

Administration and Personnel Committee (A&P) Meeting

Via GoToWebinar Wednesday, 6/10/2020 10:00 AM - 11:30 PM ET

- I. Public Comment
- **II. Approve Minutes**
 - A. February 13, 2020

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A. Update on Return to the Office Planning



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Minutes

A regular meeting of the Administration and Personnel Committee of the VRS Board of Trustees was held on February 13, 2020 in Richmond, Virginia with the following members present:

Mitchell L. Nason, VRS Chair Diana F. Cantor, Vice Chair Wallace G. Harris, Ph.D. Joseph W. Montgomery

Board members present: William H. Leighty O'Kelly E. McWilliams, III

Also present:

Trish Bishop, Ron Schmitz, Jennifer Schreck, Farley Beaton, Jeanne Chenault, Michael Cooper, Juanita Cribbs, Barry Faison, Robert Irving, LaShaunda King, Curt Mattson, Angela Payne, Cat Pelletier, Matt Priestas, Cindy Wilkinson of the VRS Staff; and Jamie Bitz of the Joint Legislative Audit and Review Commission.

The meeting convened at 10:35 a.m.

Approval of Minutes

Upon a motion by Mr. Montgomery, with a second by Ms. Cantor, the minutes of the November 20, 2019 meeting were approved.

Tuition Reimbursement and Tenure Agreement

Mr. Schmitz presented a request for authorization to execute a tenure agreement with and reimburse tuition payments for certain investment professional staff. VRS adheres to the Education and Development for Investment Professionals Policy which outlines the process for requesting, approving and reimbursing allowable expenses for training, tuition reimbursement and attainment of professional designations. The Policy supports the retention of current investment professionals and attraction of new talent.

The Policy authorizes the VRS Chief Investment Officer (CIO) to approve tuition reimbursement for investment professionals unless the estimated costs exceed \$100,000. If the estimated tuition costs exceed \$100,000 the VRS Board of Trustees must review and approve the request.

Upon a motion by Mr. Harris, with a second by Mr. McWilliams, the Committee recommends approval of the following action to the full Board:



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RBA: Authorize Tuition Reimbursement and Tenure Agreement

Request for Board Action: The VRS Board of Trustees authorizes the Chief Investment Officer to execute a tenure agreement with and reimburse tuition payments for certain investment professional staff.

Review and Approve New FY 2020 Agency Performance Outcome (APO) #6

Ms. Bishop and Mr. Cooper presented a new proposed Agency Performance Outcome (APO) #6, Implement FY 2020 Legislation. A significant amount of legislation impacting VRS is expected to be approved during the 2020 General Assembly session, and likely to require implementation by July 1, 2020. The resources necessary for legislation implementation will likely affect other key initiatives, including those outlined in the previously approved FY 2020 APOs.

Staff is meeting to evaluate schedules for current agency projects and to develop a plan for process, system and communication changes necessary to satisfy the anticipated minimum requirements of the VRS-related approved legislation.

Upon a motion by Mr. McWilliams, with a second by Mr. Harris, the Committee recommends approval for the following action to the full Board:

Request for Board Action: The Board approves new FY 2020 APO #6, Implement FY 2020 Legislation.

Reappointment of IAC Member

Mr. Schmitz presented the recommendation to reappoint W. Bryan Lewis to the Investment Advisory Committee (IAC) for a two-year term ending March 31, 2022.

Upon a motion by Ms. Cantor, with a second by Mr. Montgomery, the Committee recommends approval of the following action to the full Board:

RBA: Reappointment of IAC Member

Request for Board Action: The Board reappoints W. Bryan Lewis to the Investment Advisory Committee for a two-year term ending March 31, 2022.

Appointment of DCPAC Member

Ms. Bishop presented the recommendation to appoint Kathleen T. Seay to the Defined Contribution Plans Committee (DCPAC). Ms. Seay would fill the unexpired term of Allan Carmody, which ends June 20, 2020, and, given the short duration of the unexpired term, the recommendation includes the subsequent reappointment of Ms. Seay to a full term that will end June 20, 2022.

Upon a motion by Mr. Montgomery, with a second by Mr. Leighty, the Committee recommends approval of the following action to the full Board:



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RBA: Appointment of DCPAC Member

Request for Board Action: The Board appoints Kathleen T. Seay to fill the unexpired term of Allan Carmody, which ends June 20, 2020, and reappoints Ms. Seay for a two-year term ending June 20, 2022.

Budget Update

Mr. Faison provided a budget update for FY 2020 to the Committee. Mr. Faison noted that due to market and other conditions, actual incentive compensation was less than budgeted for investment professionals. Therefore, staff is requesting approval to reallocate the remaining funds to other key agency projects. The total amount to be reallocated is \$3,082,000.

Upon a motion by Mr. McWilliams, with a second by Mr. Leighty, the Committee recommends approval of the reallocation of unused incentive compensation funds for other key agency projects.

Adjournment

There being no further business, Mr. Nason adjourn	ed the meeting at 11:13 a.m.
Date	O'Kelly E. McWilliams, III, VRS Chair* Administration and Personnel Committee

* Mr. McWilliams was appointed as VRS Chair after the date of the meeting.



PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS



JUNE 2020

Benchmark and Performance Hurdle Analysis

Virginia Retirement System

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Benchmarks



Introduction to benchmarks

CFA Institute – Some of the characteristics of a good benchmark

- Unambiguous
- Investable
- Measurable
- Appropriate
- Specified in advance
- Reflective of current investment opinions

