are first smoothed over 5 years and then all experience is amortized over 20 years

Non-Investment Risks

Item	Impact	Contribution Impact	Liquidity Impact	Hedging
Inflation	Benefit payments	20 years	Immediate	Inflation assets
Inflation and merit increases	Payroll and normal cost	Immediate	Immediate	Inflation assets
Longevity	Liability	20 years	Small impact immediately	“Hot” portfolio
Unanticipated retirement	Benefit payments and payroll	20 years	Immediate	“Hot” portfolio
Workforce reduction	Lower normal cost, but lower payroll	Immediate	Smaller contributions	“Hot” portfolio
Legislative Change	Unknown	Unknown	Likely immediate impact	Not possible

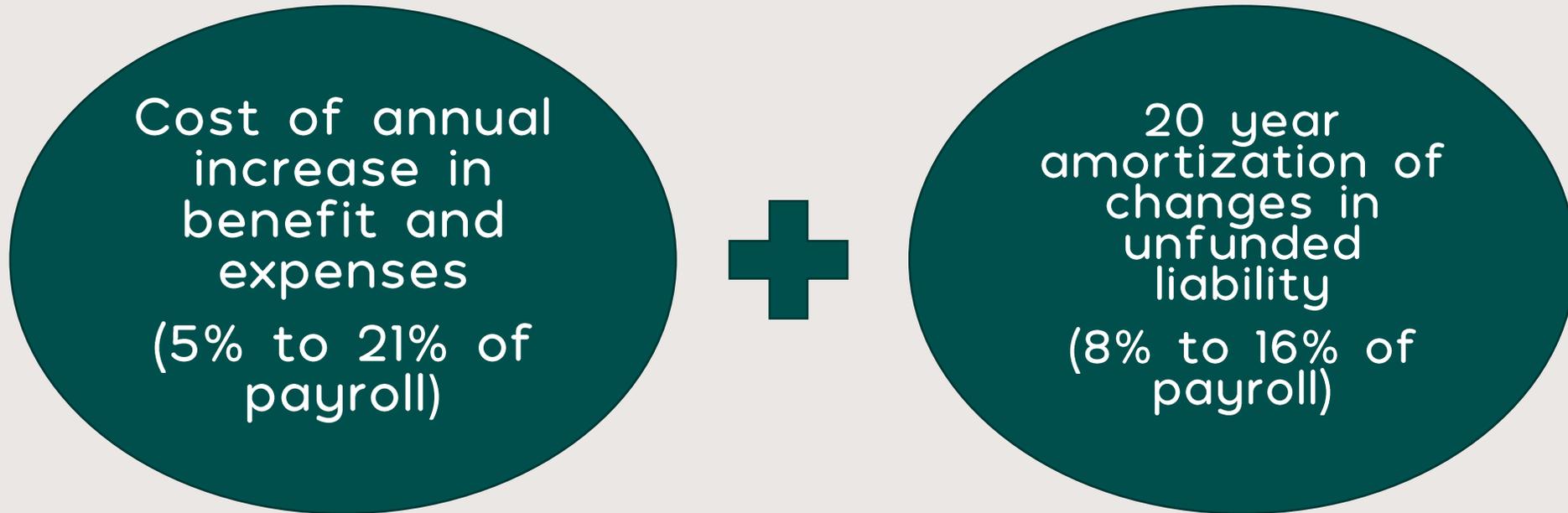
Other considerations are that there may be pressure to limit an increase in the contribution percentage

Plan Design Key Features

Feature	Plan 1	Plan 2	Hybrid
General Group Covered	Hired < 7/1/2010	Hired between 7/1/2010 & 1/1/2014	Hired > 1/1/2014
Employee Contribution	5% of compensation	5% of compensation	4% DB / 1% DC
Retiree CPI increase	100% of 1 st 3% and 50% of next 4%	100% of 1 st 2% and 50% of next 2%	100% of 1 st 2% and 50% of next 2%

- All plans are based on final average earnings and service at retirement
- Generally paid as an annuity
- Early retirement subsidies exist in all plans but smaller subsidy in Plan 2 and Hybrid due to restrictions on retirement age

Annual Contribution Calculation



- Above is expressed as a percentage of payroll
- For amortization purposes, asset gains and losses are first “smoothed” over 5 years
- Original amortization began 7/1/2013 over 30 years

Important performance and legal information

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Issued by Agilis Partners LLC

130 Turner Street, Building 3, Suite 510, Waltham, MA 02453

Telephone: 781-373-6900

Fax: 781-373-6902

Email: info@agilis.llc



AGILIS



Virginia
Retirement
System

Strategic Asset Allocation *Next Steps*

Andrew Junkin and Chung Ma

June 15, 2023



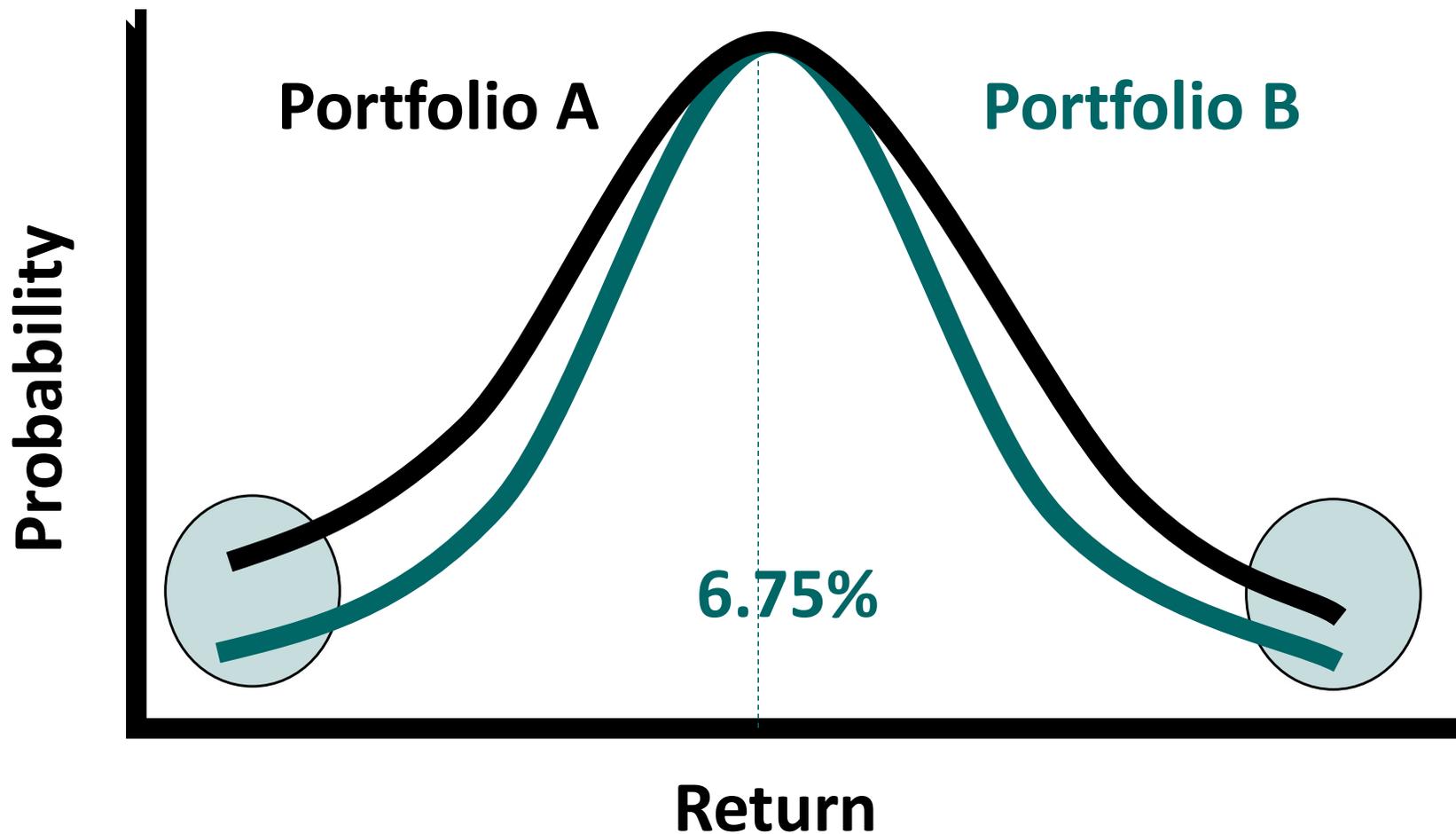
- Review of key tenets
- Candidate portfolios
- Next steps
- Progress on pre-implementation checklist
- Takeaways

- Don't use leverage to increase public equity exposure (other than rebalancing)

- Use leverage to defend the fund
 - Better risk balance
 - Help mitigate drawdown risk
 - Ability to hold positions – don't be a forced seller of assets

- Liquidity management is critical

Illustrative



Two main ways for VRS

Rebalancing Leverage

- Market conditions create attractive opportunity for investment (expected return >> borrowing cost)
- Allows portfolio rebalancing without forced selling
- Expect these opportunities would be infrequent
- Allows Staff to act swiftly, yet prudently

Asset Allocation Leverage

- The sum of the target weights of the strategic asset allocation is greater than 100%
- Diversifies the portfolio by increased allocation to diversifying assets (return, inflation protection, etc.)
- Desired outcome is smoother return experience over time

Risks and Controls

Risks	Controls
Lose more than given capital	Avoid using excessive amounts of leverage. Use dashboard monitors including stress tests, liquidity reports, and other evaluation metrics as part of holistic process to manage
In a crisis, assets sell-off at the same time (correlations across assets move to 1)	Focus strategic leverage on diversifying assets (like Fixed Income and RBI)
Additional operational complexity can challenge current processes	VRS has had a track record of portfolio management innovation. This is another step in that direction
Varying cost of financing	Use centralized decision-making to ensure that expected return is commensurate with all costs, including cost of financing
Losses can challenge liquidity profile	Additional resources dedicated to liquidity management, a strategic initiative for VRS

Alternative Portfolios

Asset	Current (1)	Less Equity (2)	More Diversification (3)	More Equity (4)	Leveraged Diversification (5)	Leveraged Diversification with Less Equity (6)
Public Equity	34%	29%	32%	36%	32%	29%
Fixed Income	15%	20%	15%	10%	16%	18%
Credit Strategies	14%	14%	15%	15%	16%	16%
Real Assets	14%	14%	15%	16%	15%	16%
Private Equity	16%	15%	15%	16%	15%	15%
PIP	2%	1%	1%	1%	1%	1%
MAPS	4%	5%	5%	5%	6%	6%
Cash	1%	2%	2%	1%	2%	2%
Total	100%	100%	100%	100%	103%	103%
Leverage	0%	0%	0%	0%	3%	3%
Expected Return (ann.)	7.14%	6.96%	7.07%	7.22%	7.14%	7.09%
Expected Volatility (ann.)	12.63%	11.33%	11.93%	12.88%	12.00%	11.63%
Return > 6.75% - 10y	53%	52%	53%	54%	55%	55%
Return > 6.75% - 20y	55%	53%	54%	56%	61%	61%

- Options 2, 3, 5, and 6 offer more favorable return/risk ratios than the current portfolio and Option 4
 - Options 2, 4, and 6 show significant changes to the overall risk level of the portfolio and would be a significant strategic shift
- If the Board prefers to not use Asset Allocation Leverage, then Option 3 is a modest improvement over the current portfolio without disruptive changes
- A modest amount of Asset Allocation Leverage (Options 5 and 6) creates favorable probable outcomes across the median and 95th percentile contribution rates
- Staff recommends the approval of Rebalancing Leverage up to 3% regardless of the option selected

Pros

- Builds a portfolio that is resilient to different futures. Modestly increases probability of achieving assumed rate of return versus current portfolio
- Less reliance on equities than current portfolio
- More diversifying assets for capital protection
- Quick implementation. Little disruption to current portfolio

Cons

- Likely to modestly underperform peers if equities meaningfully appreciate
- Diversifying strategies may underperform
- Slight increase in private exposure, adding pressure to liquidity management

Pros/Cons: Option 5 (Leverage-Diversification)

Pros

- Builds a portfolio that is more resilient to different futures. Increases probability of achieving assumed rate of return
- Less reliance on equities than current portfolio
- More fixed income and cash can provide additional protection during a market downturn
- Expectation of smoother return experience
- Continues VRS' history of innovation

Cons

- Adds complexity to the investment process and requires more headcount
- Likely to underperform if equities meaningfully appreciate
- Diversifying strategies may underperform
- More private exposure, potentially making liquidity management harder
- Cost of leverage is variable
- Will take time to fully implement portfolio

Pros/Cons: Option 6 (Leverage-Diversification Less Equity)

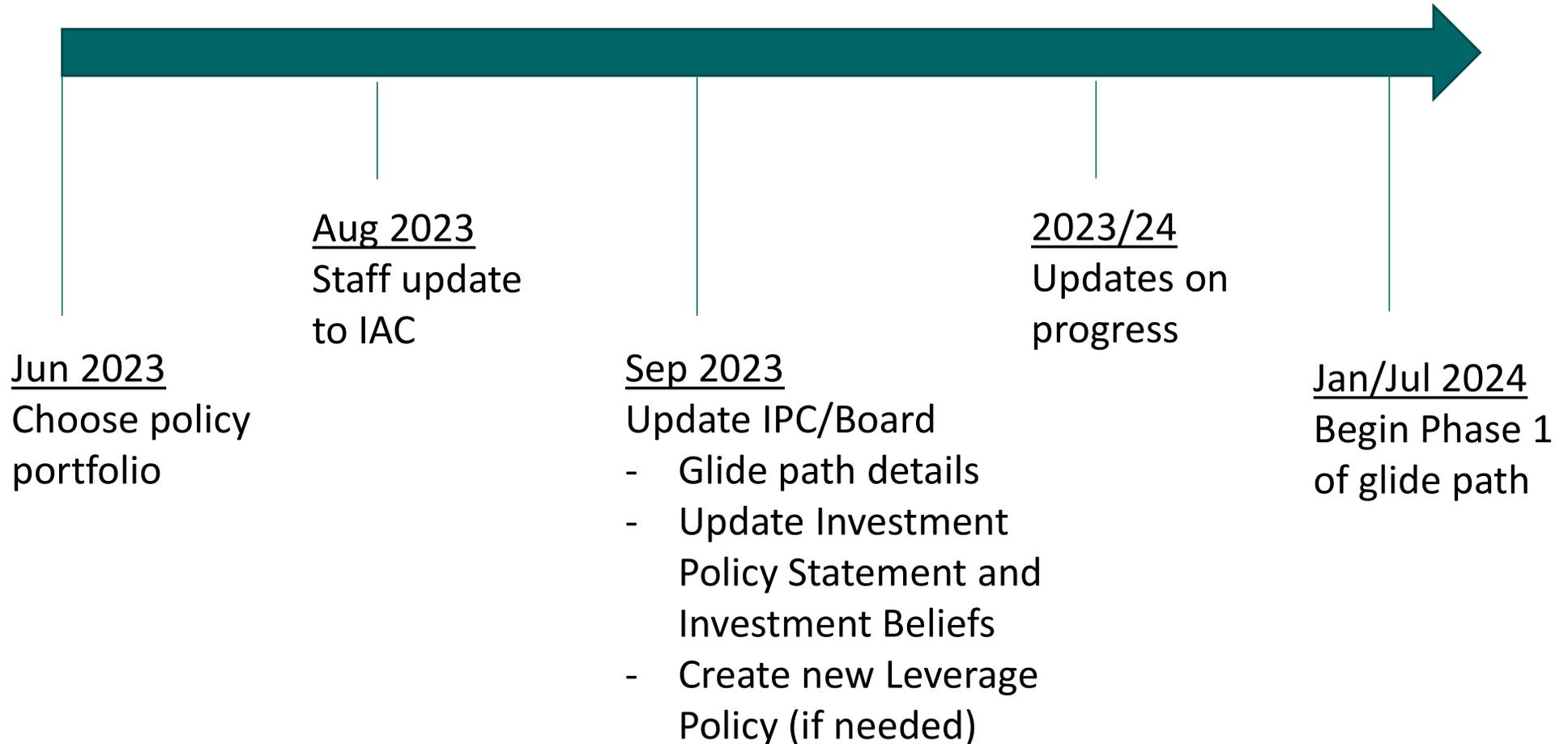
Pros

- Builds a portfolio that is more resilient to different futures. Increases probability of achieving assumed rate of return
- Large decrease in exposure to equities (6% for All Equity)
- Much more fixed income and cash can provide substantial protection during a severe market downturn
- Expectation of smoother return experience
- Continues VRS' history of innovation

Cons

- Adds complexity to the investment process and requires more headcount
- Very likely to underperform other options more if equities meaningfully appreciate
- Diversifying strategies may underperform
- More private exposure, potentially making liquidity management harder
- Cost of leverage is variable
- Will take time to fully implement portfolio

Roadmap to Launch



Checklist (If Necessary)

Today Launch

- Update Investment Policy Statement and Investment Beliefs
- Draft Leverage Policy
- Identify options for funding
- Ability to trade futures, swaps, borrow from securities lending
- Liquidity reporting and management tools
- Financing dashboard
- Counterparty risk dashboard
- Other risk management dashboards
- Enhanced portfolio management tools
- Enhanced rebalancing and cash flow monitors
- Complete documentation for financing options
- Dynamic scenario and stress testing tools

- Modest changes to asset allocation to position the portfolio to be more resilient to uncertainty and downside scenarios
- Selection of policy portfolio in June allows for appropriate planning by Staff. Updates forthcoming in future Board meetings
- Liquidity management becomes more important as complexity is introduced into the portfolio. Desire to centralize processes to optimize efficiency, accountability and communication
- Demonstrated track record of innovation and internal implementation

Counterparty Risk

Counterparty Risk Dashboard

Highlight Counterparty Name



Choose an Effective Date:

4/11/2023

Counterparty	Risk	CDS Rates and Implied Default Probabilities							Equity Price Performance				
		Counterparty Name	Risk Ranking	CDS	%Ch 1Day	%Ch 1Week	%Ch 1Mth	%Ch YTD	1 Yr DP	5 Yr DP	Equity Price	%Ch 1D	%Ch 1W
JPMorgan Chase & Co	1	86.5	0.50%	16.79%	7.82%	8.57%	0.0%	1.5%	126.52	0.7%	0.1%	2.1%	10.6%
Bank of New York Mellon	2						0.1%	3.3%	45.74	1.1%	2.4%	3.7%	-11.9%
Goldman Sachs Group Inc/The	3						0.0%	1.5%	327.37	0.7%	1.5%	3.8%	-15.8%
BNP Paribas SA	4	70.0	-2.00%	4.20%	26.11%	11.07%	0.1%	1.0%	57.28		1.0%	-0.7%	-13.2%
Citigroup Inc	4	105.2	-1.02%	11.09%	11.70%	9.83%	0.2%	2.2%	47.20	1.5%	2.4%	5.5%	-13.2%
Morgan Stanley	6						0.0%	1.7%	85.09	1.3%	0.3%	3.3%	15.6%
UBS AG	7	110.5	-0.73%	3.91%	50.70%	43.18%	0.2%	2.5%	18.98		0.1%	3.3%	-8.8%
Bank of America Corp	8	122.6	1.82%	25.47%	37.72%	41.08%	0.1%	1.9%	28.71	2.8%	2.6%	0.7%	-27.6%
Societe Generale SA	9	81.7	-2.50%	0.31%	25.34%	18.99%	0.4%	1.2%	21.54		0.0%	-12.0%	-23.1%
Deutsche Bank AG	10	151.0	-1.29%	3.58%	59.03%	22.69%	0.4%	1.3%	9.50		0.5%	-6.4%	-22.4%
Credit Suisse Group AG	11	195.4	2.99%	5.53%	54.29%	40.00%	9.2%	11.0%	0.81		0.1%	64.2%	88.7%

Counterparty	Risk	Ratings Outlook		Volatility Metrics				
		Counterparty Name	Risk Ranking	Fitch	Fitch Outloo..	Rv 30D	Rv 60D	Rv 360D
JPMorgan Chase & Co	1			N.A.	N.A.	34.6	27.4	28.7
Bank of New York Mellon	2			N.A.		39.9	29.8	30.7
Goldman Sachs Group Inc/The	3			N.A.	N.A.	31.3	29.8	29.4
BNP Paribas SA	4			N.A.	N.A.	52.6	40.3	35.5
Citigroup Inc	4			N.A.	N.A.	43.9	34.1	32.3
Morgan Stanley	6			N.A.	N.A.	33.9	29.4	31.2
UBS AG	7			N.A.	N.A.	62.7	45.3	36.5
Bank of America Corp	8			N.A.	N.A.	41.0	31.5	31.6
Societe Generale SA	9			N.A.	N.A.	55.2	45.0	42.4
Deutsche Bank AG	10			N.A.	N.A.	50.8	40.7	44.1
Credit Suisse Group AG	11			N.A.	N.A.	267.3	193.7	90.7

* Lower numerical risk ranking is better; Rank 1 is considered lowest risk

Risk ranking is a derived value based on CDS (lower is better), EP %Ch 1M (higher is better), EP %Ch 52wH (higher is better), and RV 60D (lower is better)

Financial Conditions

Risk Dashboard Daily Summary & Trends

Daily Snapshot as of 4/12/2023

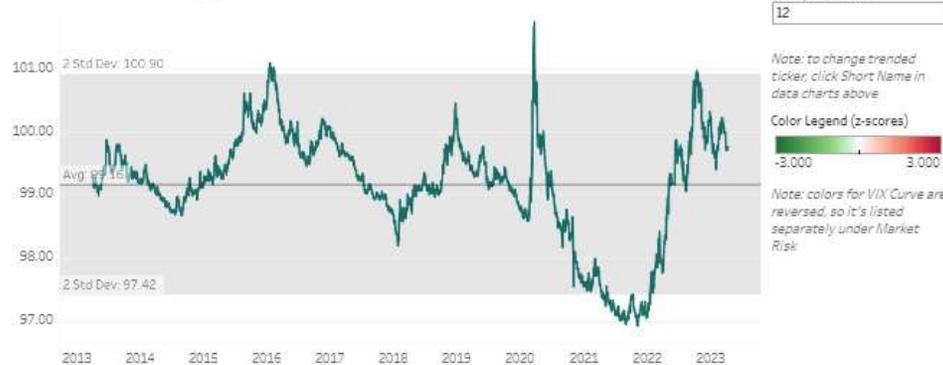
Risk Category	Short Name	Date	Level	WoW change	z-score	z-score - 1 wk ago
Market Risk	CSFB Index	4/11/2023	20.11	0.05	1.35	1.36
	Financial Cond. - Asia ex. Japan	4/11/2023	103.17	0.05	0.13	0.07
	Financial Cond. - Europe	4/11/2023	101.39	0.01	2.78	2.76
	Financial Cond. - UK	4/11/2023	100.31	-0.04	1.51	1.56
	Financial Cond. - US	4/11/2023	99.75	0.04	0.68	0.63
	GFSI	4/11/2023	0.39	-0.01	0.67	0.90
	GFSI Equity	4/11/2023	0.56	0.14	-0.16	-0.33
	GFSI Flow	4/11/2023	0.14	-0.08	0.41	0.65
	GFSI Fund Flow	4/11/2023	0.02	-0.06	0.51	0.32
	GFSI Market	4/11/2023	0.43	-0.09	1.30	1.45
	GFSI Risk	4/11/2023	0.43	-0.02	1.18	1.23
	GFSI Skew	4/11/2023	0.45	0.02	0.21	0.18
	GFSI Volume	4/11/2023	0.51	-0.21	0.43	0.68
	Gold VIX	4/11/2023	18.33	-1.40	0.38	0.69
	Oil VIX	4/11/2023	34.23	-5.19	-0.71	0.04
	US Treasury VIX	5/15/2020	4.71	-0.44	-0.53	-0.21
	VIX Index	4/12/2023	19.23	-0.37	0.14	0.19
Vol of Vol	4/11/2023	85.92	1.20	-0.64	0.70	
Market Risk	VIX Curve	4/12/2023	2.97	-0.48	0.30	0.43

Risk Category	Short Name	Date	Level	WoW change	z-score	z-score - 1 wk ago
Currency Risk	EURUSD CCB	12/31/2021	-7.38	Null	1.00	
	GFSI FX Skew	4/11/2023	0.34	-0.09	0.80	0.99
Liquidity Risk	GFSI Liquidity	4/11/2023	0.42	0.05	0.69	0.54
	GFSI Solvency	4/11/2023	0.46	-0.03	-1.07	-1.15
	LIBOR-OIS	4/6/2023	0.29	0.02	0.53	0.37
	TED Spread	4/11/2023	0.12	-0.22	-0.95	0.40
Policy Risk	China Political Uncertainty	3/31/2023	756.76	Null	1.19	
	CNH-CNY Spread	4/12/2023	0.01	Null	0.09	
	Europe Political Uncertainty	3/31/2023	322.94	Null	-1.45	
	Japan Political Uncertainty	3/31/2023	126.58	Null	0.58	
	U.S. Daily Political Uncertainty	4/11/2023	233.95	-16.22	-1.00	-1.14
	U.S. Political Uncertainty	3/31/2023	202.75	Null	0.49	

1-Year Trend - Bloomberg Financial Condition US



10-Year Trend - Bloomberg Financial Condition US



Funding Rates

Regions ▾		Settings ▾		17:18:05		Swaps Markets: US Libor Alternatives				
GV Ask/Chg		SOFR/GV		SOFR OIS		Dow Jones				
2Y	3.958 -0.064	2.3000 +0.1700	3.9815 -0.0005	DJIA		33646.50	-38.29			
3Y	3.689 -0.089	-10.0800 -0.1400	3.5920 +0.0005	S&P 500 Index						
4Y	3.574 -0.077	-20.6300 -0.3800	3.3717 -0.0043	S&P 500		4091.95	-16.99			
5Y	3.462 -0.065	-21.2500	3.2417 -0.0103	NASDAQ Composite Index						
7Y	3.419 -0.054	-28.8800 +0.0200	3.1245 -0.0109	CCMP		11929.34	-102.54			
10Y	3.391 -0.035	-29.8800	3.0840 -0.0110	Bloomberg European 500						
20Y	3.736 -0.007	-65.2500 +0.0600	3.0770 -0.0090	BE500		300.65	+0.07			
30Y	3.625 +0.006	-72.1500 -0.0200	2.9005 -0.0038							
CME Term SOFR		BSBY Fix		AMERIBOR Fix		3M BSBY/SOFR Spread		Active Futures		
0/N	4.80000 -0.03000	4.89507 0.00869	5.06987 -0.00321	3M		5 Year		110-03 ³ / ₄	+0-11 ¹ / ₄	
1M	4.88117 +0.00500	4.90659 0.00560	4.97865 +0.00724	6M		27.7500 +4.6250	10 Year		115-22+ +0-10+	
3M	4.98987 +0.01326	5.15320 0.02162	5.05500 +0.00271	1Y		25.2500 +0.2500	LONG BOND		132-05 -0-07	
6M	4.98536 +0.01401	5.29138 0.05963	4.89063 -0.00624	2Y		25.7500	ULTRA LONG		142-03 -0-20	
1Y	4.76552 +0.01275	5.28580 0.11464	4.60095 -0.00485	5Y		27.2500	Alternative Rate Futures			
3M Libor/SOFR OIS Spread						10Y		27.5000 +0.1250	1M SOFR	95.19000 +0.00250
LB/SFR		26.97900 +0.98200				20Y		28.1250 +0.1250	3M SOFR	95.05500 +0.03000
						30Y		28.3750	3M BSBY	95.14500 +0.07000
Cash Market		Generic SOFR Futures		SOFR Swaption 1Y		5Y		10Y	Generic BSBY Futures	
ICAP FF	4.82000 +0.00000	SFR1	95.088 +0.000	1Y	151.356	119.348	105.169	BSB1	94.7600	+0.0300
Fed Funds Eff	4.83000 +0.00000	SFR2	95.055 +0.030	2Y	132.865	111.010	99.124	BSB2	95.1450	+0.0700
0/N Repo	4.83000 -0.00800	SFR3	95.375 +0.070	5Y	104.644	95.408	87.289	BSB3	95.4550	+0.0750
		SFR4	95.740 +0.075	10Y	83.759	77.639	72.546	BSB4	95.9400	+0.0750
		SFR5	96.195 +0.085					BSB5	96.3350	+0.0850
		SFR6	96.595 +0.110					BSB6	96.6500	+0.1100

Economic Releases | ECO »

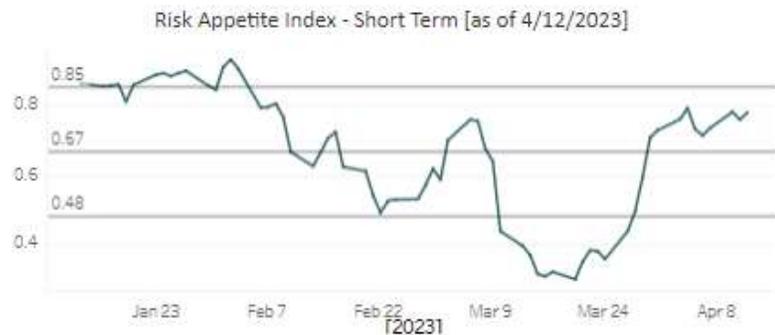
Risk Appetite

Short-Term Risk Appetite Index Summary

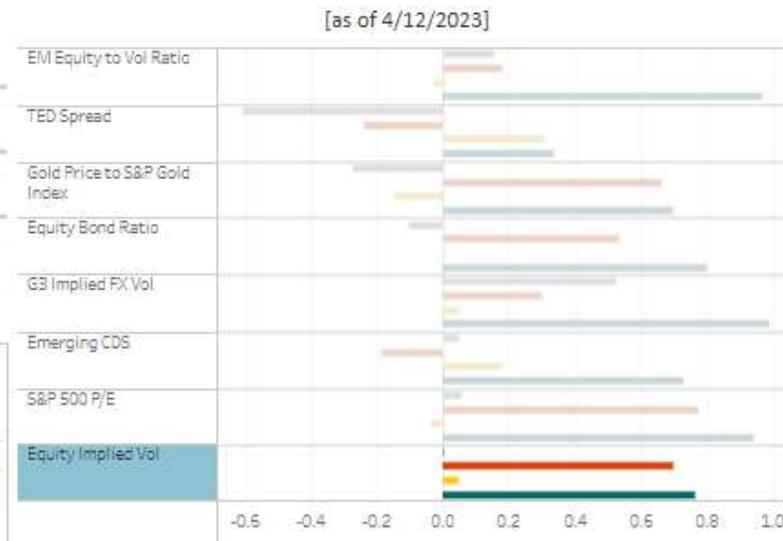
Short Term (months):
 Long Term (years):
 Rolling Window (days):
 Include Crude Oil Future:

Specify Start Date (m/d/yyyy):
 Specify End Date (m/d/yyyy):

Legend: Chg3Mon (Grey), Chg1Mon (Red), Chg1Wk (Yellow), Current (Green)
 <-----Risk Aversion-----> <-----Risk Loving----->



z-scores [as of 4/12/2023]				
	Index Value	z-score	Long Term Mean	Long Term Std Dev
Current	72%	1.11	64%	12%
Prior Day	74%	1.02		
Prior Week	72%	0.90		





Approve FY2024 Defined Benefit Plan Strategic Asset Allocation and Allowable Ranges.

Requested Action

The VRS Board of Trustees approves the FY2024 Defined Benefit Plan Strategic Asset Allocation and Allowable Ranges, effective July 1, 2023.

Description/Background

Board Strategic Asset Allocation and Allowable Ranges. Every year at fiscal year-end, the Chief Investment Officer (CIO) considers market conditions and suggests specific target exposure to the Board for the upcoming fiscal year.

The CIO recommends the following target exposures and allowable ranges effective July 1, 2023, which are unchanged from the current targets and ranges. Should the Board adopt a new Strategic Asset Allocation as a result of the ALM exercise, the CIO and staff will bring forward an implementation plan which will include new targets and ranges.

Asset Class	FY 2024 Target	Allowable Ranges	
		Min	Max
Public Equity	34%	-5%	+5%
Fixed Income	15%	-3%	+5%
Credit Strategies	14%	-5%	+5%
Real Assets	14%	-5%	+5%
Private Equity	16%	-5%	+5%
PIP	2%	-2%	+2%
MAPS	4%	-2%	+2%
Exposure Management	0%	-	+3%
Cash	1%	-1%	+4%
Total Fund	100%		

High-Level Exposure	FY2024 High-Level Target	High-Level Allowable Ranges	
		Min	Max
Total Equity	50%	-10%	+10%
Fixed Income + Cash	16%	-4%	+9%

Staff will not, by its tactical actions, underweight or overweight any individual asset class beyond the minimum and maximum allowable ranges. However, market action or Fund liquidity needs could cause an individual asset class to be temporarily below the minimum allowable range or above the maximum allowable range. In such rare cases, using the high-level rebalancing ranges, the CIO will have the flexibility to exceed the individual allowable ranges if the deviation is related to market actions or Fund liquidity needs, if the CIO believes bringing an individual asset class back within its allowable range

would not be economically prudent. If, however, the CIO determines an individual asset class needs to be brought back into its allowable range, staff will establish an action plan. In any event, the CIO will communicate the deviation to the Board on a timely basis.

Rationale for Requested Action

The recommended Strategic Asset Allocation and Allowable Ranges reflects the current market conditions and continues to allow for easier management of the asset allocation.

Authority for Requested Action

The Board is authorized to approve these recommendations pursuant to the provisions of *Code of Virginia* §§ 51.1-124.22 and -124.30.

The above action is approved on June 15, 2023, with an effective date of July 1, 2023.

A. Scott Andrews, Chair
VRS Board of Trustees

Date



Select and approve a Long-Term Defined Benefit Plan Strategic Asset Allocation.

Requested Action

The VRS Board of Trustees selects and approves the long-term defined benefit plan strategic asset allocation of Option __: _____. Staff will recommend for the Board’s further approval an implementation plan which will include a transition plan, allowable ranges, and a total fund tracking error range to be determined at an upcoming Board meeting.

Description/Background

The VRS Board of Trustees last approved a long-term target asset mix on October 10, 2019, with an effective date of January 1, 2020. The Board also agreed that, as in the past and going forward, every year at fiscal year-end, the Chief Investment Officer (CIO) will consider market conditions and progress in moving to the new long-term policy portfolio and suggest target exposures to the Board for the upcoming fiscal year.

Staff engaged Agilis, an actuarial consulting firm, to review and propose long-term asset allocation options for the Defined Benefit Plan. Agilis conducted asset-liability modeling, reviewed potential outcomes for the analysis, decision criteria, alternative portfolios, liability risk factors, and non-investment risks with the Board at several meetings.

Agilis recommends the following options for consideration for the long-term asset allocation target.