Source: Exposure Draft of GIPS® Guidance Statement on Benchmarks



VRS benchmarks

Program	Current Benchmarks	Recommended Benchmarks
Fixed Income	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. Aggregate Index [90%], Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [5%) and JP Morgan EMBI Global Core Index [5%]	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. Aggregate Index [90%], Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [5%] and JP Morgan EMBI Global Core Index [5%]
Credit Strategies	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [30%], Bloomberg Barclays U.S. Aggregate Index [10%] and S&P Performing Loan Index [60%]	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [30%], Bloomberg Barclays U.S. Aggregate Index [10%] and S&P Performing Loan Index [60%]
Public Equity	MSCI All Country World Investable Market Index net of VRS taxes	MSCI All Country World Investable Market Index net of VRS taxes
Internal Equity	Asset-weighted Blend of the MSCI U.S. Standard Index, MSCI U.S. Small Cap Index, MSCI USA Minimum Volatility Index, MSCI World ex-U.S. Index, MSCI World ex-U.S. Minimum Volatility Index, MSCI Emerging Markets Index and EPRA/NAREIT U.S. Index net of VRS taxes	Asset-weighted Blend of the MSCI U.S. Standard Index, MSCI U.S. Small Cap Index, MSCI USA Minimum Volatility Index, MSCI World ex-U.S. Index, MSCI World ex-U.S. Minimum Volatility Index, MSCI Emerging Markets Index and EPRA/NAREIT U.S. Index net of VRS taxes
Private Equity	MSCI All Country World Investable Market Index net of VRS taxes (lagged by 3 months) + 250 bps per annum	MSCI All Country World Investable Market Index net of VRS taxes (lagged by 3 months)
Real Assets	Asset-weighted Blend of the Total Real Estate benchmark (NCREIF ODCE Index (net, lagged by 3 months) [85%] and FTSE EPRA/NAREIT Developed REIT Index [15%]) and the Other Real Assets benchmark CPI-U Index + 400 bps per annum lagged by 3 months	Asset-weighted Blend of the Total Real Estate benchmark (NCREIF ODCE Index (net, lagged by 3 months) [85%], FTSE EPRA/NAREIT Developed REIT Index [15%]) and the Other Real Assets benchmark CPI-U Index + 400 bps per annum lagged by 3 months
Private Investment Partnership	40% Private Equity (MSCI All Country World Investable Market Index (net of VRS taxes lagged by 3 months) + 250 bps per annum) 30% Real Estate (NCREIF ODCE Index (net, lagged by 3 months) 10% Other Real Assets (CPI-U Index + 400 bps per annum lagged by 3 months) 10% Credit Strategies Rate Sensitive (Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index) 10% Credit Strategies Non-Rate Sensitive (S&P Performing Loan Index)	33% Private Equity (MSCI All Country World Investable Market Index net of VRS taxes lagged by 3 months) 25% Real Estate (NCREIF ODCE Index, net, lagged by 3 months) 8% Other Real Assets (CPI-U Index + 400 bps per annum lagged by 3 months) 17% Credit Strategies Rate Sensitive (Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index) 17% Credit Strategies Non-Rate Sensitive (S&P Performing Loan Index)
Dynamic Strategies	60% MSCI All Country World Investable Market Index net of VRS taxes 20% Bloomberg Barclays U.S. Aggregate Index 10% Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index 10% JP Morgan EMBI Global Core Index	60% MSCI All Country World Investable Market Index net of VRS taxes 20% Bloomberg Barclays U.S. Aggregate Index 10% Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index 10% JP Morgan EMBI Global Core Index
Risk Based Investments	80% Diversifiers Benchmark (Bloomberg Barclays 3- month U.S. Treasury Bellwether + 250 bps per annum) 20% S&P Risk Parity 12% Volatility	80% Diversifiers Benchmark (Bloomberg Barclays 3- month U.S. Treasury Bellwether + 250 bps per annum) 20% S&P Risk Parity 12% Volatility



Discussion of changes

Private Equity

- Aspirational, non-investable (global equity index + 250 bp)
 - Approach typically used by institutional investors
- Any outperformance relative to Public Equity is beneficial to the fund
- If not invested in Private Equity, monies would likely be invested in Public Equity

PIP

- Changed weightings to reflect new asset allocation weights
 - Implementation delayed until 7/1/2021 due to illiquid nature

Investigated changing other aspirational, non-investable benchmarks but did not change

- Other Real Assets (CPI + 400 bps)
- RBI Diversifiers (Cash + 250 bps)
 - Approach typically used by institutional investors
 - Risk and return, reflective of strategy characteristics were not improved, or approach not used by other institutional investors



Performance hurdles



Summary of performance hurdles (1X)

Program	Current Hurdle (bps)	Recommended Hurdle (bps)	Rationale for Change
Fixed Income	20	25	Consistently achieving 2X. Universe of active management consistently adds value. Encourage slightly more risk taking and value added. High yield and EMD added to mandate and opportunity set.
Credit Strategies	50	75	Restructuring of strategy expected to increase tracking error and therefore higher value added.
Public Equity	30	30	No change
Internal Equity	20	25	Higher expected tracking error and higher value added than when current 1X was developed as VRS has expanded into higher tracking error, strategies, primarily low volatility strategies. Expect higher IR due to global nature of portfolio
Private Equity	75	200	Removal of + 250 bps from benchmark. 2X is the same, 400 bps over the global equity index
Real Assets	75	75	No change
Private Investment Partnership	75	120	Weighted sum of new benchmark and new 1X's
Dynamic Strategies	30	25	Still early in the life of the strategy. Use the same 1X as internal public strategies. Diversification benefits from strategy not captured in performance hurdles
Risk Based Investments	30	25	Still early in the life of the strategies. Use the same 1X as internal public strategies. Diversification benefits from strategy not captured in performance hurdles
Total Fund	30	45	Adjustment for private equity benchmark change, expected universe top quartile ranking performance, greater asset class alpha expectations and increasing allocations to higher alpha asset classes



VRS results – Private Equity



Any point of +2.5% line above zero is beneficial to VRS and would smooth out the incentive compensation



VRS results – Total Fund



Historical tracking error within a fairly narrow range and expected to increase some as new target allocation is implemented



Public fund universe – total fund value added

InvMetrics Public DB Net Universe ending 12/31/2019

	3 Year	5 Year	8 Year	10 Year
Universe				
5th Pctl.	1.36	0.77	1.14	0.95
25th Pctl.	0.38	0.20	0.28	0.24
Median	-0.09	-0.18	-0.03	-0.05
75th Pctl.	-0.45	-0.48	-0.43	-0.43
95th Pctl.	-1.26	-1.16	-1.14	-1.41
Observations	211	203	180	153

InvMetrics Public DB Net Universe ending 12/31/2018

	8 Year
Universe	
5th Pctl.	0.90
25th Pctl.	0.32
Median	-0.07
75th Pctl.	-0.43
95th Pctl.	-1.47
Observations	211

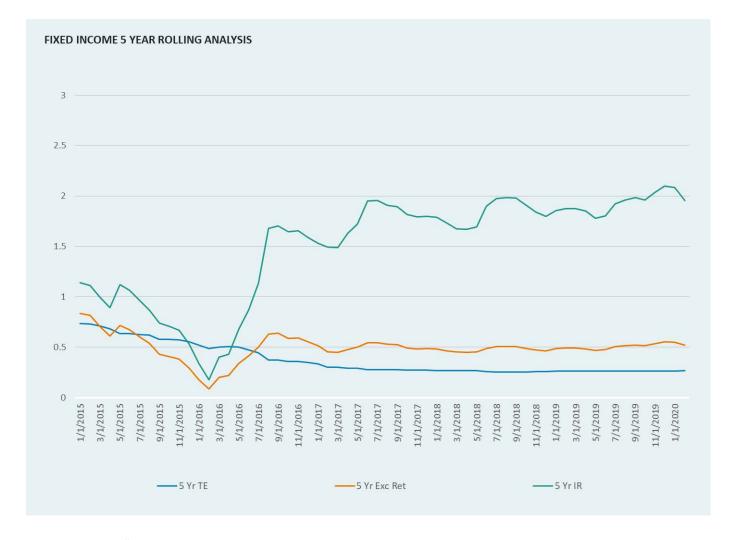
Aspirational benchmarks of +200 to +500 bps are normally used in policy performance benchmarks

Removing the aspirational contribution from every funds' policy return would likely shift the universe's value added by a similar amount that it does for VRS, 25-30 bps

1X of 45 bps estimated to be above adjusted median but below adjusted top quartile.

2X of 90 bps estimated to be above adjusted top quartile, and approximately adjusted top decile

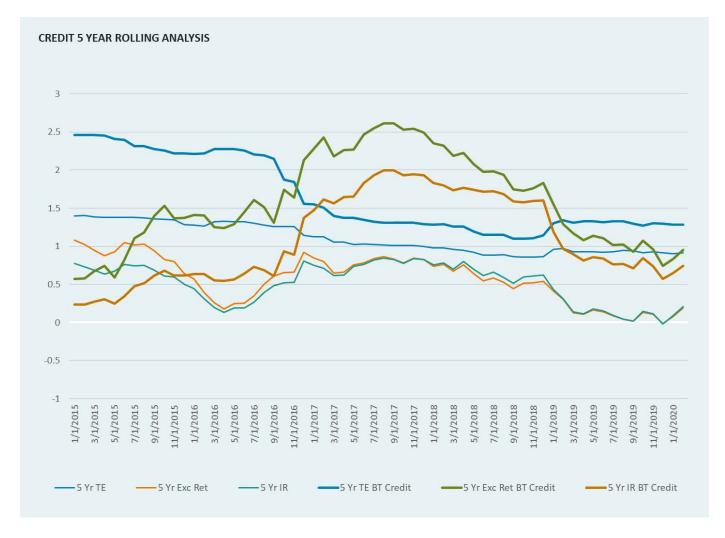
VRS results – Fixed Income



Excellent results. New hurdles encourage a bit more risk taking within the current capabilities and strategies



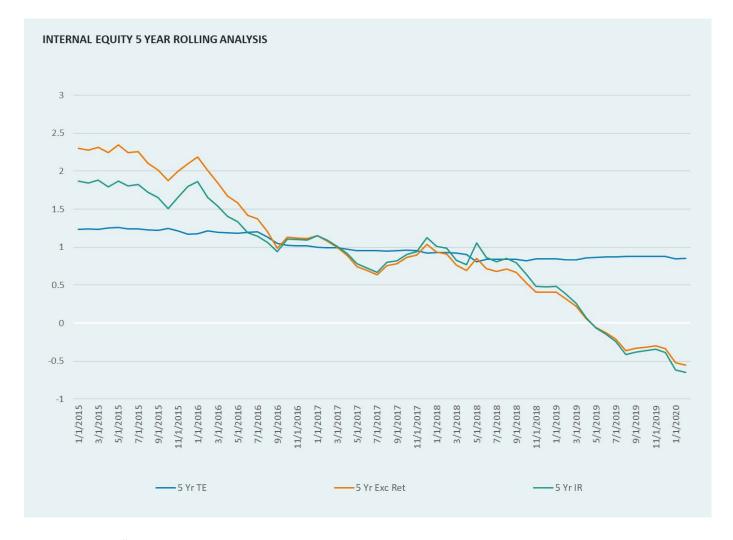
VRS results – Credit Strategies



Backtest of proposed strategy demonstrates greater tracking error than program's historical risk



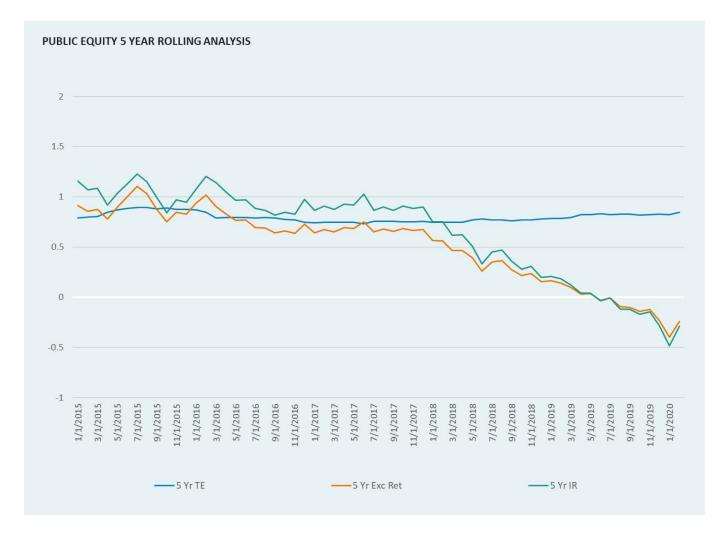
VRS results – Internal Equity



Current 1X developed at a slightly lower tracking error expectation and lower, U.S. equity based, information ratio



VRS results – Public Equity





Summary

Program	Recommended Benchmarks	Recommended Hurdles (bps)
Fixed Income	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. Aggregate Index [90%], Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [5%] and JP Morgan EMBI Global Core Index [5%]	25
Credit Strategies	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [30%], Bloomberg Barclays U.S. Aggregate Index [10%] and S&P Performing Loan Index [60%]	75
Public Equity	MSCI All Country World Investable Market Index net of VRS taxes	30
Internal Equity	Asset-weighted Blend of the MSCI U.S. Standard Index, MSCI U.S. Small Cap Index, MSCI USA Minimum Volatility Index, MSCI World ex-U.S. Index, MSCI World ex-U.S. Minimum Volatility Index, MSCI Emerging Markets Index and EPRA/NAREIT U.S. Index net of VRS taxes	25
Private Equity	MSCI All Country World Investable Market Index net of VRS taxes (lagged by 3 months)	200
Real Assets	Asset-weighted Blend of the Total Real Estate benchmark (NCREIF ODCE Index (net, lagged by 3 months) [85%], FTSE EPRA/NAREIT Developed REIT Index [15%]) and the Other Real Assets benchmark CPI-U Index + 400 bps per annum lagged by 3 months	75
Private Investment Partnership	33% Private Equity (MSCI All Country World Investable Market Index net of VRS taxes lagged by 3 months) 25% Real Estate (NCREIF ODCE Index, net, lagged by 3 months) 8% Other Real Assets (CPI-U Index + 400 bps per annum lagged by 3 months) 17% Credit Strategies Rate Sensitive (Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index) 17% Credit Strategies Non-Rate Sensitive (S&P Performing Loan Index)	120
Dynamic Strategies	60% MSCI All Country World Investable Market Index net of VRS taxes 20% Bloomberg Barclays U.S. Aggregate Index 10% Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index 10% JP Morgan EMBI Global Core Index	25
Risk Based Investments	80% Diversifiers Benchmark (Bloomberg Barclays 3-month U.S. Treasury Bellwether + 250 bps per annum) 20% S&P Risk Parity 12% Volatility	25
Total Fund	Fixed Policy-weighted Blend of individual program benchmarks	45



VRS June 2020



Approve changes to benchmarks and excess return objectives, effective July 1, 2020.