Asset Class	Long Term Asset Allocation Options					
	Current and Proposed FY 2024	Option 1	Option 2	Option 3	Option 4	Option 5
	Target	Conservative Target	Lower Risk Target	Higher Risk Target	Leverage Diversify Target	Leverage Lower Risk Target
Public Equity	34%	29%	32%	36%	32%	29%
Fixed Income	15%	20%	15%	10%	16%	18%
Credit Strategies	14%	14%	15%	15%	16%	16%
Real Assets	14%	14%	15%	16%	15%	16%
Private Equity	16%	15%	15%	16%	15%	15%
Private Investment Partnerships	2%	1%	1%	1%	1%	1%
MAPS	4%	5%	5%	5%	6%	6%
Exposure Management	0%	0%	0%	0%	0%	0%
Cash	1%	2%	2%	1%	2%	2%
Leverage	0%	0%	0%	0%	-3%	-3%
Total Fund	100%	100%	100%	100%	100%	100%

High-Level Exposure	Long Term Asset Allocation Options					
	Current and Proposed FY 2024 Target	Option 1 Conservative Target	Option 2 Lower Risk Target	Option 3 Higher Risk Target	Option 4 Leverage Diversify Target	Option 5 Leverage Lower Risk Target
Total Equity	50%	44%	47%	52%	47%	44%
Fixed Income + Cash	16%	22%	17%	11%	18%	20%

For any option selected, staff will not, by its tactical actions, underweight or overweight any individual asset class beyond the minimum and maximum allowable ranges (to be determined at a future Board meeting). However, market action or Fund liquidity needs could cause an individual asset class to be temporarily below the minimum allowable range or above the maximum allowable range. In such rare cases, using the high-level rebalancing ranges, the CIO will have the flexibility to exceed the individual allowable ranges if the deviation is related to market actions or Fund liquidity needs, if the CIO believes bringing an individual asset class back within its allowable range would not be economically prudent. If, however, the CIO determines an individual asset class needs to be brought back into its allowable range, staff will establish an action plan. In any event, the CIO will communicate the deviation to the Board on a timely basis.

If the Board selects Option 4 (Leverage Diversify) or Option 5 (Leverage Lower Risk), such selection represents a determination by the Board that using leverage for investment purposes (i) is a prudent use of trust funds, (ii) is consistent with the exclusive benefit rule, and (iii) does not negatively impact liquidity, diversification, or expected risk and return characteristics. Additionally, staff has requested up to an additional 3% of leverage be available for rebalancing purposes as circumstances may warrant to prevent transacting at non-economic prices and at the CIO’s discretion. In all leveraged scenarios (and potentially supported by the additional rebalancing leverage), the payment of pensions will be prioritized over the repayment of debt.

Rationale for Requested Action

The approval of the defined benefit plan long-term asset allocation will better position the VRS Trust Fund to achieve its investment objective.

Authority for Requested Action

The Board is authorized to approve these recommendations pursuant to the provisions of *Code of Virginia* §§ 51.1-124.22 and -124.30.

The Board selects and approves the long-term defined benefit plan strategic asset allocation of Option ____: _____.

A. Scott Andrews, Chair
VRS Board of Trustees

Date

Report

The Defined Contribution Plans Advisory Committee (DCPAC) convened on June 1, 2023, at 1:00 p.m. and took up the following matters:

WELCOME AND INTRODUCTION

Senator Bell welcomed Committee members, Board members, agency officials, representatives from stakeholder groups, and other members of the public joining in person and through electronic means, to the DCPAC.

ADMINISTRATION

Administrative Reports & Communications

Staff provided an overview of the DC Plans, as well as an update on administrative reports for the first quarter of 2023. An overview of assets and accounts across the various defined contribution plans, as well as account trends, was also provided.

Staff advised the Committee that assets and accounts, taken across all plans in totality, were both up since year end. The increase is primarily related to the impact of auto escalation in the Hybrid Retirement Plan.

Staff provided details of the age-based catch-up contributions of the SECURE 2.0 federal legislation and the challenges it poses to the administration of DC plans. An update was provided on the Hybrid Plan rate separation, which will be effective July 1, 2024. Employer support is being provided to assist with this transition. Further, staff provided details on ORPHE and upcoming DC Plans events, including the TD Ameritrade/Schwab transition.

INVESTMENTS

Performance Reports

Staff provided an overview of the April 30, 2023 performance reports to the DCPAC, including the unbundled DC plans investment options and the bundled TIAA investment menu for ORPHE.

VRS Primary Pension Plans Basic Characteristics

As part of staff's ongoing DC retirement income product/solution discussion, staff provided the Committee with a high-level overview of some of the key features found within the various VRS primary pension plans. Primary pension plan benefits serve as a foundational source of a member's retirement income and therefore, understanding these benefits helps set the stage for evaluating DC retirement income products/solutions in a holistic manner for VRS members.

OTHER BUSINESS

COV 457 Plan

Staff provided an overview of the proposed 457 Plan Document amendments. These amendments will, among other provisions, authorize VRS to suspend the right to make elective age-based catch-up deferrals to the plan for participants age 50 or older for any year beginning in 2024.

In addition, these amendments eliminate the first day of the month rule for initial elections, allow automatic pre-tax contributions to become effective as soon as administratively practicable, and update the Plan Document to reflect the current required minimum distribution age and maximum amount of elective deferrals under federal law. The Committee approved a motion to recommend the RBA to the Board.

DISCUSSION OF NEW IDEAS

No new ideas presented.

2023 MEETINGS

Senator Bell confirmed the remaining DCPAC meeting dates in 2023, all at 1:00 p.m.:

- Thursday, September 7th
- Thursday, November 30th

Additionally, the ORPHE Annual Employer Update will be scheduled for September 2023 (TBD) and will appear on the DCPAC agenda as an upcoming event. This is not a DCPAC meeting; however, members may attend if interested.

RECOMMENDATION FOR DC PLANS THIRD-PARTY ADMINISTRATOR

Staff and outside consultant, Andrew Ness, provided comments on the RFP process and an analysis of proposals in closed session. After the Committee returned to open session, the Committee unanimously voted to recommend that the Board approve the Request for Board Action recommending Voya Financial as the DC Plans Third-Party Administrator. The new contract will be effective January 1, 2025.

There was no other business to come before the Committee.

Submitted to the Board of Trustees on June 15, 2023.

J. Brandon Bell, Chair
Defined Contribution Plans Advisory Committee



Approve amended and restated 457 Deferred Compensation Plan Document.

Requested Action

The Virginia Retirement System Board of Trustees approves the amended and restated Commonwealth of Virginia 457 Deferred Compensation Plan (Plan), effective July 1, 2023.

Description/Background

The Setting Every Community Up for Retirement Enhancement Act of 2022 (SECURE Act 2.0) was included in the Comprehensive Appropriations Act of 2023, which was signed into law on December 29, 2022. VRS staff undertook a review of the existing Plan Document for the purpose of determining the need or advisability for certain required and discretionary amendments under the SECURE Act 2.0. In connection with this project, staff engaged Ice Miller (outside benefits counsel) to create draft amendments to the Plan Document. The overriding goals of this project were to (i) ensure compliance with recent required changes contained in the SECURE Act 2.0 and (ii) adopt discretionary provisions allowed under the SECURE Act 2.0 that serve the interests of plan members.

The proposed amendments to the Plan Document include the following:

- Effective July 1, 2023, eliminates the first day of the month rule for initial elections and the exception to that rule for new hires (paragraphs 4.01(b) and 4.01(e)).
- Effective July 1, 2023, allows automatic pre-tax contributions to become effective as soon as administratively practicable following the employee's 90th day of employment as opposed to the first day of the next calendar month following the 90th day of employment (paragraph 4.02(c)).
- Effective January 1, 2023, amends the maximum amount of elective deferrals to the plan to reflect the current federal level (paragraph 5.01(a)).
- Effective January 1, 2023, authorizes VRS to suspend the right to make elective age-based catch-up deferrals to the plan for participants age 50 or older for any year beginning in 2024 (paragraph 5.01(b)).
- Effective January 1, 2023, amends the age when required minimum distributions must begin to reflect the current federal level (paragraph 9.07(c)).

The amendments to paragraphs 4.01(b), 4.01(e), and 4.02(c) of the Plan Document are discretionary under the SECURE 2.0 Act that were determined to serve the interests of plan members. The amendments to paragraphs 5.01(a) and 9.07(c) are required under the SECURE Act 2.0.

The amendment to paragraph 5.01(b) related to the catch-up contributions is necessary due to a required change in the SECURE Act 2.0. Specifically, the SECURE Act 2.0 requires that all age-based catch-up contributions must be made to a Roth account if the participant earned more than \$145,000 in the prior calendar year. Because VRS does not have the capability to implement this requirement in the immediate future, in order not to contravene this change in federal law, the amendment gives VRS the discretion to suspend age-based catch-up contributions to ensure VRS continues to comply with federal law.

Authority for Requested Action

Va. Code § 51.1-124.22(8) authorizes the Board to make determinations necessary to carry out the provisions of Title 51.1 of the *Code of Virginia*, and Va. Code § 51.1-124.22(10) requires the Board to adopt rules and policies that bring the Retirement System into compliance with any applicable law or regulation of the Commonwealth of Virginia or the United States.

The above action is approved.

A. Scott Andrews, Chairman
VRS Board of Trustees

Date



Accept the Defined Contribution Plans Advisory Committee's recommendation for a DC Plans Third-Party Administrator.

Requested Action

The Virginia Retirement System Board of Trustees accepts the recommendation of the Defined Contribution Plans Advisory Committee (DCPAC) for Voya to serve as the Board of Trustees' third-party record keeper for the VRS defined contribution plans subject to negotiation of a contract.

Description/Background

VRS issued a Request for Proposals (RFP # 158-3420-1) for a DC Plans Third-Party Administrator. The RFP was issued via eVA, Virginia's electronic procurement portal.

Four firms submitted written proposals in response to the RFP. The proposals were evaluated by a panel of VRS staff members and an outside consultant based on the following criteria: qualifications and experience, approach to services, and price. Of the four firms that responded, the three highest-ranked firms were selected for interviews with the panel.

During the interviews, all the firms were asked to respond to several questions and to provide an overview of their firm's background and experience, proposed staffing, investment option support, communications (including websites), fees and implementation, if necessary.

The initial contract period is for seven years, with two successive four-year renewals.

Rationale for Requested Action

Based on the results of the scoring of the written proposals and the interviews, the panel's recommendation, with which the DCPAC concurs, is that the Board appoint Voya contingent upon staff's successful negotiation of contract terms acceptable to the parties, to serve as the VRS Board of Trustees' DC Plans Third-Party Administrator. This decision is based on the review of the proposals and the interviews.

Authority for Requested Action

Code of Virginia § 51.1-124.22(A)(8) authorizes the Board to promulgate regulations and procedures and make determinations necessary to carry out the provisions of this title.

The above action is approved.

A. Scott Andrews, Chair
VRS Board of Trustees

Date



Recordkeeping Proposal Review Summary

Date of Presentation: June 15, 2023

Presented by: Andrew Ness

Virginia Retirement System DC Plans Recordkeeping RFP
RFP No. 158-3420-1

SAGE
VIEW

SageView was retained as Request for Proposal (RFP) consultant and a kickoff meeting was held on June 9, 2022, including representatives from:

- DC Plans
- Investments
- Technology/Security
- Communications/PR
- Policy
- Procurement

The recordkeeping RFP was developed in the Summer of 2022 to include details about the Plans and their administration.

RFP was posted on eVA on September 23, 2022.

Questions and Answers provided in October and November.

Proposal responses were due by December 2, 2022.

Four Bidders



	Alight		Empower		MissionSquare		Voya	
Official Firm Name Headquarters	Alight Solutions Lincolnshire, IL		Empower Retirement, LLC Greenwood Village, CO		ICMA-RC DBA MissionSquare Retirement Washington DC		Voya Institutional Plan Services, LLC Windsor, CT	
Firm History	Alight was created in 2017 from Aon Hewitt (Blackstone acquisition) and is publicly traded on NYSE since 2021; provide benefits, payroll and cloud solutions		Empower Retirement is a subsidiary of Power Corporation (publicly traded on Toronto Stock Exchange); financial services company		Established in 1972, MissionSquare is a non-profit financial services corporation; services are largely focused on the public sector DC market		Voya was a subsidiary of ING prior to 2013, but spun off and is now publicly traded company, Voya provides health, wealth and investments	
Employees	16,000 employees in 39 countries		12,390 employees within US		621 employees (plus staff at SS&C)		4,803 employees in the US	
Recordkeeping Participants on System	11.1 M accounts		17.5 M participants		1.7 M participants (but 8.5M on SS&C)		6.5 M participants	
Participants in Plan	DC Plans	Gov't DC	DC Plans	Gov't DC	DC Plans	Gov't DC	DC Plans	Gov't DC
< 1,000	91	0	66,600	4,122	6,689	6,689	51,531	3,539
1,000-5,000	33	0	1,469	138	110	110	558	95
5,000-10,000	15	0	222	29	6	6	214	50
10,000-25,000	36	0	133	23	0	0	42	10
25,000-50,000	19	0	54	9	2	2	12	6
> 50,000	<u>19</u>	<u>5</u>	<u>32</u>	<u>12</u>	<u>7</u>	<u>7</u>	<u>21</u>	<u>14</u>
Total	213	5	68,510	4,333	6,821	6,821	52,378	3,714

Proposal Evaluations

Evaluation committee included staff from several departments.

	Weighting
Qualifications & Experience	20%
Background and Experience, Terms & Conditions	
Approach to Services	60%
Recordkeeping and Administration Processing	
Participant Services	
Data Security	
Technology and Data Exchange	
Regulatory Services and Compliance	
Investment Option Support	
Financial Planning Services	
Self-Directed Brokerage Accounts	
Quality Monitoring and Assurance	
Call Center Operations	
Public Websites	
Secure Participant Portal	
Other Participant Access Points	
Participant Communications	
Participant Education	
Secure Employer Portal	
Employer Training, Education and Communications	
Transition - Implementation	
Price	20%
Total Revenue Requirement	
Other Fees	

Proposal scoring meeting held on March 28, 2023.

The top 3 scoring firms were invited to finalist interviews in May.

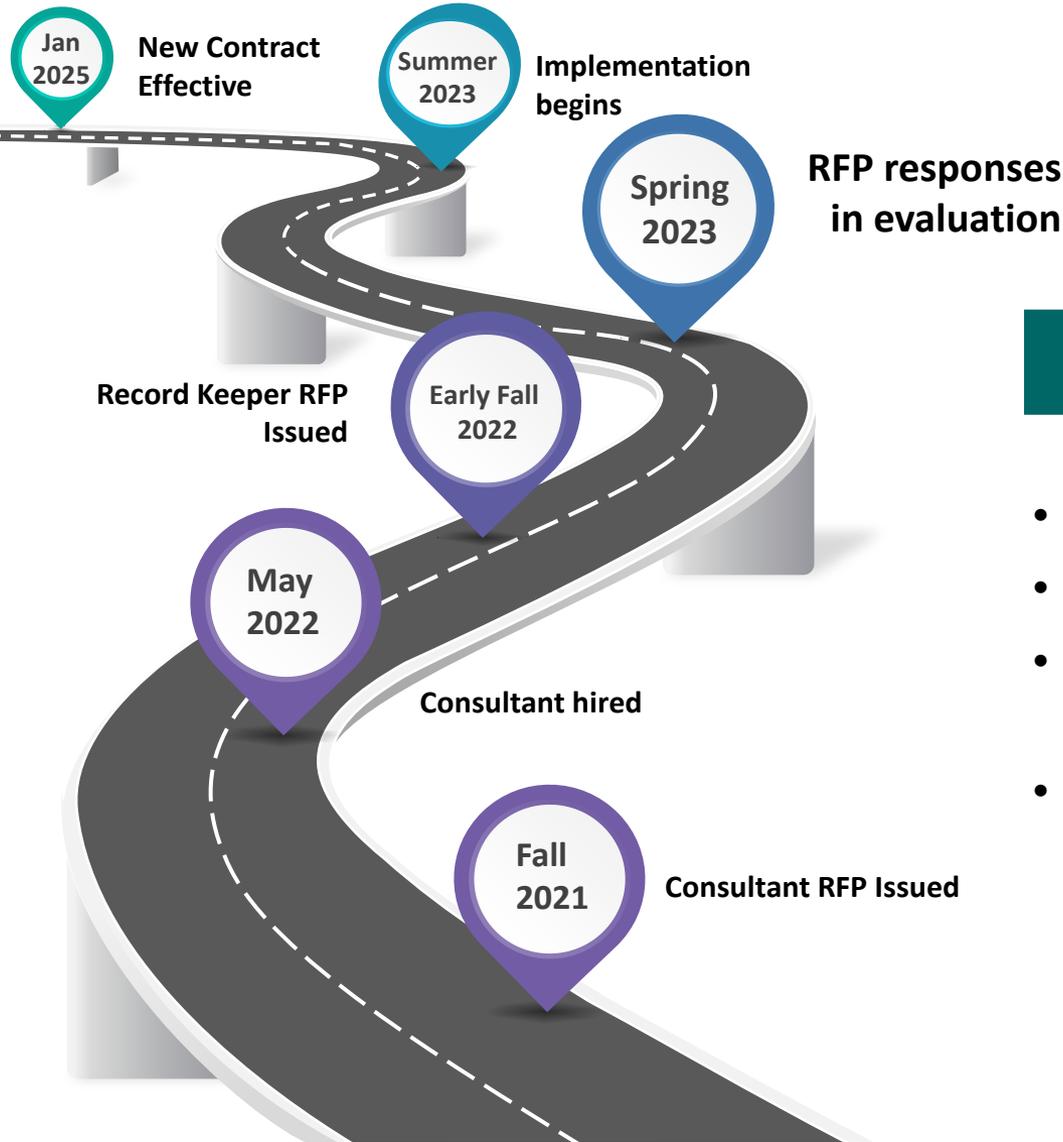
Each firm was provided with an agenda of topics requested to cover at the interview, as well as a list of questions specific to that firm's proposal.

The evaluation committee met following the interviews to discuss any updates to scores. Each finalist was sent an invitation to provide a Best and Final Offer regarding fees as well as some additional questions.

The evaluation committee met again following the finalist responses to the Best and Final Offer.

Results of the evaluation are that Voya has the highest scoring proposal and is recommended for award. Strengths of Voya included their experience with large complex governmental plans, commitment to custom processing, employer support, participant communications, data security and reporting, and their commitment to innovation.

Project Status



Project Status

- **RFP issued:** September 23, 2022
- **Responses due:** December 2, 2022
- **Initial evaluation & finalists determined:** April 2023
- **Finalist interviews:** May 15-16, 2023

Report

The Administration, Finance and Talent Management Committee met on June 13, 2023, and discussed the following:

APPROVAL OF MINUTES

The Committee approved the minutes of its April 20, 2023, meeting.

DISCUSSION AND CONSIDERATION OF FY 2024 AGENCY PERFORMANCE OUTCOMES (APOs) AND OPERATIONAL MEASURES

Michael Cooper reviewed the proposed Agency Performance Outcomes (APOs) and operational measures for FY 2024. Mr. Cooper noted that APOs are considered stretch goals for the organization, requiring input across all business units, and operational measures reflect the agency's day-to-day business operations.

Staff proposes five APOs for FY 2024, each with multiple subcomponents. Sixteen operational measures are also proposed for the fiscal year. To satisfy the requirements for the gainsharing bonus, staff must accomplish four of the five APOs and 13 of the 16 operational measures.

The Committee recommends approval of the following action to the full Board:

Request for Board Action: *The Board approves the FY 2024 Agency Performance Outcomes (APOs) and Operational Measures.*

CUSTOMER EXPERIENCE INITIATIVE UPDATE

Mr. Cooper next presented an update on the agency's customer experience initiative. The agency worked with its consultants, KPMG and ICMI, to evaluate its current customer experience program and identify opportunities for enhancement. Staff has developed a roadmap to implement the new enhancements over the next several years, including two APOs for FY 2024.

BUDGET UPDATE

Jon Farmer, Budget and Performance Reporting Manager, provided an update on the FY 2023 budget. Mr. Farmer advised the Committee that VRS began the fiscal year with approximately \$119 million and through April 2023 has expended approximately \$83 million. Mr. Farmer noted that the agency is on track to conclude the fiscal year with an estimated \$11.3 million in unexpended appropriation.

Submitted to the Board of Trustees on June 15, 2023.

A. Scott Andrews, Chair
Administration, Finance and Talent Management Committee

Approve FY 2024 APOs and Operational Measures.

Requested Action

The VRS Board of Trustees approves the FY 2024 Agency Performance Outcomes (APOs) and Agency Operational Measures.

Description/Background

Each year the VRS Board of Trustees approves Agency Performance Outcomes (APOs) and Operational Measures. The APOs are stretch goals for the Administrative staff. The Operational Measures are agency performance measures.

APOs (see attachment 1). The FY 2024 APOs have five stated outcomes summarized as follows:

1. Customer Experience Enhancements: Call Management System (CMS) – Phase 1
2. Customer Experience Enhancements: Voice of the Customer (VoC) Program – Phase 1
3. Records Management Program – Phase 2 Implementation
4. Hybrid Plan – Contribution Separation Legislation Implementation Phase 2
5. Human Resource Information System (HRIS) Implementation – Phase 1

The objective is to attain four of the five APOs. Successful attainment of the APOs is the gainsharing portion of the performance management program of the Administrative Pay Plan for administrative staff. Under the gainsharing portion of the performance management program of the Investment Operations and Administration Pay Plan, investments operations staff are eligible for a bonus if their performance meets or exceeds expectations or is exceptional, as rated in their annual performance assessment, and the employee consistently works, as a team member, to accomplish the goals of the Investment Department. Both bonuses are normally paid as a lump sum equal to 2.5% of salary.

Operational Measures (see attachment 2). VRS also identifies key operational measures each year. These measures are coupled with the APOs as part of the gainsharing portion of the performance management program. The objective is to meet or exceed the target goal for at least 13 of the 16 measures. Again, the expectation is that all employees will work collaboratively and contribute to accomplishing key functions of the agency.

Satisfying the APO and operational measure targets is required to earn the gainsharing bonus.

Rationale for Requested Action

The APOs are stretch goals for VRS, and VRS identifies key operational measures as organizational performance expectations for the fiscal year that must be maintained while working to satisfy the APOs and maintaining key agency functions. Both the Administrative and Investment Operations and Administration Staff Pay Plans contain gainsharing language to reward teamwork, collaboration, and organizational results.

Although satisfaction of the APOs and Operational Measures is not an explicit condition for a gainsharing bonus to be paid to Investment Operations and Administration staff, the agency's practice is

that no gainsharing bonus is paid to Investment Operations and Administration staff in a year that Administrative staff is not eligible for a gainsharing bonus.

Authority for Requested Action

Code of Virginia § 51.1-124.22 (A)(11) authorizes the Board to establish and administer a compensation plan for officers and employees of the Retirement System.

The above action is approved.

A. Scott Andrews, Chair
VRS Board of Trustees

Date



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2024

Summary

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

Overall Measure: 4 of 5 completed

APO #	APO Description	Strategic Goal	July	August	September	October	November	December	January	February	March	April	May	June
1	Customer Experience Enhancements: Call Management System (CMS) - Phase 1 <i>(Measure: 3 of 4 completed)</i>	Member, Retiree and Employer Education, Outreach and Partnership												
2	Customer Experience Enhancements: Voice of the Customer (VoC) Program – Phase 1 <i>(Measure: 3 of 4 completed)</i>	Member, Retiree and Employer Education, Outreach and Partnership												
3	Records Management Program – Phase 2 Implementation <i>(Measure: 4 of 5 completed)</i>	Digital Transformation and Secure Service Delivery												
4	Hybrid Plan – Contribution Separation Legislation Implementation Phase 2 <i>(Measure: 4 of 4 completed)</i>	Superior Governance and Long-Term Financial Health												
5	Human Resource Information System (HRIS) Implementation – Phase 1 <i>(Measure: 4 of 5 completed)</i>	Organizational Strength, Culture and Engagement												



AGENCY PERFORMANCE OUTCOMES STATUS REPORT
FISCAL YEAR 2024
APO 1

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

APO 1 Measure: 3 of 4 completed

Customer Experience Enhancements: Call Management System (CMS) - Phase 1

Strategic Goal:

Member, Retiree and Employer Education, Outreach and Partnership

#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
1.1	Develop and prioritize customer relationship management (CRM) system requirements.												
1.2	Initiate development of new key performance indicators (KPIs) for call management.												
1.3	Procure a new CRM system.												
1.4	Establish initial Customer Counseling Center (CCC) queue metrics dashboard.												



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2024

APO 2

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

APO 2 Measure: 3 of 4 completed

Customer Experience Enhancements: Voice of the Customer (VoC) Program – Phase 1

Strategic Goal:

Member, Retiree and Employer Education, Outreach and Partnership

#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
2.1	Identify and document VoC customer feedback channels.												
2.2	Develop essential responsibilities and position description for new Customer Experience Officer position, and initiate recruitment process.												
2.3	Define key business units to be involved in initial VoC program and develop organizational structure.												
2.4	Research and identify solutions for collecting and storing customer feedback in a centralized repository.												



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2024

APO 3

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

APO 3 Measure: 4 of 5 completed

Records Management Program – Phase 2 Implementation	Strategic Goal: Digital Transformation and Secure Service Delivery
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#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
3.1	Develop a physical records digitization program, including processes for indexing, scanning, storage, retrieval and disposition.												
3.2	Initiate the implementation of the physical records digitization program.												
3.3	Conduct a comprehensive review of VRS' current records management program, including policies, procedures and retention requirements.												
3.4	Develop a statement of work (SOW) defining a comprehensive electronic content management (ECM) system.												
3.5	Initiate the procurement of a new ECM software solution.												



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2024

APO 4

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

APO 4 Measure: 4 of 4 completed

Hybrid Plan – Contribution Separation Legislation Implementation Phase 2

Strategic Goal:

Superior Governance and Long-Term Financial Health

#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
4.1	Develop and execute a comprehensive communications plan, including employer outreach, and updates to publications and training materials.												
4.2	Conduct technology system testing.												
4.3	Complete staff and employer readiness activities.												
4.4	Establish post-deployment quality monitoring.												



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2024

APO 5

APO Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- N/S** Not started

APO 5 Measure: 4 of 5 completed

Human Resource Information System (HRIS) Implementation – Phase 1

Strategic Goal:

Organizational Strength, Culture and Engagement

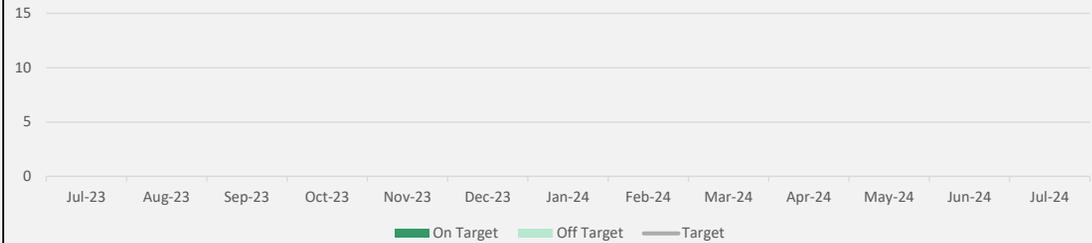
#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
5.1	Establish an HRIS project team.												
5.2	Develop a statement of work (SOW) and procure the services of a consultant to serve as HRIS project manager.												
5.3	Identify and document stakeholder business needs, technology implementation and on-going support requirements for a new HRIS.												
5.4	Initiate a statement of work (SOW) outlining HRIS system requirements.												
5.5	Develop a project implementation plan and timeline for completion of the multi-phase HRIS project.												

July-23

Current Status - All Operational Measures

YTD Status - All Operational Measures

■ On Target ■ Off Target



OM #	Operational Measure (OM)	Description	Strategic Goal	Target (Goal)	Current Status	YTD Status	Reporting Frequency	Comments
1	Timeliness of Monthly Financial Account Reconciliations	Percentage of monthly financial control reconciliations completed by last business day of the following month	Superior Governance and Long-Term Financial Health	> 95.00%	-	-	Monthly	
2	Average Abandoned Call Rate	Percentage of calls to the Customer Counseling Center (CCC) that result in hang-ups while in the queue	Member, Retiree and Employer Education, Outreach and Partnership	< 7.00%	-	-	Monthly	
3	Timeliness of Response to Messages Received by the Customer Counseling Center (CCC)	Average response time to emails received by the CCC	Member, Retiree and Employer Education, Outreach and Partnership	.75 business days	-	-	Monthly	
4	Timeliness of Monthly Retirement Disbursements	Percentage of monthly retirement disbursements processed no later than the first business day of the month	Superior Governance and Long-Term Financial Health	100.00%	-	-	Monthly	
5	Timeliness of Service Retirements Processed	Percentage of service retirements processed so that retiring members are set up to receive retirement benefits on the first retirement payment date for which they are eligible	Superior Governance and Long-Term Financial Health	95.00%	-	-	Monthly	
6	Accuracy of Service Retirements Processed	Percentage of service retirements processed for which the corresponding benefit payment correctly reflects the member's service record	Superior Governance and Long-Term Financial Health	99.00%	-	-	Monthly	
7	Timeliness of Disability Retirements Processed	Percentage of disability retirements processed within 30 days of VRS receiving notification of approval by the Medical Review Board	Superior Governance and Long-Term Financial Health	98.00%	-	-	Monthly	
8	Accuracy of Disability Retirements Processed	Percentage of disability retirements processed for which the corresponding benefit paid correctly reflects the member's service record	Superior Governance and Long-Term Financial Health	99.00%	-	-	Monthly	
9	Timeliness of Workflow Documentation Imaging	Percentage of workflow documents imaged within one business day of receipt	Digital Transformation and Secure Service Delivery	99.50%	-	-	Monthly	
10	Planned IT System Availability	Percentage of time critical systems are available during periods of planned availability	Technology Infrastructure	99.50%	-	-	Monthly	
11	Timeliness of Employer Contribution Confirmations	Percentage of Employer Contribution Confirmation (CC) snapshots completed in VNAV by the end of the month in which they are due	Superior Governance and Long-Term Financial Health	97.00%	-	-	Monthly	
12	Implementation of Corrective Action to Audit Recommendations	Percentage of audit recommendations for which VRS management represents that corrective action has been implemented by the approved target date	Superior Governance and Long-Term Financial Health	> 95.00%	-	-	Quarterly	
13	Preventable Employee Turnover	Percentage of employees voluntarily separating VRS employment due to preventable experiences	Organizational Strength, Culture and Engagement	< 10.00%	-	-	Annual	

Overall Measure: 13 of 16 meet or exceed target

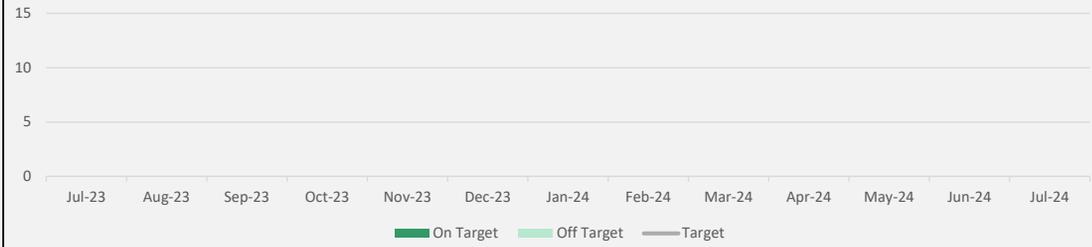
Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

July-23

Current Status - All Operational Measures

■ On Target ■ Off Target

YTD Status - All Operational Measures



OM #	Operational Measure (OM)	Description	Strategic Goal	Target (Goal)	Current Status	YTD Status	Reporting Frequency	Comments
14	Cost to Administer Defined Benefit Plans	Annual pension administration cost for defined benefit plans, as compared to peer group median reported by CEM Benchmarking, Inc.	Superior Governance and Long-Term Financial Health	FY 2023 CEM Peer Cost Average	-	-	Annual	Will not know FY 2023 CEM peer cost until spring 2024
15	Systems Security Awareness	Percentage of eligible staff who have completed security training in compliance with the agency's and Commonwealth's security policies	Digital Transformation and Secure Service Delivery	100.00%	-	-	Annual	Measure reported on an annual basis
16	Employee Professional Development	Percentage of full-time VRS administration employees receiving at least 8 hours of professional development	Organizational Strength, Culture and Engagement	85.00%	-	-	Annual	Measure reported on an annual basis

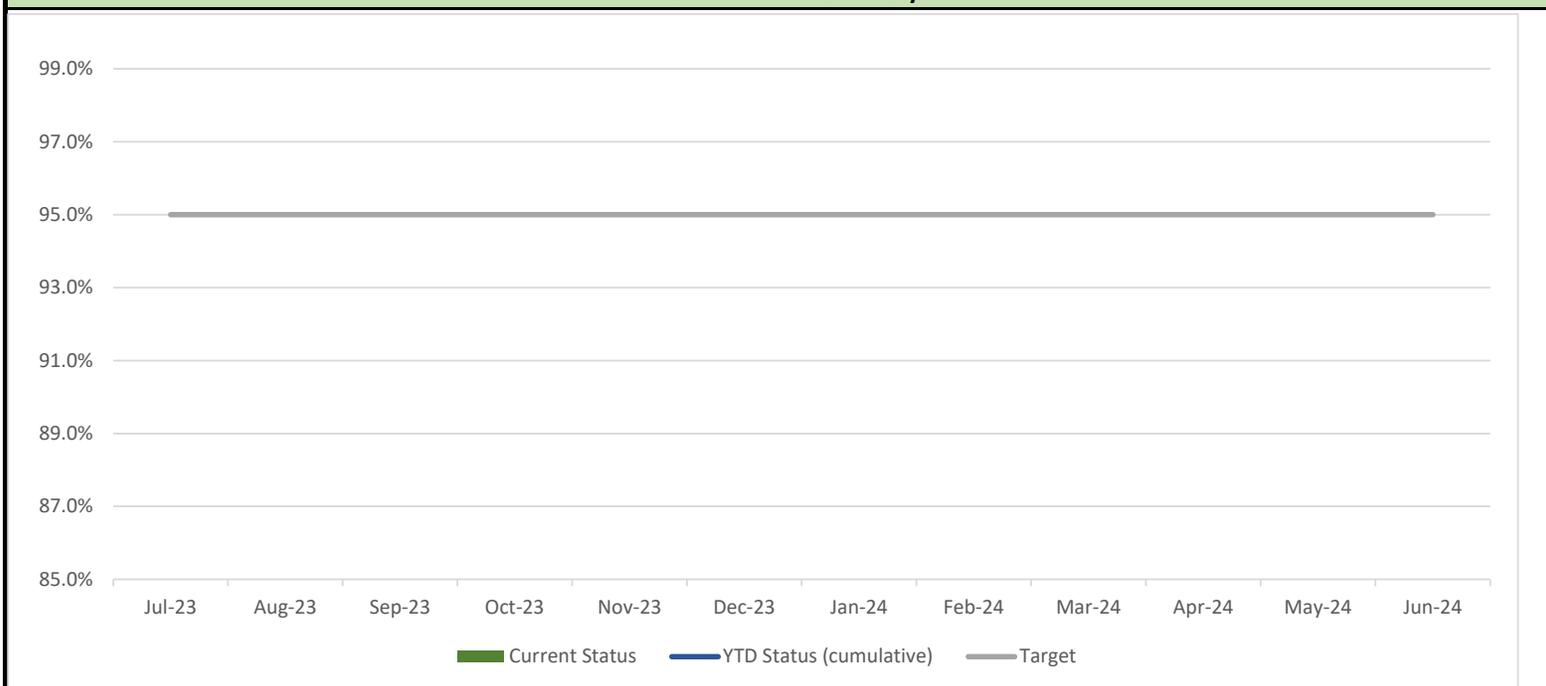
Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Reporting Period: July-23

Operational Measure	Timeliness of Monthly Financial Account Reconciliations		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of monthly financial control reconciliations completed by last business day of the following month		
Calculation Methodology	The number of financial account reconciliations completed by the last business day of the month, divided by the total accounts requiring reconciliation each month.		
Data Source	Finance Control Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	> 95.00%	Baseline (Performance History)	99%
Target Rationale: Accounts for potential impacts due to the transition to a return to the office and ongoing system changes		Baseline Rationale: 5 year average = 99%	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Ongoing transition to the hybrid work environment impacts processes and agency resources	Identify alternative processes to work around disruptions, and cross-train staff for backup as needed	
2	Ongoing transition to Cardinal HCM impacts processes and agency resources, including technology, that limit system availability	Enact business continuity plan for technology outages	
3	Unanticipated external/internal requests for new programs that expand the overall number of reconciliations	Streamline process for approving and implementing new programs to expedite roll-out and ensure accurate reconciliation reporting	

YTD Performance History



VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.