Requested Action

The VRS Board of Trustees approves the recommended changes to the benchmarks and excess return objectives, effective July 1, 2020.

Description/Background

Benchmarks and Excess Return Objectives. The VRS Board of Trustees uses benchmarks to monitor performance results and uses excess return objectives in calculations associated with the Investment Professionals' Pay Plan. At the June 19, 2015 meeting, the Board approved the program benchmarks and excess return objectives as recommended by Aon Hewitt. Since that time, the Board has approved various changes to asset class benchmarks; however, the adopted excess return objectives remained in effect. As directed by the Board, staff engaged Verus, the consulting firm that recently performed the asset liability study for the Board, to review the appropriateness of the benchmarks and the excess return objectives for the individual asset class programs and the total fund.

After careful analysis, Verus recommends the following benchmarks and excess return objectives.

Benchmarks: Recommended Changes

Program	
Private Equity	
Current Benchmark	MSCI All Country World Investable Market Index net of VRS taxes (lagged by 3 months) + 250 bps per annum
Recommended Benchmark	MSCI All Country World Investable Market Index net of VRS taxes (lagged by 3 months)
Private Investment Partners	ships
Current Benchmark	40% Private Equity (MSCI All Country World Investable Market Index (net of VRS taxes lagged by 3 months) + 250 bps per annum)
	30% Real Estate (NCREIF ODCE Index, net, lagged by 3 months)
	10% Other Real Assets (CPI-U Index + 400 bps per annum lagged by 3 months)
	10% Credit Strategies Rate Sensitive (Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index)
	10% Credit Strategies Non-Rate Sensitive (S&P Performing Loan Index)
Recommended Benchmark	33% Private Equity (MSCI All Country World Investable Market Index net of VRS taxes lagged by 3 months)
	25% Real Estate (NCREIF ODCE Index, net, lagged by 3 months)
	8% Other Real Assets (CPI-U Index + 400 bps per annum lagged by 3 months)
	17% Credit Strategies Rate Sensitive (Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index)
	17% Credit Strategies Non-Rate Sensitive (S&P Performing Loan Index)

Notes:

The recommended benchmark for Private Equity will be effective as of July 1, 2020.

The recommended benchmark for Private Investment Partnerships will be effective as of July 1, 2021, due to the illiquid nature of the program.

Benchmarks: No Recommended Changes

Program	Benchmark
Fixed Income	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. Aggregate Index [90%], Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [5%) and JP Morgan EMBI Global Core Index [5%]
Credit Strategies	Fixed Policy-weighted Blend of Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index [30%], Bloomberg Barclays U.S. Aggregate Index [10%] and S&P Performing Loan Index [60%]
Public Equity	MSCI All Country World Investable Market Index net of VRS taxes
Internal Equity	Asset-weighted Blend of the MSCI U.S. Standard Index, MSCI U.S. Small Cap Index, MSCI USA Minimum Volatility Index, MSCI World ex-U.S. Index, MSCI World ex-U.S. Minimum Volatility Index, MSCI Emerging Markets Index and EPRA/NAREIT U.S. Index net of VRS taxes
Real Assets	Asset-weighted Blend of the Total Real Estate benchmark (NCREIF ODCE Index (net, lagged by 3 months) [85%] and FTSE EPRA/NAREIT Developed REIT Index [15%]) and the Other Real Assets benchmark CPI-U Index + 400 bps per annum lagged by 3 months
Dynamic Strategies	60% MSCI All Country World Investable Market Index net of VRS taxes 20% Bloomberg Barclays U.S. Aggregate Index 10% Bloomberg Barclays U.S. High Yield Ba-B 2% Issuer Cap Index 10% JP Morgan EMBI Global Core Index
Risk-Based Investments	80% Diversifiers Benchmark (Bloomberg Barclays 3- month U.S. Treasury Bellwether + 250 bps per annum) 20% S&P Risk Parity 12% Volatility

Excess Return Objectives: Recommended Changes

	Excess Return Objective (basis points)	
Program	Current	Recommended
Fixed Income	20	25
Credit Strategies	50	75
Internal Equity	20	25
Private Equity	75	200
Private Investment Partnerships	75	120
Dynamic Strategies	30	25
Risk-Based Investments	30	25
Total Fund	30	45

Notes:

For the implementation of the incentive compensation calculation for those programs where the excess return objective changed, the calculation will be a blend of the current excess return objective (to be used until June 30, 2020) and the recommended excess return objective (to be used from July 1, 2020 onward).

Excess Return Objectives: No Recommended Changes

		Excess Return Objective (basis points)	
Program	Current	Recommended	
Public Equity	30	30	
Real Assets	75	75	

Rationale for Requested Action

The benchmarks reflect the characteristics of a good benchmark per the CFA Institute: unambiguous, investable, measurable, appropriate, specified in advance, and reflective of current investment opinions. The excess return objectives reflect the strategies and current capabilities of staff within each program as well as for the total fund. The measures are based on careful analysis of the risks and opportunities of the underlying markets and an analysis of the practices of peer funds, within the universe of public funds.

Authority for Requested Action

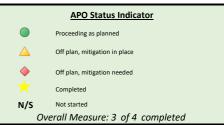
The Board is authorized to approve this recommendation pursuant to the provisions of *Code of Virginia* §§ 51.1-124.22 and -124.30.

The above action is approved on June 11, 2020 with an effective date of July 1, 2020.		
O'Kelly E. McWilliams, III, Chair	 Date	
VRS Board of Trustees		



AGENCY PERFORMANCE OUTCOMES STATUS REPORT

FISCAL YEAR 2021
Summary



APO #	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
1	Implement New myVRS Functionality - Online Retirement Processing (Measure: 4 of 6 completed)												
2	Implement New myVRS Functionality - Payment, Health Insurance Maintenance (Measure: 4 of 6 completed)												
3	ERM Implementation (Measure: 3 of 3 completed)												
4	Cardinal HCM Implementation - The Plan (Track 1), Agency (Track 2) and Retiree (Track 3) (Measure: 4 of 5 completed)												

Note: APO project schedules are tracked through the Roadmap process. APO outcomes are reported to the Board of Trustees at the conclusion of the fiscal year.