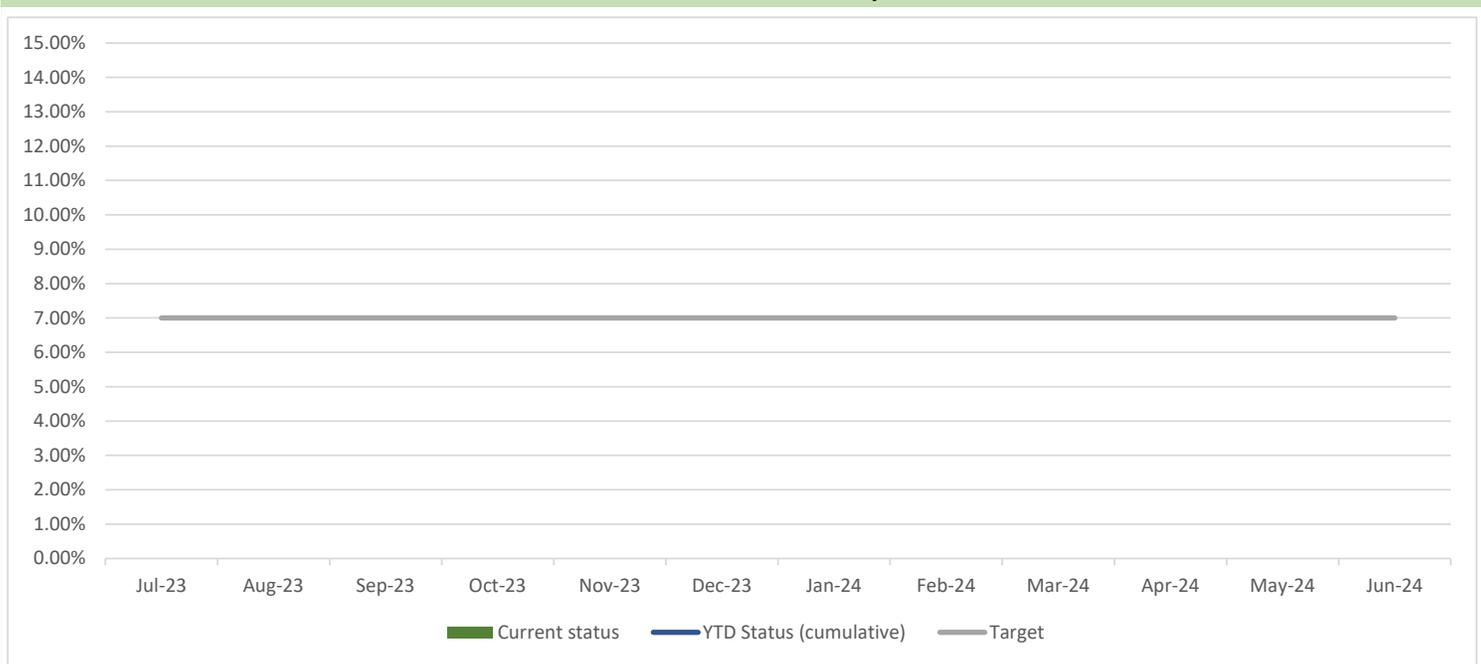
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Average Abandoned Call Rate		
Strategic Goal	Member, Retiree and Employer Education, Outreach and Partnership		
Description	Percentage of calls to the Customer Counseling Center (CCC) that result in hang-ups while in the queue		
Calculation Methodology	The number of abandoned calls (defined as a caller hanging up prior to reaching a knowledgeable person), divided by the total number of calls received by the CCC support teams. Average rate is calculated on a cumulative basis.		
Data Source	Customer Counseling Center Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	< 7.00%	Baseline (Performance History)	6.40%
Target Rationale: To account for anticipated high call volume due to system changes and the transition to a return to the office		Baseline Rationale: 5 year average = 6.4%	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Regulatory or legislative changes that impact customer benefits and result in increased call volumes (i.e. federal tax code change)	Prepare and implement a staffing augmentation plan for times when additional resources are needed on short notice to react to call influxes due to external causes	
2	The ongoing transition to the hybrid work environment impacts processes and agency resources, including system unavailability, which may cause an increase in call volume	Prepare a staffing augmentation plan for times when additional resources are needed on short notice to react to call influxes	
3	Need for increased security requirements for accessing members' records in accordance with industry best practices which cause longer call times	Identify opportunities to expedite the requisite validation process while still ensuring compliance with VRS security protocols to protect member data	

YTD Performance History



VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.

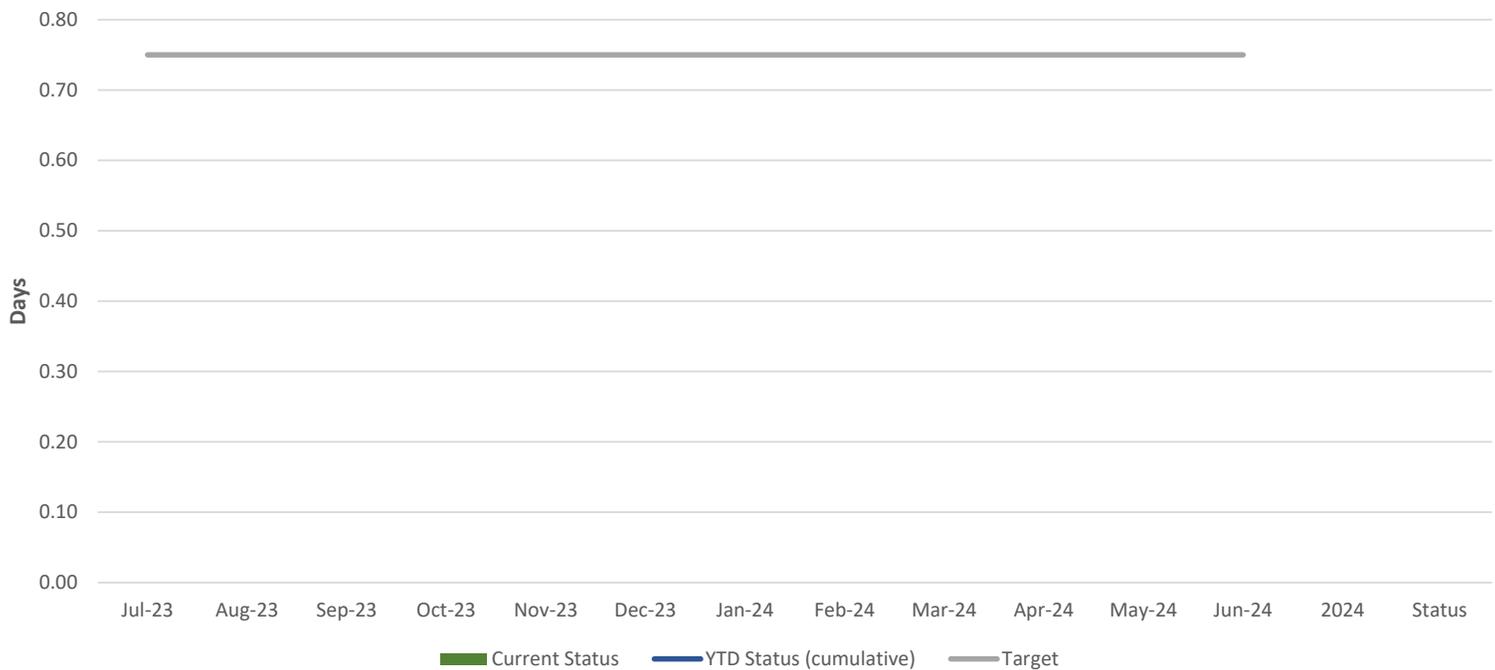
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Response to Messages Received by the Customer Counseling Center (CCC)		
Strategic Goal	Member, Retiree and Employer Education, Outreach and Partnership		
Description	Average response time to emails received by the CCC		
Calculation Methodology	The number of messages responded to within two business days, divided by the total number of messages responded to by the CCC. Note: In FY 2024, the CCC may transition its electronic communications from the current traditional email platform to secure messaging conducted through myVRS.		
Data Source	Customer Counseling Center Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	.75 business days	Baseline (Performance History)	.84 business days
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = .84 days</i>	
Current Reporting Month Status	-	YTD Status <small>(Cumulative; used at year-end to determine whether target has been met)</small>	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Transition may occur in FY 2024 from traditional emails to secure messaging through the MyVRS portal	Proactively train CCC staff on the process changes that will occur when secure messaging is implemented	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including email/secure messaging capabilities	Prepare a staff augmentation plan for times when additional resources are needed to address email backlogs resulting from system outages	
3	Historically high rate of turnover of CCC staff	Continue recruitment and retention measures to attract and retain CCC staff	

YTD Performance History



VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.

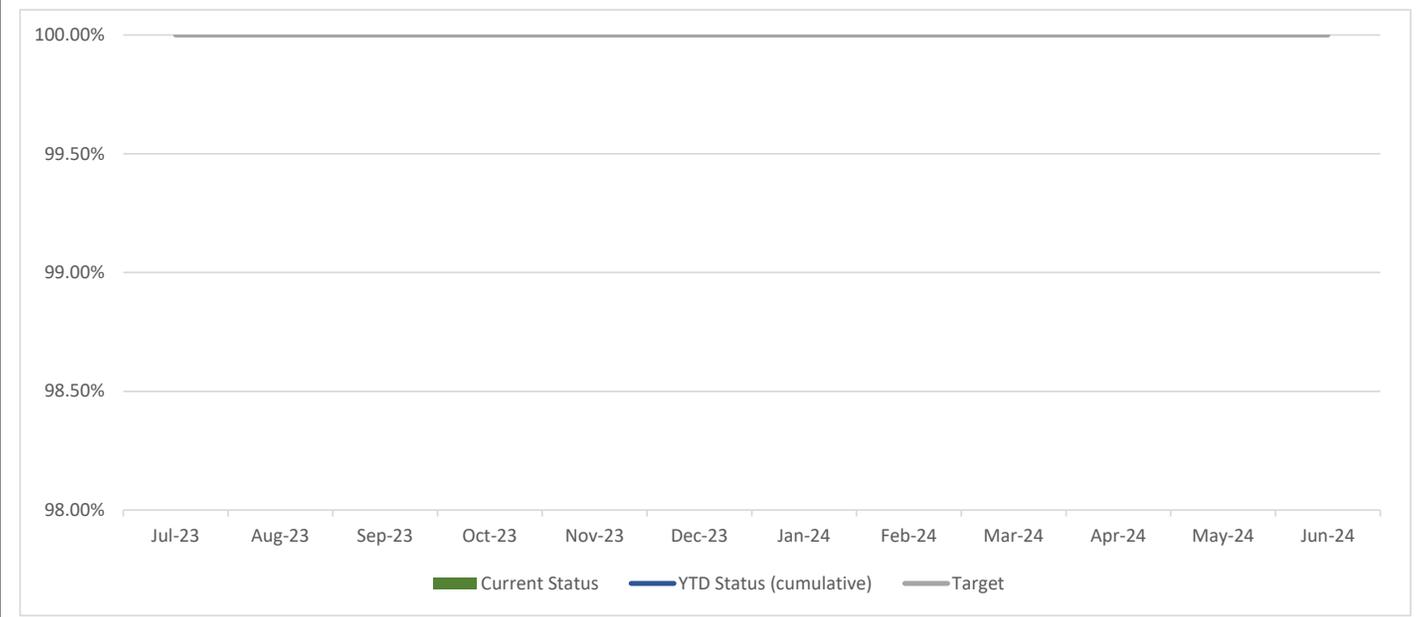
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Monthly Retirement Disbursements		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of monthly retirement disbursements processed no later than the first business day of the month		
Calculation Methodology	The number of monthly retirement disbursements processed so that the payment date is no later than the first business day of the month, divided by the total number of monthly retirement disbursements that require processing each month. "Processed" is defined as funds having been disbursed to retirees; "disbursed" is defined as the funds having been paid out of the VRS account. This process requires VRS to submit documentation to external partners (Virginia Department of Treasury, banking partner) in sufficient time to meet the first business day of the month requirement.		
Data Source	Benefit Disbursements Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	100.00%	Baseline (Performance History)	100.00%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 100%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		100	
1	Dependence upon external parties who are integral to the process (i.e., Virginia Department of Treasury and banking partner)	Develop contingency plan in concert with external parties to ensure open lines of communication and alternate processes in the event of a potential delay	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit ability to process and/or transmit fund documentation to external stakeholders	Enact business continuity plan for technology outages	
3	Sensitivity of data that requires strong controls and several levels of approvals; risk of staff absences or unavailability	Cross-train existing staff and ensure redundancy of staff authorized to approve retirements	

YTD Performance History



VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.

VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

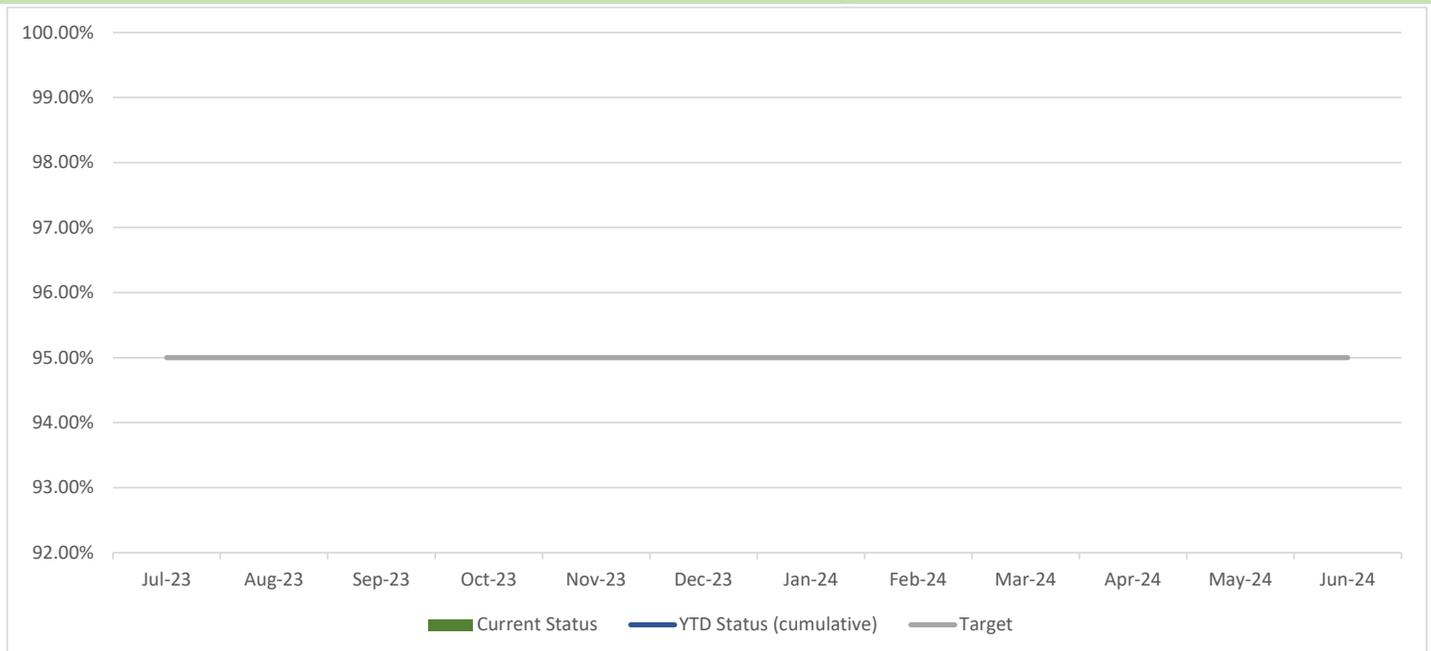
Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Service Retirements Processed		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of service retirements processed so that retiring members are set up to receive retirement benefits on the first retirement payment date for which they are eligible		
Calculation Methodology	The number of service retirement payments processed by the first payment date on which the member is eligible to receive retirement benefits, divided by the total number of initial payments made for the same time period. The "first payment date on which the member is eligible to receive retirement benefits" is based on the date by which VRS receives a member's retirement application that is determined by VRS to be complete, accurate, and ready for payment processing. "Processed" is defined as funds having been paid to retirees; "disbursed" is defined as the funds having been paid out of the VRS account.		
Data Source	Service Retirement Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	95.00%	Baseline (Performance History)	98.38%
<i>Target Rationale: Accounts for system conversion and ongoing pandemic</i>		<i>Baseline Rationale: 5 year average = 98.38%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-

Potential Constraints to Meeting Target		Mitigation Strategies	
1	Ongoing implementation of myVRS enhancements, which will significantly change current processes	Provide ample opportunity for advanced training; augment staffing as needed to ensure adequate resources during transition	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit ability to process retirements	Enact business continuity plan for technology outages	
3	Sensitivity of data that requires strong controls and several levels of approvals; risk of staff absences or unavailability	Cross-train existing staff and ensure redundancy-of staff authorized to approve retirements	

YTD Performance History



VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.