APO#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
1	1 Implement New myVRS Functionality - Online Retirement Processing												
1.1	Complete staff and employer readiness activities, including staff training, for Member Portal (Online Retirement)												
1.2	Member Portal (Online Retirement) software is tested and ready for deployment												
1.3	Security enhancements necessary for go-live for Member Portal (Online Retirement) are complete												
1.4	Security penetration testing for Member Portal (Online Retirement) is complete												
1.5	Complete phased ramp-up of online retirement processing functionality												
1.6	Initiate and conduct quality monitoring for online retirement processing												





APO#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
2 1	2 Implement New myVRS Functionality - Payment, Health Insurance Maintenance												
2.1	Complete staff and employer readiness activities, including staff training, for Payment/Health Insurance Maintenance												
2.2	Payment/Health Insurance Maintenance software is tested and ready for deployment												
2.3	Security enhancements necessary for go-live for Payment/Health Insurance Maintenance are complete												
2.4	Security penetration testing for Payment/Health Insurance Maintenance is complete												
2.5	Complete phased ramp-up of Payment/Health Insurance Maintenance functionality												
2.6	Initiate and conduct quality monitoring for Payment/Health Insurance Maintenance functionality												





APO#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
3 EI	RM Implementation												
3.1	Complete risk assessment process to validate and prioritize risks identified in the risk portfolio												
3.2	Develop final risk response plan based on the outcomes of the risk assessment process												
3.3	Initiate the development of the initial risk response plan												





APO#	APO Description	July	August	September	October	November	December	January	February	March	April	May	June
4	4 Cardinal HCM Implementation - The Plan (Track 1), Agency (Track 2) and Retiree (Track 3)												
4.1	Update myVRS documentation related to information exchanges to and from the state central payroll system (CIPPS) and personnel management system (PMIS) to reflect process changes resulting from the implementation of the new Cardinal HCM system. (Track 1)												
4.2	Successfully test interfaces to and from the new Cardinal HCM system to myVRS, and monitor VRS third party vendors' completion of testing of interfaces to and from the Cardinal HCM system, in accordance with the testing schedule provided by DOA. (Track 1)												
4.3	Create or update, as appropriate, VRS policies and procedures, workflows, interface documentation and VRS signature authority to reflect process changes in the new Cardinal HCM system (Track 1, 2 and 3)												
4.4	Communicate with VRS staff concerning the transition to the new Cardinal HCM system and ensure education is provided to staff with roles in the system (Track 1, 2 and 3)												
4.5	Implement the new Cardinal HCM system and provide required reconciliation between the Cardinal HCM system and Kronos, as required. (Track 2)												



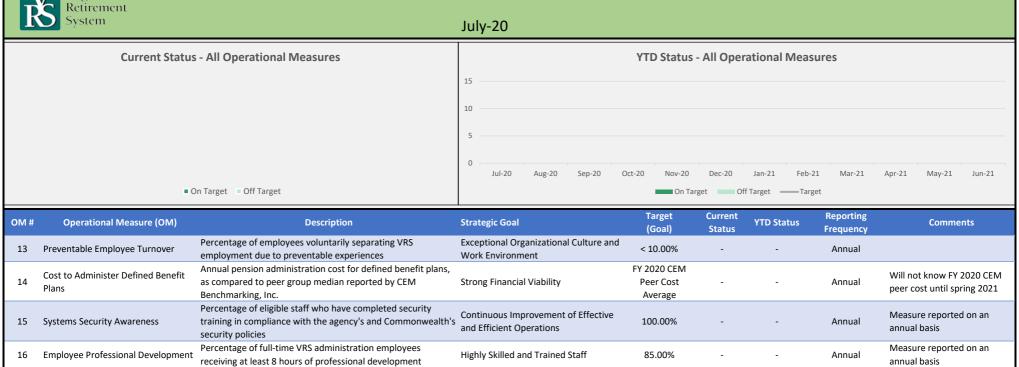
FISCAL YEAR 2021 OPERATIONAL MEASURES STATUS REPORT

July-20





FISCAL YEAR 2021 OPERATIONAL MEASURES STATUS REPORT



ĸ	Virginia Retirement System	Fiscal Year 2021 Ope		OM 1
	Operational Measure	Timeliness of Monthly Financial Acco	•	
	Strategic Goal	Strong Financial Viability	varie recommending	
	Description	i	trol reconciliations completed by last bus	iness day of the following
(Calculation Methodology	The number of financial account reconcil	onciliations completed by the last busine iation each month.	ss day of the month, divided by
	Data Source	Finance Control Performance Report	Reporting Frequency	Monthly
	Target (Performance Goal)	> 95.00%	Baseline (Performance History)	99%
To		tial impacts due to ongoing pandemic and n changes	Baseline Rationale: 5 yea	ar average = 99%
(Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%
	Potential Constrai	nts to Meeting Target	Mitigation Str	ategies
1	Ongoing pandemic impacts p	processes and agency resources	Identify alternative processes to work an train staff for backup as needed	round disruptions, and cross-
2		processes and agency resources, s that limit system availability	Enact business continuity plan for techn	ology outages
3	Unanticipated external/inter expand the overall number o	nal requests for new programs that of reconciliations	Streamline process for approving and im expedite roll-out and ensure accurate re	
		YTD Perfori	mance History	
9	9.0% ————————————————————————————————————			
	1.0%			
	9.0%			
8	7.0%			
8	5.0% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec-2	0 Jan-21 Feb-21 Mar-21 Apr Status (cumulative) ——Target	-21 May-21 Jun-21
			rough sound financial stewardship and superior custome	er service.

Vinginia Retirement System	Fiscal Year 2021 Oper Reporting Period:		OM 2						
Operational Measure	Average Abandoned Call Rate	•							
Strategic Goal	Continuous Improvement of Effectiv	e and Efficient Operations							
Description	Percentage of calls to the Customer	rcentage of calls to the Customer Counseling Center (CCC) that result in hang-ups while in the queue							
Calculation Methodology		ined as a caller hanging up prior to reach received by the CCC support teams. Aver							
Data Source	Customer Counseling Center Performance Report	Reporting Frequency Monthly							
Target (Performance Goal)	< 7.00%	Baseline (Performance History)	6.20%						
	nated high call volume due to system change ongoing pandemic	Baseline Rationale: 5 year	average = 6.2%						
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%						
Potential Constrai	nts to Meeting Target	Mitigation Stra	ategies						
	nges that impact customer benefits olumes (i.e. federal tax code change)	Prepare and implement a staffing augment additional resources are needed on should to external causes							
	processes and agency resources, ty, which may cause an increase in	Prepare a staffing augmentation plan fo resources are needed on short notice to							
Need for increased security r members' records in accorda which cause longer call times	nce with industry best practices	Identify opportunities to expedite the rewhile still ensuring compliance with VRS member data	-						
	YTD Perfori	mance History							
10.00% 9.00% 8.00% 7.00% 6.00% 5.00% 4.00% 3.00% 1.00% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec-	20 Jan-21 Feb-21 Mar-21 Ap	or-21 May-21 Jun-21						
		rough sound financial stewardship and superior custome	r service.						

Virginia Retirement	Fiscal Year 2021 Oper		OM						
System	Reporting Period:	<u> </u>	4						
Operational Measure	Timeliness of Monthly Retirement D								
Strategic Goal	Continuous Improvement of Effectiv		6						
Description	Percentage of monthly retirement disbursements processed no later than the first business day of the month								
Calculation Methodology	first business day of the month, dividence processing each month. "Prough disbursed" is defined as the funds he submit documentation to external put time to meet the first business day of	disbursements processed so that the pay ded by the total number of monthly retirecessed" is defined as funds having been naving been paid out of the VRS account. artners (Virginia Department of Treasury of the month requirement.	ement disbursements that disbursed to retirees; This process requires VRS to						
Data Source	Benefit Disbursements Performance Report	Reporting Frequency	Monthly						
Target	100.00%	Baseline	100.00%						
(Performance Goal)	Lintain ann an C	(Performance History)	100%						
Target Rationale: Ma	nintain recent performance	Baseline Rationale: 5 year	average = 100%						
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%						
Potential Constrai	nts to Meeting Target	Mitigation Stra	ntegies						
Dependence upon external p process (i.e., Virginia Departi partner)	parties who are integral to the ment of Treasury and banking	Develop contingency plan in concert wit open lines of communication and altern potential delay							
	processes and agency resources, s that limit ability to process and/or n to external stakeholders	Enact business continuity plan for techn	ology outages						
3 Sensitivity of data that require of approvals; risk of staff abs		Cross-train existing staff and ensure red approve retirements	undancy of staff authorized to						
	YTD Perfori	mance History							
100.00%									
99.50%									
99.00%									
98.50%									
98.00% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec	-20 Jan-21 Feb-21 Mar-21 Ap	or-21 May-21 Jun-21						
	t and other benefits to Virginia public employees the rin the delivery of benefits and services to those w	nrough sound financial stewardship and superior custon ve serve.	ner service.						

Virginia Retirement System	Fiscal Year 2021 Oper Reporting Period:		OM 5		
Operational Measure	Timeliness of Service Retirements Pr	-			
Strategic Goal	Continuous Improvement of Effectiv	e and Efficient Operations			
Description	Percentage of service retirements pr benefits on the first retirement payn	rocessed so that retiring members are set nent date for which they are eligible	up to receive retirement		
Calculation Methodology	eligible to receive retirement benefit time period. The "first payment date based on the date by which VRS rece complete, accurate, and ready for pa	ayments processed by the first payment of the total number of initial person which the member is eligible to receive a member's retirement application to ayment processing. "Processed" is defined to the the total out of the VRS	payments made for the same ve retirement benefits" is that is determined by VRS to be a funds having been paid to		
Data Source	Service Retirement Performance Report	Reporting Frequency	Monthly		
Target	95.00%	Baseline	97.90%		
(Performance Goal)		(Performance History)			
Target Rationale: Accounts for sys	stem conversion and ongoing pandemic	Baseline Rationale: 5 year o	average = 97.90%		
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%		
Potential Constraints to Meeting Target Mitigation Strategies					
Ongoing implementation of raisignificantly change current p	myVRS enhancements, which will processes	Provide ample opportunity for advanced needed to ensure adequate resources do			
Ongoing pandemic impacts p including technology outages retirements	processes and agency resources, s that limit ability to process	Enact business continuity plan for techno	ology outages		
3 Sensitivity of data that require of approvals; risk of staff abs		Cross-train existing staff and ensure reduapprove retirements	undancy-of staff authorized to		
	YTD Perfori	mance History			
100.00%					
100.00%					
99.00%					
98.00%					
97.00%					
96.00%					
95.00%					
94.00%					
93.00%					
92.00% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec-	-20 Jan-21 Feb-21 Mar-21 Ap	r-21 May-21 Jun-21		
	Current Status ——YTD	Status (cumulative) ——Target			
VRS Mission: VRS delivers retiremen	t and other benefits to Virginia public employees th	nrough sound financial stewardship and superior custom	per service.		
VRS Vision: To be the trusted leader	er in the delivery of benefits and services to those w	ve serve.			

System Retirement System	Fiscal Year 2021 Oper Reporting Period:		6			
Operational Measure	Accuracy of Service Retirements Pro	cessed				
Strategic Goal	Continuous Improvement of Effective	<u>-</u>				
Description	Percentage of service retirements p the member's service record	rocessed for which the corresponding bene	efit payment correctly reflec			
Calculation Methodology	divided by the total number of initial payment is defined as the benefit ar	pplications processed and corresponding bal service retirement benefits processed an mount correctly reflecting the member's set o retirees; "paid" is defined as the funds ha	d paid. An accurate benefit ervice record. "Processed" is			
Data Source	Service Retirement Performance Report	Reporting Frequency Mor				
Target (Performance Goal)	99.00%	Baseline (Performance History)	99.00%			
Target Rationale: M	aintain recent performance	Baseline Rationale: 5 year o	average = 99%			
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%			
Potential Constra	nints to Meeting Target	Mitigation Strate	egies			
Ongoing implementation of significantly change current	myVRS enhancements, which will processes	Provide ample opportunity for advanced needed to ensure adequate resources du				
	processes and agency resources, es that limit ability to process	Enact business continuity plan for technol	logy outages			
	ires strong controls and several taff absences or unavailability	Cross-train existing staff and ensure redurapprove retirements	ndancy of staff authorized t			
	YTD Perfor	mance History				
99.50%						
99.30%						
99.00%						
98.50%						
98.00%						
97.50%						
97.00% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec	-20 Jan-21 Feb-21 Mar-21 Apr-	21 May-21 Jun-21			

¥	Virginia Retirement	Fiscal Year 2021 Opera	ational Measures	OM	
K	System	Reporting Period:	•	7	
	Operational Measure Timeliness of Disability Retirements P				
	Strategic Goal Continuous Improvement of Effective and Efficient Operations				
	Description	Percentage of disability retirements the Medical Review Board	processed within 30 days of VRS receiving	ng notification of approval by	
•	Calculation Methodology	•	s processed within 30 days after VRS recesoard. "Processed" is defined as funds has been paid out of the VRS account.		
	Data Source	Disability Retirement Performance Report	Reporting Frequency	Monthly	
	Target (Performance Goal)	98.00%	Baseline (Performance History)	98.80%	
		otential processing delays due to system nd ongoing pandemic impacts	Baseline Rationale: 5 year (average = 98.80%	
(Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%	
	Potential Constrai	ints to Meeting Target	Mitigation Stra	itegies	
1	significantly change current	•	Provide ample opportunity for advanced needed to ensure adequate resources d		
2	Ongoing pandemic impacts princluding technology outagestretirements	processes and agency resources, es that limit ability to process	Enact business continuity plan for techn	ology outages	
3			Cross-train existing staff and ensure red approve retirements	undancy of staff authorized to	
		YTD Perform	mance History		
	9.00%				
9	8.00%				
9	7.00%				
9	6.00%				
9:	5.00% Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 Dec-2 Current Status ——YTD S	20 Jan-21 Feb-21 Mar-21 Apı Status (cumulative) ——Target	r-21 May-21 Jun-21	
	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.				