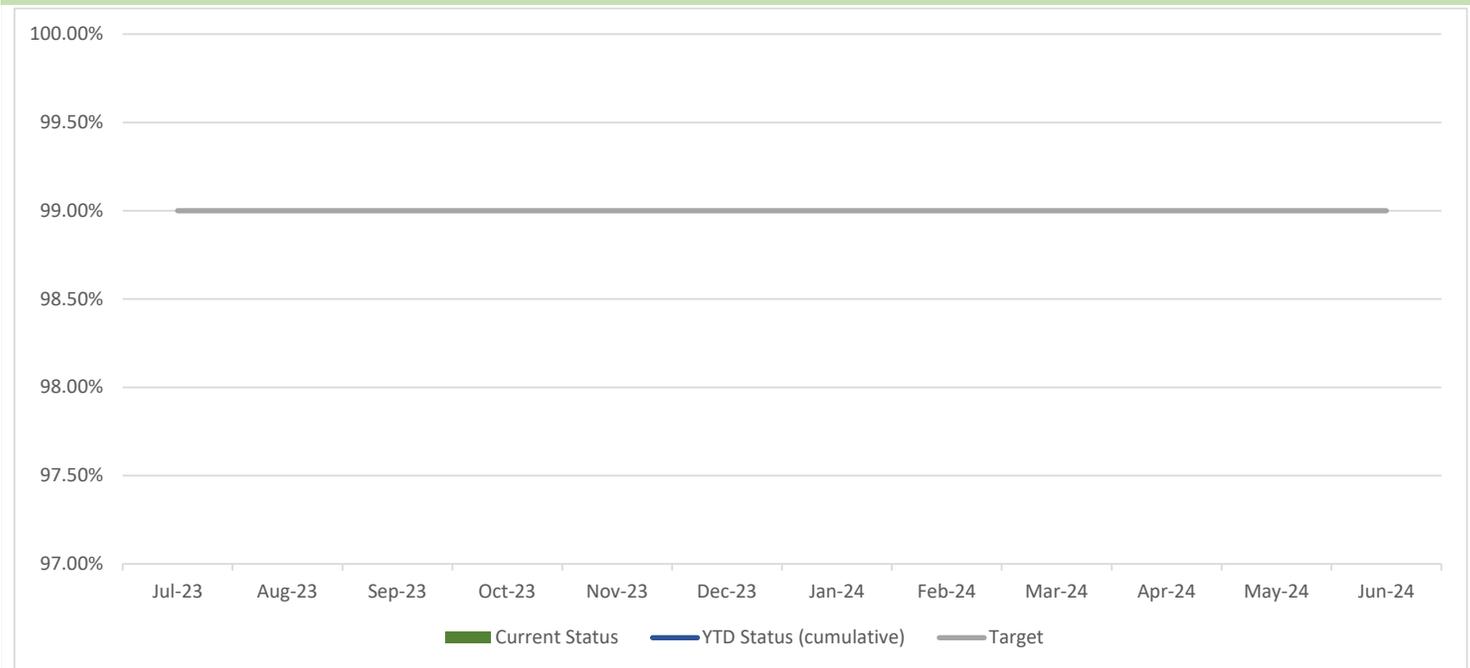
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Accuracy of Service Retirements Processed		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of service retirements processed for which the corresponding benefit payment correctly reflects the member's service record		
Calculation Methodology	The number of service retirement applications processed and corresponding benefit paid accurately, divided by the total number of initial service retirement benefits processed and paid. An accurate benefit payment is defined as the benefit amount correctly reflecting the member's service record. "Processed" is defined as funds having been paid to retirees; "paid" is defined as the funds having been paid out of the VRS account.		
Data Source	Service Retirement Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	99.00%	Baseline (Performance History)	99.00%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 99%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Ongoing implementation of myVRS enhancements, which will significantly change current processes	Provide ample opportunity for advanced training; augment staffing as needed to ensure adequate resources during transition	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit ability to process retirements	Enact business continuity plan for technology outages	
3	Sensitivity of data that requires strong controls and several levels of approvals; risk of staff absences or unavailability	Cross-train existing staff and ensure redundancy of staff authorized to approve retirements	

YTD Performance History



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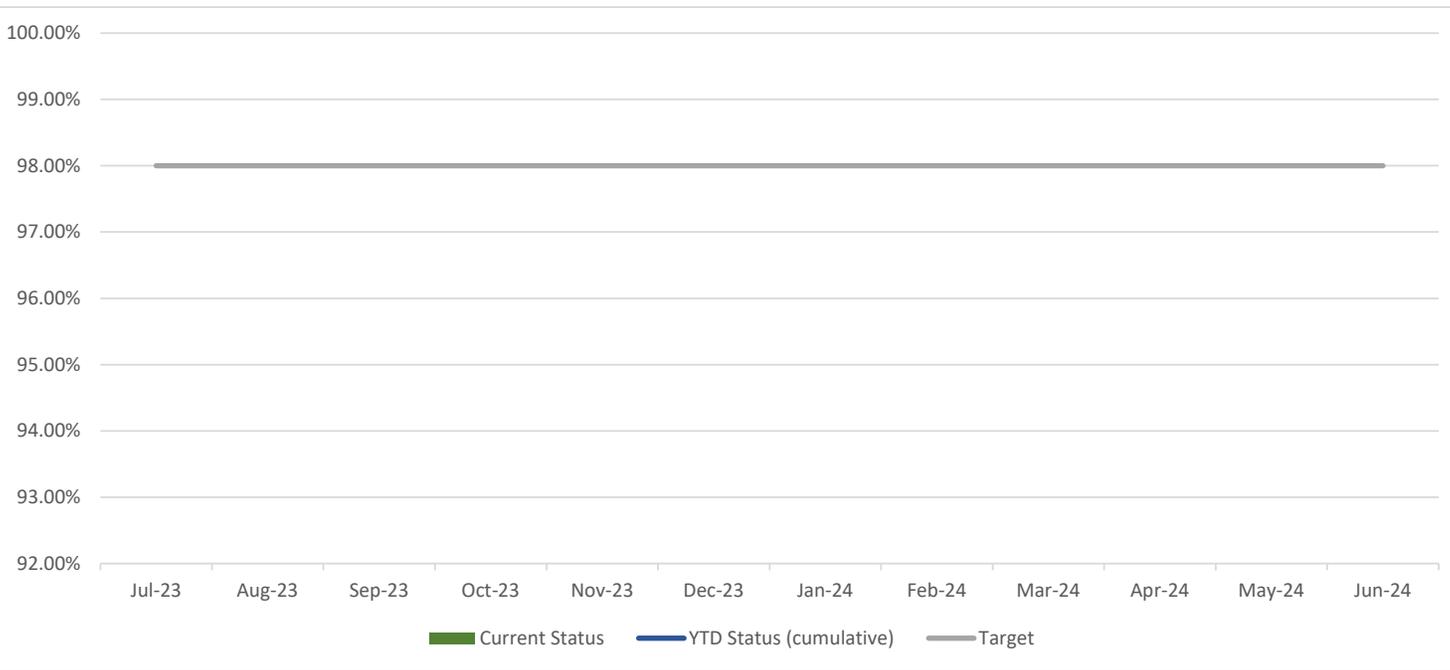
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Disability Retirements Processed		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of disability retirements processed within 30 days of VRS receiving notification of approval by the Medical Review Board		
Calculation Methodology	The number of disability retirements processed within 30 days after VRS receives notice of approval of the application by the Medical Review Board. "Processed" is defined as funds having been paid to retirees; "paid" is defined as the funds having been paid out of the VRS account.		
Data Source	Disability Retirement Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	98.00%	Baseline (Performance History)	97.96%
Target Rationale: To account for potential processing delays due to system conversion in FY 2021 and ongoing pandemic impacts		Baseline Rationale: 5 year average = 97.96%	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Ongoing implementation of myVRS enhancements, which will significantly change current processes	Provide ample opportunity for advanced training; augment staffing as needed to ensure adequate resources during transition	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit ability to process retirements	Enact business continuity plan for technology outages	
3	Sensitivity of data that requires strong controls and several levels of approvals; risk of staff absences or unavailability	Cross-train existing staff and ensure redundancy of staff authorized to approve retirements	

YTD Performance History



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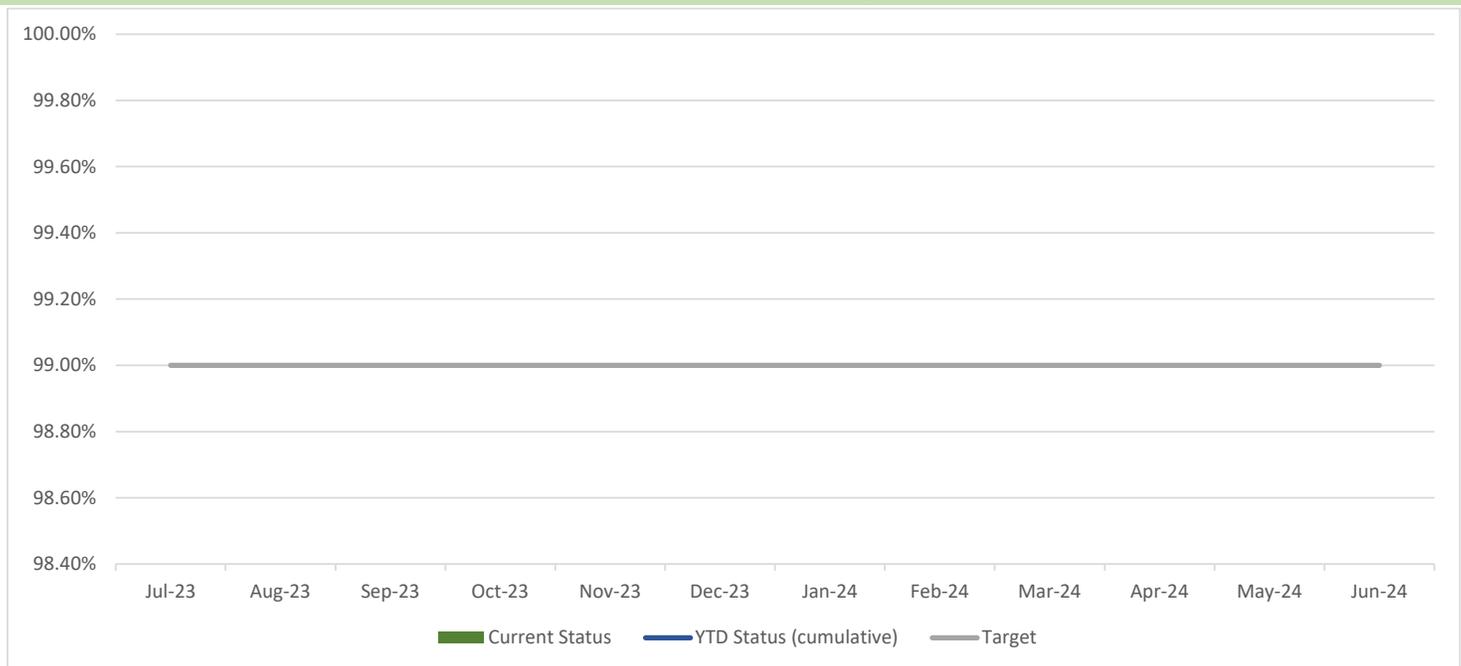
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Accuracy of Disability Retirements Processed		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of disability retirements processed for which the corresponding benefit paid correctly reflects the member's service record		
Calculation Methodology	The number of disability retirement applications processed and corresponding benefit paid accurately, divided by the total number of initial disability retirement benefits processed and paid. An accurate benefit payment is defined as the benefit amount correctly reflecting the member's service record. "Processed" is defined as funds having been paid to retirees; "paid" is defined as the funds having been paid out of the VRS account.		
Data Source	Disability Retirement Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	99.00%	Baseline (Performance History)	99.00%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 99%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Ongoing implementation of myVRS enhancements, which will significantly change current processes	Provide ample opportunity for advanced training; augment staffing as needed to ensure adequate resources during transition	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit ability to process retirements	Enact business continuity plan for technology outages	
3	Sensitivity of data that requires strong controls and several levels of approvals; risk of staff absences or unavailability	Cross-train existing staff and ensure redundancy of staff authorized to approve retirements	

YTD Performance History



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VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

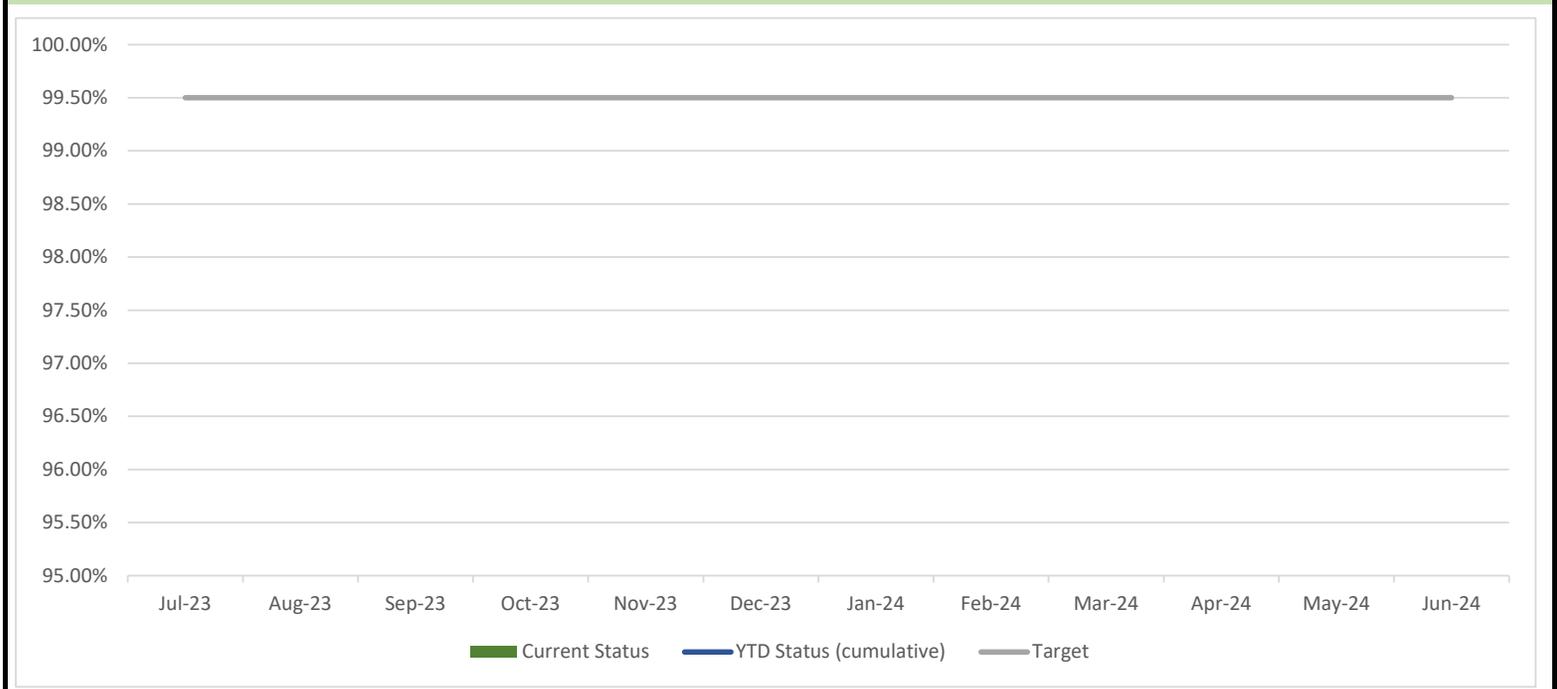
Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Workflow Documentation Imaging		
Strategic Goal	Digital Transformation and Secure Service Delivery		
Description	Percentage of workflow documents imaged within one business day of receipt		
Calculation Methodology	The number of documents imaged within one business day of receipt by the Imaging business unit, divided by the number of documents received by the Imaging unit within the same timeframe. Currently, an average of 20,000 documents are imaged per month.		
Data Source	Technology Services SLEs Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	99.50%	Baseline (Performance History)	99.90%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 99.9%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-

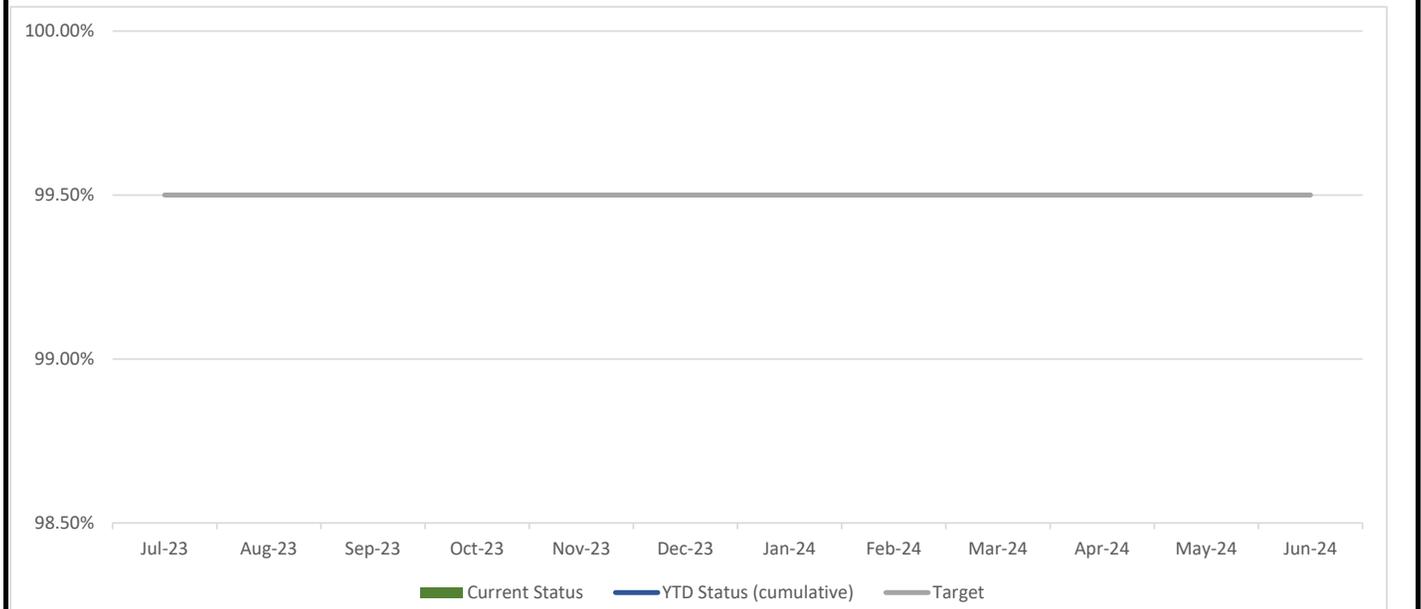
Potential Constraints to Meeting Target	Mitigation Strategies
1 Dependence upon current Imaging unit staffing level to ensure expedient and accurate processing within the prescribed turnaround time	Prescribe duties that merit the continuance of the current Imaging unit staffing level (with respect to the ongoing transition to online retirements that should reduce paper form intake levels)
2 Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit system availability	Enact business continuity plan for technology outages
3 Staffing constraints; specific skill set required limits feasibility for untrained staff to produce results with same efficiency and effectiveness	Establish a routine cross-training program to ensure well-trained staff are available at all times