Ketirement System	Fiscal Year 2021 Oper Reporting Period:		OM 8		
Operational Measure Accuracy of Disability Retirements Processed					
Strategic Goal Continuous Improvement of Effective and Efficient Operations					
Description	Percentage of disability retirements processed for which the corresponding benefit paid correctly reflects the member's service record				
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%		
Target Rationale: Ma	iintain recent performance	Baseline Rationale: 5 year	r average = 99%		
Current Reporting Month Status 0.00%		YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%		
Potential Constrai	nts to Meeting Target	Mitigation Stra	ntegies		
111 :		Provide ample opportunity for advanced training; augment staffing as needed to ensure adequate resources during transition			
	res strong controls and several aff absences or unavailability	Cross-train existing staff and ensure red approve retirements	undancy of staff authorized to		
	YTD Perfori	mance History			
100.00%					
99.80%					
99.40%					
99.20%					
99.00%					
98.80%					
98.60%					
98.40% Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Current Status ——YTD Status (cumulative) ——Target					
	t and other benefits to Virginia public employees th er in the delivery of benefits and services to those we	rough sound financial stewardship and superior custome. e serve.	r service.		

Retirement System	Fiscal Year 2021 Open Reporting Period		9		
Operational Measure	Timeliness of Workflow Documenta	•	<i></i>		
-	Continuous Improvement of Effective				
Description	Percentage of workflow documents	s 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 avera of 20,000 documents are imaged per month.				
Data Source	Technology Services SLEs Performance Report	Reporting Frequency	Monthly		
Target	99.50%	Baseline	99.90%		
(Performance Goal)		(Performance History)			
Target Rationale: Mai	intain recent performance	Baseline Rationale: 5 year a	verage = 99.9%		
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%		
Potential Constrain	nts to Meeting Target	Mitigation Strat	egies		
Dependence upon current Im expedient and accurate proce turnaround time	aging unit staffing level to ensure essing within the prescribed	Prescribe duties that merit the continuance of the current Imaging ur staffing level (with respect to the anticipated transition in FY 2021 to online retirements that should reduce paper form intake levels)			
Ongoing pandemic impacts processes and agency resources, including technology outages that limit system availability Enact business continuity plan for technology outages			ogy outages		
Staffing constraints; specific s untrained staff to produce reseffectiveness	kill set required limits feasibility for sults with same efficiency and	Establish a routine cross-training program are available at all times	to ensure well-trained sta		
	YTD Perfo	rmance History			
00.00%					
99.50%					
9.00%					
8.50%					
18.00%					
07.50%					
7.00%					
6.50%					
6.00%					
95.50%					
Jul-20 Aug-20	Sep-20 Oct-20 Nov-20 De	c-20 Jan-21 Feb-21 Mar-21 Apr	-21 May-21 Jun-21		

Fiscal Year 2021 Operational Measures Reporting Period: July-20 Reporting Period: July-20					
Operational Measure	Operational Measure Timeliness of Employer Contribution Confirmations				
Strategic Goal Superior Technological Tools that Enable Efficient Delivery of Service					
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	97.00%	Baseline	97.60%		
(Performance Goal)	57.00%	(Performance History)	<i>57.</i> 00/6		
Target Rationale: Mo	aintain recent performance	Baseline Rationale: 5 year	average = 97.60%		
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%		
Potential Constra	ints to Meeting Target	Mitigation Strategies			
7	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 pandemic that prevent their timely sub	on resources at the employer level omission of CC snapshots		communicate with employers to identify potential impacts appropriate with the submission process		
The state of the s	state employers may delay timely Il responsibilities during Cardinal	Provide notice to state employers of polimplementation and advise that they pr submission			
	YTD Perfori	mance History			
99.0%					
98.0%					
97.0%					
96.0%					
95.0%					
94.0% Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Current Status ——YTD Status (cumulative) ——Target					
target					
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.					

Fiscal Year 2021 Operational Measures Reporting Period: July-20					
Operational Measure	Implementation of Corrective Action	•		12	
Strategic Goal Continuous Improvement of Effective and Efficient Operations					
Description	_	ercentage of audit recommendations for which VRS management represents that corrective action has seen implemented by the approved target date			
Calculation Methodology	he number of audit recommendations for which VRS management has represented that corrective action as been implemented, divided by the total number of audit recommendations for which corrective action needed as of the date the measure is calculated. VRS management establishes target dates and provides eriodic updates to Audit regarding whether actions have been taken. Audit tracks responses in the Audit ecommendation Follow-Up System (ARFUS).				
Data Source	ARFUS	Reporting Frequency	Quarterly		
Target	> 95.00%	Baseline	94.00%		
(Performance Goal)		(Performance History)			
Target Rationale: Ma	intain recent performance	Baseline Rationale: 5 year	average = 94.00%		
Current Reporting Month Status	0.00%	YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%		
Potential Constrai	nts to Meeting Target	Mitigation Stra	ategies		
1 High cost to implement nece		ork within existing agency allocations and, if necessary, also with te budgetary processes to obtain resources needed to effectuate rrective action			
2 Limited staff resources to effectively implement necessary corrective action Adjust allocation of staffing resources to enable corrective action implementation			ction		
-	oility to take necessary corrective tes that redirect agency resources,	Communicate with DEC and Audit regar target date to accommodate timeline of available	= :		
	YTD Perfor	mance History			
100.00%					
100.0070					
99.00%					
98.00%					
36.6670					
97.00%					
96.00%					
05 000/					
95.00%					
94.00%					
93.00%					
92.00%					
91.00%					
90.00% Q1 (July-Sept)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)		
	Current Status ——YTD	Status (cumulative) ——Target			
VRS Mission: VRS delivers retirement	t and other benefits to Virainia public employees the	rough sound financial stewardship and superior customer	service.		
	r in the delivery of benefits and services to those we				
The traded leader	,	f 16 meet or exceed target			