YTD Performance History



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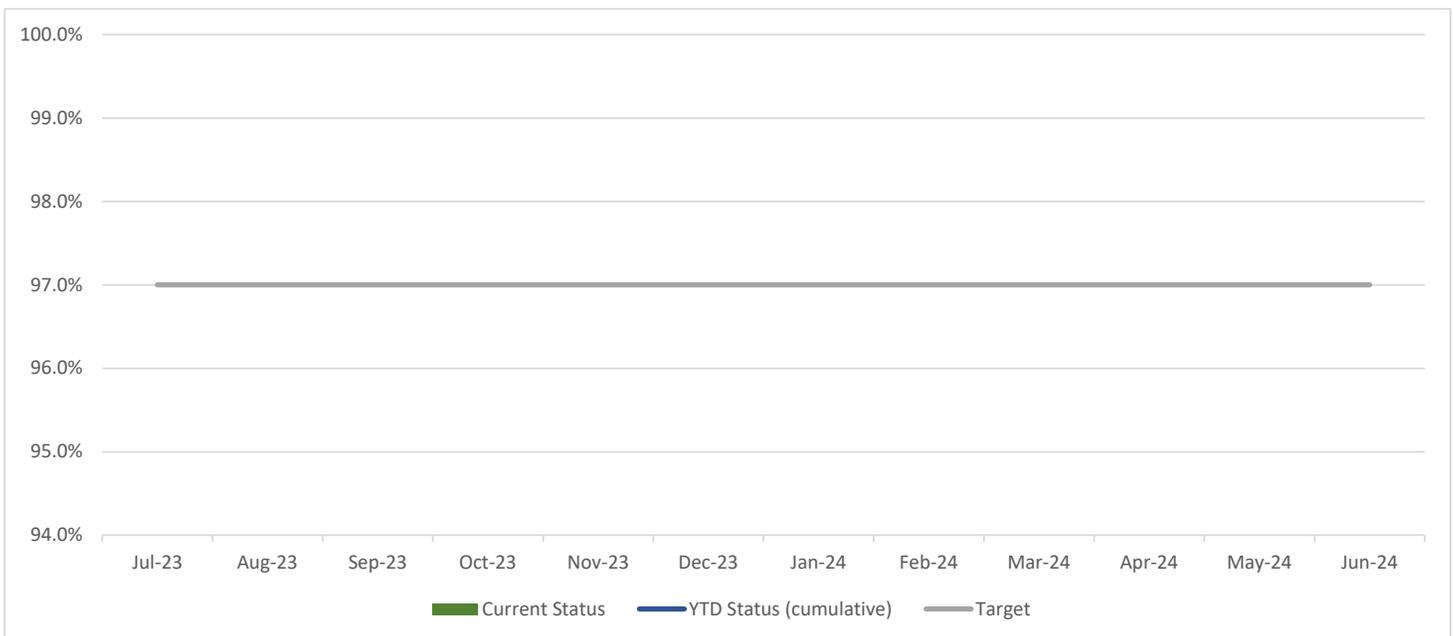
Operational Measure		Planned IT System Availability	
Strategic Goal		Technology Infrastructure	
Description		Percentage of time critical systems are available during periods of planned availability	
Calculation Methodology		Percentage of time during which critical business systems are available for use by VRS staff and customers, divided by the total time for which it was planned that said systems would be available. Critical business systems include: VNAV, telephone, email, internet, myVRS, Imaging, Investments, D365, Customer Counseling Center Cisco phone system, and remote access. Note: business systems deemed "critical" may change periodically depending on business needs or system changes (ex: RIMS was decommissioned in spring 2019 and is no longer considered a critical business system as of that time). Periods of availability are pre-determined based on business needs and requirements regarding routine system testing, maintenance and upgrades. "Availability" is defined as being able to be used by the majority of persons for whom it is intended and for the majority of purposes for the system's intended use.	
Data Source	Technology Services SLEs Performance Report	Reporting Frequency	Monthly
Target (Performance Goal)	99.50%	Baseline (Performance History)	99.90%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 99.9%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Failure on the part of third party business partners to provide dependent services	Implement back-up plans (ex: different phone line)	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit system availability	Enact business continuity plan for technology outages	
3	Timing of a potential system failure that limits staff resources available to respond immediately	Strategically plan staffing availability to address potential system failures in the most effective manner	
YTD Performance History			
			
VRS Mission: VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service. VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.			

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Timeliness of Employer Contribution Confirmations		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of Employer Contribution Confirmation (CC) snapshots completed in VNAV by the end of the month in which they are due		
Calculation Methodology	The number of employer CC snapshots received by the end of the month in which they are due, divided by the total number of employer CC snapshots required for the same time period. VRS works with employers to ensure that monthly CC snapshots are posted in a timely fashion. There are over 1,000 employers reporting to VRS for which CC snapshots are required on a monthly basis.		
Data Source	Employer Reporting Contribution Confirmation and Payment Status Report	Reporting Frequency	Monthly
Target (Performance Goal)	97.00%	Baseline (Performance History)	98.80%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 98.80%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Dependence on over 1,000 employers to submit their confirmations on time every month	Proactively communicate with employers with a focus on those with a history of delinquent submissions to mediate potential causes for delay	
2	Impact of ongoing transition to hybrid work environment on resources at the employer level that prevent their timely submission of CC snapshots	Proactively communicate with employers to identify potential impacts and assist as appropriate with the submission process	
3	Ongoing Cardinal transition for state employers may delay timely submission due to additional responsibilities during Cardinal transition	Provide notice to state employers of potential for delay due to Cardinal implementation and advise that they prepare to ensure timely report submission	

YTD Performance History



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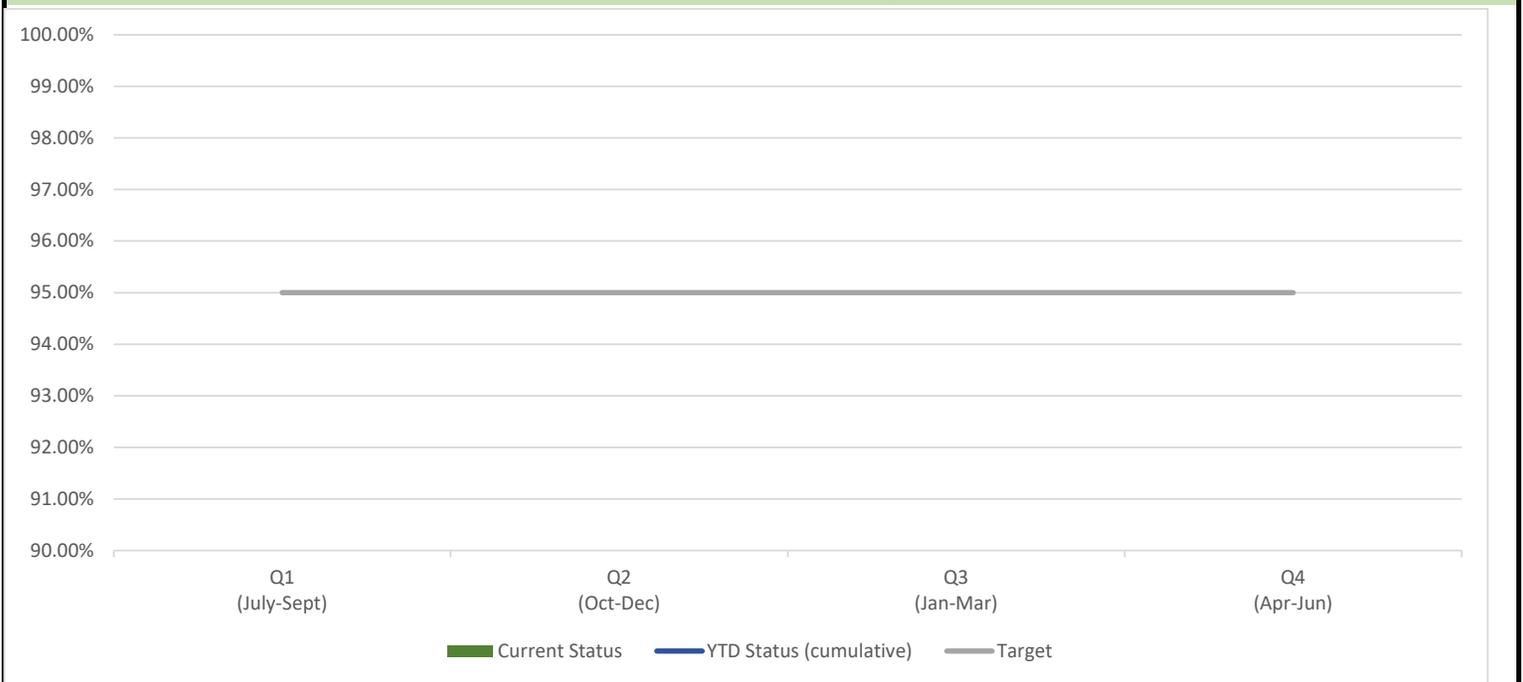
VRS Vision: To be the trusted leader in the delivery of benefits and services to those we serve.

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Implementation of Corrective Action to Audit Recommendations		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Percentage of audit recommendations for which VRS management represents that corrective action has been implemented by the approved target date		
Calculation Methodology	The number of audit recommendations for which VRS management has represented that corrective action has been implemented, divided by the total number of audit recommendations for which corrective action is needed as of the date the measure is calculated. VRS management establishes target dates and provides periodic updates to Audit regarding whether actions have been taken. Audit tracks responses in the Audit Recommendation Follow-Up System (ARFUS).		
Data Source	ARFUS	Reporting Frequency	Quarterly
Target (Performance Goal)	> 95.00%	Baseline (Performance History)	97.00%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: 5 year average = 97.00%</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	High cost to implement necessary corrective action	Work within existing agency allocations and, if necessary, also with state budgetary processes to obtain resources needed to effectuate corrective action	
2	Limited staff resources to effectively implement necessary corrective action	Adjust allocation of staffing resources to enable corrective action implementation	
3	External factors that delay ability to take necessary corrective action (ex: legislative mandates that redirect agency resources, ongoing pandemic)	Communicate with DEC and Audit regarding possible adjustment of target date to accommodate timeline of when resources will be available	

YTD Performance History



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Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Preventable Employee Turnover		
Strategic Goal	Organizational Strength, Culture and Engagement		
Description	Percentage of employees voluntarily separating VRS employment due to preventable experiences		
Calculation Methodology	The number of Administration employees who voluntarily separate from VRS employment due to preventable reasons, divided by the total number of Administration employees who voluntarily separate VRS employment, when total employee turnover exceeds 5% within the same period of time. Preventable turnover is determined from exit interview results, and includes substantiated reports of unsuccessful supervision or management, unsatisfactory work environment, insufficient resources to complete one's job effectively, and unavailability of training opportunities.		
Data Source	Human Resources Department Exit Interview Survey Results	Reporting Frequency	Annual
Target (Performance Goal)	< 10.00%	Baseline (Performance History)	6.67%
<i>Target Rationale: Maintain recent performance</i>		<i>Baseline Rationale: FY 2022 results</i>	
Current Reporting Month Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Unrealistic employee expectations regarding VRS work environment and responsibilities	Provide clear position descriptions and responsibilities upon hire; outline organization culture and expectations on a regular basis; ensure open communication between employees, managers and supervisors	
2	Reorganization due to myVRS enhancements may alter current work responsibilities for some employees	Provide clear and open communication throughout the implementation process; Offer sufficient training opportunities for employees tasked with new responsibilities	
3	Ongoing transition to hybrid work environment impacts employee morale	Continue direct outreach to employees, provide EAP resources and implement employee engagement activities	
YTD Performance History			
[Reported as an annual measure]			
VRS Mission: <i>VRS delivers retirement and other benefits to Virginia public employees through sound financial stewardship and superior customer service.</i>			
VRS Vision: <i>To be the trusted leader in the delivery of benefits and services to those we serve.</i>			

Operational Measure	Cost to Administer Defined Benefit Plans		
Strategic Goal	Superior Governance and Long-Term Financial Health		
Description	Annual pension administration cost for defined benefit plans, as compared to peer group median reported by CEM Benchmarking, Inc.		
Calculation Methodology	VRS pension administration cost per active member and annuitant for defined benefit plans as compared to that of its peer group, as calculated by CEM Benchmarking, Inc. The average peer cost calculated by CEM is available on delay and will not be known until spring 2024. At that time the FY 2023 annual agency cost will be compared to the to the FY 2022 CEM peer cost to determine whether VRS's cost is lower than the peer average.		
Data Source	CEM Benchmarking, Inc.	Reporting Frequency	Annual
Target (Performance Goal)	Lower than the FY 2023 CEM Peer Cost Average	Baseline (Performance History)	N/A
<i>Target Rationale: Measuring VRS annual administrative cost for FY 2023 against the most current peer data as provided by CEM Benchmarking, Inc.</i>		<i>Baseline Rationale: N/A</i>	
Current Reporting Month Status	-	YTD Status (Used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Significant unanticipated costs to administer pension plans due to external influences, including the ongoing pandemic and transition to a return to the office	Work within existing agency allocations and prioritize spending plans to ensure administrative expenditures remain reasonable	
2	Dependent upon expenditure patterns for the CEM Peer group for administrative cost average	Maintain communications with CEM peers to stay informed on any spending abnormalities that may skew CEM-calculated peer costing	
3	FY 2023 CEM cost not known until late into FY 2024 (limiting agency ability to react if missing target)	Proactively calculate and monitor agency administrative cost in anticipation of receiving the FY 2023 CEM cost; adjust agency spending if out of line with recent CEM peer cost averages	
YTD Performance History			
<p>[Average Pension Administration Cost for VRS' Peer Group, as provided by CEM Benchmarking, will be known in spring 2024]</p>			
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VRS Vision: <i>To be the trusted leader in the delivery of benefits and services to those we serve.</i>			

Operational Measure	Systems Security Awareness		
Strategic Goal	Digital Transformation and Secure Service Delivery		
Description	Percentage of eligible staff who have completed security training in compliance with the agency's and Commonwealth's security policies		
Calculation Methodology	Percentage of eligible staff who have completed the agency's annual security training, VRS User IT Security Policy Training ("security training"), divided by the total eligible agency staff. Employees who join the agency during FY 2022 are required to complete security training within 30 days after their start date. All staff are required to complete the training during the annual training window. The training provides information on such critical security practices as protecting sensitive data, utilizing effective passphrases, reviewing acceptable technology use policies, being on alert for phishing and other malpractices, and more. The percentage is calculated on a cumulative basis and reported annually (with the total requirement recalculated monthly as new staff are hired and required to obtain security training).		
Data Source	Technology Services SLEs Performance Report	Reporting Frequency	Annual
Target (Performance Goal)	100.00%	Baseline (Performance History)	100.00%
<i>Target Rationale: Maintain high security awareness</i>		<i>Baseline Rationale: All VRS staff completed security training in FY 2023</i>	
Current Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Unavailability of the Virginia Learning Center (VLC, a non-VRS application) for training	Provide sufficient time for staff to obtain training within prescribed timeline to allow for possible VLC system unavailability	
2	Ongoing transition to hybrid work environment impacts processes and agency resources, including technology outages that limit system availability	Enact business continuity plan for technology outages	
3	New training requirements as set-forth by the Commonwealth Security Policy that require changes to the prepared security training	Proactively coordinate with different units within VRS to ensure sufficient time and resources to make necessary changes to the prepared training	
YTD Performance History			
[Reported as an annual measure]			
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VRS Vision: <i>To be the trusted leader in the delivery of benefits and services to those we serve.</i>			

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Operational Measure	Employee Professional Development		
Strategic Goal	Organizational Strength, Culture and Engagement		
Description	Percentage of full-time VRS administration employees receiving at least 8 hours of professional development		
Calculation Methodology	The number of eligible full-time VRS administration employees who have completed at least 8 hours of professional development, divided by the total number of eligible full-time administration employees. Eligible employees are full-time administration staff hired after July 1, 2023 who are not on short- or long-term disability or FMLA during FY 2024. Qualifying professional development includes courses designated in the Virginia Learning Center (VLC), as well as conferences, webinars, college or trade school classes, and any other professional development as approved by the Human Resources Director. Number of hours received is tracked on a cumulative basis and reported quarterly.		
Data Source	Human Resources Performance Report	Reporting Frequency	Annual
Target (Performance Goal)	85.00%	Baseline (Performance History)	91.30%
<i>Target Rationale: Maintain recent performance and increased total # of hours</i>		<i>Baseline Rationale: 5 year average = 91.32%</i>	
Current Status	-	YTD Status (Cumulative; used at year-end to determine whether target has been met)	-
Potential Constraints to Meeting Target		Mitigation Strategies	
1	Limited staff flexibility to obtain professional development due to significant staff time dedicated to HCI data center and other system enhancements.	Encourage staff to plan for professional development opportunities before and/or after periods of time dedicated to HCI data center and other system enhancements.	
2	Dependence on IT system availability/accessibility for trainings and/or time tracking	Advise staff to plan to be proactive about obtaining professional development and reporting their hours earned as they go	
3	Limited progressive course availability on relevant subject matter area	Ongoing communication between managers and staff to expand and identify new learning opportunities	

YTD Performance History

[Reported as an annual measure]

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VRS Vision: *To be the trusted leader in the delivery of benefits and services to those we serve.*

Overall Measure: 13 of 16 meet or exceed target

Changes to operational measure targets and/or calculation methodologies require approval by both the Director's Executive Committee (DEC) and the Board of Trustees.

Report

The Benefits and Actuarial Committee met on June 14, 2023, and took up the following matters:

APPROVAL OF MINUTES

The Committee approved the minutes of its February 7, 2023, meeting.

ELECTION OF COMMITTEE VICE CHAIR

The Committee unanimously approved the nomination of Lindsey K. Pantele to serve as Vice Chair.

INFORMATION ITEMS

Actuarial Principles 101

Rory Badura, Senior Staff Actuary, gave a presentation on actuarial principles and the valuation process for VRS defined benefit plans that included overviews of actuarial terminology, the VRS funding policy, and development of contribution rates and funded ratios.

Group Life Insurance

Robert Irving, Customer Services Director, presented the proposed premium rate recommendation for basic life and optional life from Securian for fiscal year 2024, the group life insurance third-party administrator.

There is no change to the basic maximum premium rates. Mortality experience and future expectation increased from last year driven by retirees; however, given the three-year pricing horizon, the rates will be held at their current level.

Mortality experience and future expectation on the optional plan remain good. The adjusted loss ratio of 80.1% over the last five-year period (2018-2022) allows us to offer a 5% overall premium rate reduction effective July 1, 2023, and are guaranteed through June 30, 2024.

Consistent with Securian's rate setting principles for the optional plan, the rate changes reflect experience by age band in order to have equity in pricing among the various age brackets.

Upcoming B&A Committee Meetings

- Wednesday, October 18 at 1:00 p.m.
- Thursday, November 16 at 10:00 a.m.

Submitted to the Board of Trustees on June 15, 2023.

John M. Bennett, Chair
Benefits and Actuarial Committee

Report

The Audit and Compliance Committee met on June 13, 2023. Mr. Montgomery welcomed committee members, board members, agency officials, representatives from stakeholder groups and other members of the public joining in person and through electronic means. The committee discussed the following:

APPROVAL OF MINUTES

The committee approved the minutes of its March 29, 2023, meeting.

STATUS UPDATE ON THE 2022 EMPLOYER ASSURANCES REVIEW

The Auditor of Public Accounts (APA) reported the Employer Assurances Review, covering GASB Statements No. 68 and 75, was progressing as planned. The APA indicated they should conclude their work over the Pension and Other Post-Employment Benefit plans and issue the related opinions during the month of July.

ENTRANCE WITH THE APA FOR THE VRS 2023 ANNUAL COMPREHENSIVE FINANCIAL REPORT AUDIT

The Committee held its annual entrance conference with the APA to review the approach and scope of the examination of VRS' Annual Comprehensive Financial Report for the Fiscal Year Ending June 30, 2023.

AUDIT REPORTS

The committee received two audit reports.

- The review of *Service Retirements* determined sufficient controls are in place to support retirement application processing and that the associated processes are working as intended. There were no formal recommendations as a result of this review.
- The *Review of VRS' Master Custodian* determined that a general assessment found an appropriate operating environment and controls associated with the recordkeeping and safeguarding of assets held by the master custodian. Further, the review determined that VRS and the master custodian had complied with the contractual agreement and related amendments. There were no formal recommendations as a result of this review.

INTRODUCTION OF THE IIA IPPF EVOLUTION

The Committee was provided with an overview of the Institute of Internal Auditors' (IIA) current project to update its *International Professional Practices Framework (IPPF)*, and how the VRS Internal Audit Department is providing feedback for the project and preparing for the changes.

MISCELLANEOUS UPDATES

The Committee received the following miscellaneous updates:

Quarterly Report on Fraud, Waste and Abuse Hotline Cases

The Audit Director shared there were no Fraud, Waste and Abuse Hotline complaints reported to Internal Audit via the Office of the State Inspector General or other sources during the period of February 1, 2023, through April 30, 2023.

Management's Quarterly Travel Expenses and Per Diem Report

The committee received Management's Quarterly Travel Expenses and Per Diem report.

Next Committee Meeting Date

The committee's next meeting is scheduled for Wednesday, September 20, 2023, at 10 a.m.

Respectfully submitted to the Board of Trustees on June 15, 2023.

A. Scott Andrews, Committee Member and Board Chair
Audit and Compliance Committee



VRS Project Portfolio
FISCAL YEAR 2023
 May 2023

Status Indicator

- Proceeding as planned
- ▲ Off plan, mitigation in place
- ◆ Off plan, mitigation needed
- ★ Completed
- Project timeline
- N/S Not started

Agency Performance Objectives (APOs)	Strategic Alignment	Status	2022						2023							
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
Cardinal HCM Implementation – Cardinal Release 3 State Agencies and VRS Retirees with State Health Insurance	Digital Transformation and Secure Service Delivery	★														
Records Management Program - Phase 2 Implementation	Superior Governance and Long-Term Financial Health	●														
Hyper Converged Infrastructure (HCI) Data Center Migration	Technology Infrastructure	●														
Hybrid Plan – Contribution Separation Legislation Implementation Phase 1	Superior Governance and Long-Term Financial Health	●														
Customer Experience Review	Member, Retiree and Employer Education, Outreach and Partnership	●														
Comprehensive Agency Training Program – EDGE (Empower, Develop, Grow and Engage)	Organization Strength Culture and Engagement	★														
IT Initiatives ¹	Strategic Alignment	Status	2022						2023							
Continuous improvement of IT Security Processes	Digital Transformation and Secure Service Delivery	●														
VNAV Security and Technology Improvement	Digital Transformation and Secure Service Delivery	●														
Conduct Analysis and Gather Requirements for RAMS Replacement	Digital Transformation and Secure Service Delivery	★														
Complete SPO and Decommission SP On-Premise Assets	Technology Infrastructure	★														
Other Projects ²	Strategic Alignment	Status	2022						2023							
Employee Engagement Initiative Implementation	Organization Strength Culture and Engagement	●														
ERM Implementation	Superior Governance and Long-Term Financial Health	●														
Enhance Agency Roadmap Process	Superior Governance and Long-Term Financial Health	★														
Implement Performance Management Evaluation Process	Organization Strength Culture and Engagement	★														
Develop and Release DC/Hybrid Record Keeping Services RFP	Superior Governance and Long-Term Financial Health	●														
Select and Onboard VSDP and VLDP Long Term Care Services Business Partner	Superior Governance and Long-Term Financial Health	★														
Review and Update Agency Operational Measures	Superior Governance and Long-Term Financial Health	N/S														
Implement New ID Badging System	Technology Infrastructure	●														
CCC Customer Satisfaction Survey Managed Services	Digital Transformation and Secure Service Delivery	●														
Migration to new Actuarial firm	Superior Governance and Long-Term Financial Health	★														
GASB 96 (accounting and financial reporting for subscription-based information technology arrangements (SBITAs))	Superior Governance and Long-Term Financial Health	●														
Operational/Ongoing Activities	Strategic Alignment	Status	2022						2023							
COLA 2022	Operations	★														
FYE 2022	Operations	★														
Retirement Wave 2022	Operations	★														
Teacher Contracts	Operations	★														
MBPs	Operations	★														
Annual Code of Ethics Training	Operations	★														
Annual Security Awareness Training	Operations	★														
FOIA Training	Operations	●														
ACFR	Operations	★														
PAFR	Operations	★														
LODA Annual Report	Operations	★														
GASB 67	Operations	★														
GASB 68	Operations	●														
GASB 74	Operations	★														
GASB 75	Operations	●														
Actuarial Valuations	Operations	★														
myVRS Annual Updates	Operations	★														
1099/W2	Operations	★														

Operational/Ongoing Activities	Strategic Alignment	Status	2022						2023						
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Annual Roadmap Review	Operations	●													
FYE 2023	Operations	●													
Retirement Wave 2023	Operations	●													
Commonwealth Bond Disclosure	Operations	N/S													
ORPHE Surcharge Billing for FY 2023	Operations	★													
Data Fixes	Operations	●													
ALM Backlog Prioritization	Operations	●													
Employer VNAV Security Review	Operations	★													
VRS Fund Sensitivity and Stress Testing Report for GA	Operations	N/S													
Legislation FY 2023	Operations	★													

¹Initiatives led directly by Technology Services.

²Other initiatives are led by other business units and supported by Technology Services.

Yellow Status Items

Item	Due Date	Comments

Red Status Items

Item	Due Date	Comments
N/A		

Realignments/Adjustments

Item	Due Date	Comments
N/A		

Director's Report

June 15, 2023

Trish Bishop, VRS Director



New Employer Coverage



Coverage Elected

Details

**Enhanced Hazardous Duty Benefits
for Emergency Medical Technicians**

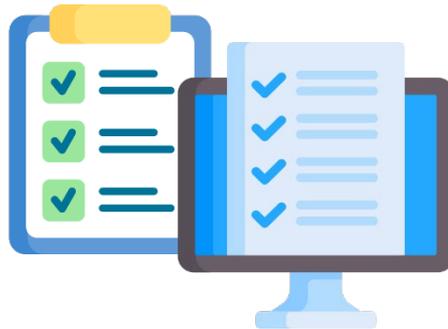
City of Suffolk
Effective June 1, 2023

July Retirements Information

2,880 July 2023 retirement applications have been received as of June 5



1,247 (43.3%) were submitted online through myVRS



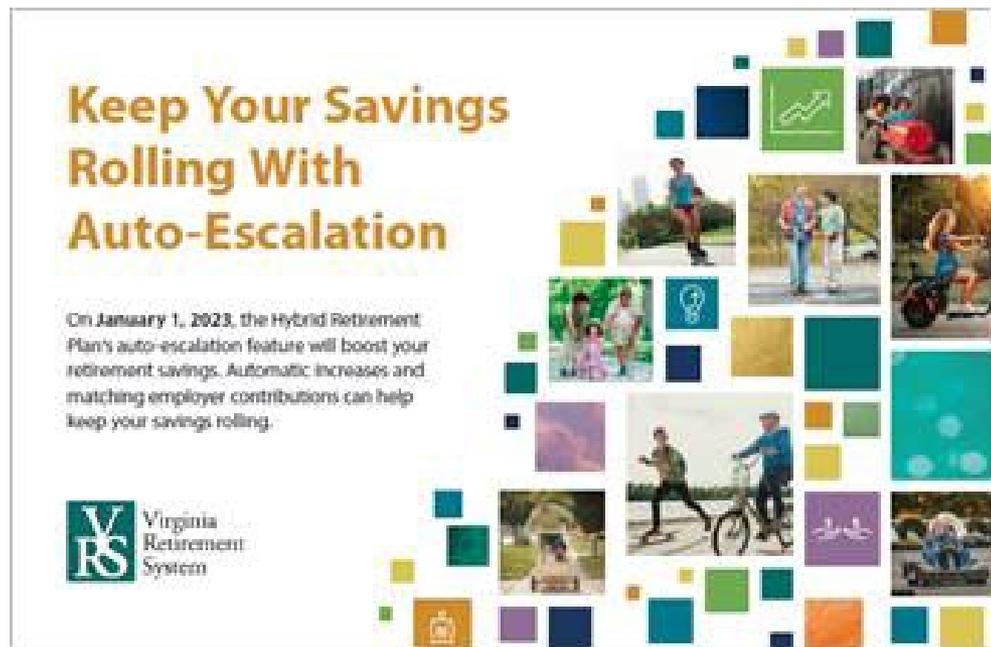
Since December 2020, VRS has received a total of **31,478** retirement applications (paper and online)



Of that total, **7,814** were received online – approximately **25%** of all applications submitted



VRS recently received a **Communicator Award of Distinction** from the Academy of Interactive and Visual Arts (AIVA) for the **Hybrid Retirement Plan Auto-Escalation Campaign**.



**Strategic Marketing Achievement – Marketing Effectiveness –
Integrated Campaign Category**

CVC (Commonwealth of Virginia Campaign) Award for 2022 Donations



VRS ranked #8 in the Top 10 Agencies for CVC donations for the 2022 campaign!

VRS employees generously donated a confirmed grand total of **more than \$45,200.**

We look forward to participating in the 2023 CVC and our **3rd annual CVC VRS 5K** on Oct. 28, 2023!

Top 10 Agencies: CVC Giving 2022

1. UVA
2. Virginia Tech
3. UVA Medical Center
4. Virginia Housing
5. VCU
6. ODU
7. Department of Motor Vehicles
- 8.**  Virginia Retirement System®
9. W&M
10. Department of Transportation (Central Office)



2023 Virginia Public Service Week



May 8-15, 2023



JLARC JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION

Monday, July 10, 2023, 10 a.m.

**Senate Room A, Pocahontas Building
900 East Main Street, Richmond, Virginia**

jlarc.virginia.gov/calendar.asp

Meetings are usually streamed live and often are also available to view after the meeting via JLARC's YouTube channel.

NBC12 Acts of Kindness

Ron Stokes recognized by helping people reduce debt by more than \$900,000!



Deficit Provision Acknowledgment Form

(Appendix A of DPB's New Year Start-up instructions)

To: Director, Department of Planning and Budget

Section A (for all agencies)

Agency Acknowledgement

I have received, read, and understand your instructions regarding indebtedness of state agencies as they relate to the requirements of § 4-3.01 of the current Appropriation Act.

Agency Name _____ Agency Code _____

Other agencies in the Act (if any) for which your agency is responsible: _____

Agency/Cabinet Head Name _____

Agency/Cabinet Head Signature _____
(Personal signature is required above and cannot be delegated)

Date _____

Section B (if applicable to your agency)

Supervisory Board *(see §2.2-2100 of the Code of Virginia for what constitutes a "supervisory board")*

I have provided each member of the supervisory board of this agency with a copy of the notice in this memorandum and I will provide the same material to those appointed to the board in the future.

(Personal Signature of Agency Head)

Date: _____

Due to COVID-19 complications, an email option is provided this year instead of traditional mail:

E-mail to:

Scan the **signed** original; Save as a PDF, and Email to budget@dpb.virginia.gov.

NOTE: Provide your agency name and agency number as well as the phrase "Deficit Provision Acknowledgment Form" in the subject line of the email.

VIRGINIA STATE BUDGET

2022 Special Session I

Budget Bill - HB29 (Chapter 1)

Bill Order » Part 4: General Provisions » Deficit Authorization and Treasury Loans » Item 4-3.01

Deficits

Item 4-3.01

§ 4-3.00 DEFICIT AUTHORIZATION AND TREASURY LOANS

§ 4-3.01 DEFICITS

a. GENERAL:

1. Except as provided in this section no state agency shall incur a deficit. No state agency receiving general fund appropriations under the provisions of this act shall obligate or expend moneys in excess of its general fund appropriations, nor shall it obligate or expend moneys in excess of nongeneral fund revenues that are collected and appropriated.
2. The Governor is authorized to approve deficit funding for a state agency under the following conditions:
 - a) an unanticipated federal or judicial mandate has been imposed,
 - b) insufficient moneys are available in the first year of the biennium for start-up of General Assembly-approved action, or
 - c) delay pending action by the General Assembly at its next legislative session will result in the curtailment of services required by statute or those required by federal mandate or will produce a threat to life, safety, health or property.
 - d) Such approval by the Governor shall be in writing under the conditions described in § 4-3.02 a Authorized Deficit Loans of this act and shall be promptly communicated to the Chairmen of the House Appropriations and Senate Finance Committees within five calendar days of deficit approval.
3. Deficits shall not be authorized for capital projects.
4. The Department of Transportation may obligate funds in excess of the current biennium appropriation for projects of a capital nature not covered by § 4-4.00 Capital Projects, of this act provided such projects a) are delineated in the Virginia Transportation Six-Year Improvement Program, as approved by the Commonwealth Transportation Board; and b) have sufficient cash allocated to each such project to cover projected costs in each year of the Program; and provided that c) sufficient revenues are projected to meet all cash obligations for such projects as well as all other commitments and appropriations approved by the General Assembly in the biennial budget.

b. UNAUTHORIZED DEFICITS: If any agency contravenes any of the prohibitions stated above, thereby incurring an unauthorized deficit, the Governor is hereby directed to withhold approval of such excess obligation or expenditure. Further, there shall be no reimbursement of said excess, nor shall there be any liability or obligation upon the state to make any appropriation hereafter to meet such unauthorized deficit. Further, those members of the governing board of any such agency who shall have voted therefor, or its head if there be no governing board, making any such excess obligation or expenditure shall be personally liable for the full amount of such unauthorized deficit and, at the discretion of the Governor,

shall be deemed guilty of neglect of official duty and be subject to removal therefor. Further, the State Comptroller is hereby directed to make public any such unauthorized deficit, and the Director, Department of Planning and Budget, is hereby directed to set out such unauthorized deficits in the next biennium budget. In addition, the Governor is directed to bring this provision of this act to the attention of the members of the governing board of each state agency, or its head if there be no governing board, within two weeks of the date that this act becomes effective. The governing board or the agency head shall execute and return to the Governor a signed acknowledgment of such notification.

c. TOTAL AUTHORIZED DEFICITS: The amount which the Governor may authorize, under the provisions of this section during the current biennium, to be expended from loans repayable out of the general fund of the state treasury, for all state agencies, or other agencies combined, in excess of general fund appropriations for the current biennium, shall not exceed one and one-half percent (1 1/2%) of the revenues collected and paid into the general fund of the state treasury as defined in § 4-2.02 b. of this act during the last year of the previous biennium and the first year of the current biennium.

d. The Governor shall report any such authorized and unauthorized deficits to the Chairmen of the House Appropriations and Senate Finance Committees within five calendar days of deficit approval. By August 15 of each year, the Governor shall provide a comprehensive report to the Chairmen of the House Appropriations and Senate Finance Committees detailing all such deficits.