Vinginia Refligement SYSTEM	Fiscal Year 2021 Oper Reporting Period:		OM 13	
Operational Measure	Preventable Employee Turnover	•		
Strategic Goal	Exceptional Organizational Culture a	nd Work Environment		
Description	Percentage of employees voluntarily	separating VRS employment due to pre	ventable experiences	
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 effectively, and unavailability of training opportunities.			ees who voluntarily separate te period of time. Preventable ed reports of unsuccessful	
Data Source	Human Resources Department Exit Interview Survey Results	Reporting Frequency	Annual	
Target	< 10.00%	Baseline	5.88%	
(Performance Goal)	10.00%	(Performance History)	3.86%	
Target Rationale: M	aintain recent performance	Baseline Rationale: FY 2019 results		
Current Reporting Month Status 0.00%		YTD Status (Cumulative; used at year-end to determine whether target has been met)	0.00%	
Potential Constra	ints to Meeting Target	Mitigation Strategies		
Unrealistic employee expectations regarding VRS work environment and responsibilities		Provide clear position descriptions and outline organization culture and expect open communication between employe	ations on a regular basis; ensure	
Reorganization due to myVRS enhancements may alter current work responsibilities for some employees Provide clear and open communication throughout the implement process; Offer sufficient training opportunities for employees that the implement process with new responsibilities.		•		
3 Ongoing pandemic impacts employee morale		Continue direct outreach to employees, provide EAP resources and implement employee engagment activities		
YTD Performance History				
TID religitialite history				

[Reported as an annual measure]

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Virginia Retirement system	Fiscal Year 2021 (Reporting Period:	Operational Measures July-20	OM 14	
Operational Measure	Operational Measure Cost to Administer Defined Benefit Plans			
Strategic Goal	Strong Financial Viability			
Description	Description Annual pension administration cost for defined benefit plans, as compared to peer group median reported by CEM Benchmarking, Inc.			
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 2021. At that time the FY 2020 annual agency cost will be compared to the to the FY 2020 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 2020 CEM Peer Cost Average	Baseline (Performance History)	N/A	
	al administrative cost for FY 2020 against the ovided by CEM Benchmarking, Inc.	Baseline Rationale: N/A		
Current Reporting Month Status		YTD Status (Used at year-end to determine whether target has been met)	-	
Potential Constrai	nts to Meeting Target	Mitigation Stra	ategies	
Significant unanticipated cost to external influences, include	ts to administer pension plans due ling the ongoing pandemic			
Dependent upon expenditur for administrative cost avera	e patterns for the CEM Peer group ge	Maintain communications with CEM peers to stay informed on any spending abnormalities that may skew CEM-calculated peer costing		
FY 2020 CEM cost not known until late into FY 2021 (limiting agency ability to react if missing target) Proactively calculate and monitor agency administrative cost in anticipation of receiving the FY 2020 CEM cost; adjust agency spend if out of line with recent CEM peer cost averages		M cost; adjust agency spending		
	YTD Perfori	mance History		

[Average Pension Administration Cost for VRS' Peer Group, as provided by CEM Benchmarking, will be known in spring 2020]

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Vinginia Retirement System	Fiscal Year 2021 Oper Reporting Period:		ON 15			
Operational Measure	Systems Security Awareness					
Strategic Goal	Continuous Improvement of Effectiv	e and Efficient Operations				
Description	Percentage of eligible staff who have Commonwealth's security policies	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 2021 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%			
Target Rationale: Mair	ntain high security awareness	Baseline Rationale: All VRS staff comple	eted security training in FY 2020			
Current Status	Current Status - (Cumulative; used at year-end to determine whether target has been met)		-			
Potential Constra	ints to Meeting Target	Mitigation Str	ategies			
1 Unavailability of the Virginia application) for training	Learning Center (VLC, a non-VRS	Provide sufficient time for staff to obtain training within prescribed timeline to allow for possible VLC system unavailability				
.,	processes and agency resources, as that limit system availability	Enact business continuity plan for techn	nology outages			
	as set-forth by the Commonwealth changes to the prepared security	Proactively coordinate with different units within VRS to ensure sufficient time and resources to make necessary changes to the prepared training				
	YTD Perfor	mance History				

[Reported as an annual measure]

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Virginia Retirement	Fiscal Year 2021 Oper		0	MC	
System	Reporting Period:	•		<u> 16 </u>	
Operational Measure	Employee Professional Development	t			
Strategic Goal	Highly Skilled and Trained Staff	Highly Skilled and Trained Staff			
Description	Percentage of full-time VRS administration employees receiving at least 8 hours of professional development				
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, 2020 who are not on short- or long-term disability or FMLA during FY 2021. Qualifying professional development includes courses designated in the Virginia Learning Center (VLC), as well as conferences, webinars, college or trade school classes, and an 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 85.00%		Baseline (Performance History)	91.30%		
Target Rationale: Maintain recent	performance and increased total # of hours	Baseline Rationale: 5 year	average = 91.32%		
Current Status -		YTD Status (Cumulative; used at year-end to determine whether target has been met)	-		
Potential Constra	ints to Meeting Target	Mitigation Strategies			
Limited staff flexibility to obtain professional development due to significant staff time dedicated to implementation of myVRS enhancements in FY 2021		Encourage staff to plan for professional before and/or after periods of time ded myVRS enhancements			
2 Dependence on IT system a and/or time tracking	vailability/accessibility for trainings	inings Advise staff to plan to be proactive about obtaining professional development and reporting their hours earned as they go			
3 Limited progressive course a	availability on relevant subject matter	ubject matter 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.

Request for Board Action RBA 2020-06-____



Approve FY 2021 APOs and Operational Measures.

Requested Action

The VRS Board of Trustees approves the FY 2021 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 2021 APOs have five stated outcomes summarized as follows:

- 1. Implement New myVRS Functionality Online Retirement Processing
- 2. Implement New myVRS Functionality Payment, Health Insurance Maintenance
- 3. ERM Implementation
- 4. Cardinal HCM Implementation The Plan (Track 1), Agency (Track 2) and Retiree (Track 3)

The objective is to attain three of the four 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, 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.

<u>Operational Measures (see attachment 2)</u>. 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

RBA	2020-06-	
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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(11) authorizes the Board to establish and administer a compensation plan for officers and employees of the Retirement System.

O'Kelly E. McWilliams, Chairman VRS Board of Trustees

The above action is approved.

Request for Board Action RBA 2020-06-____



Reappointment of IAC Members.

Requested Action

The Board reappoints to the Investment Advisory Committee: Theodore Economou for a two-year term ending September 13, 2022; and Deborah Allen Hewitt, Ph.D., for a two-year term ending October 16, 2022.

Rationale for Requested Action

Theodore Economou and Deborah Allen Hewitt, Ph.D., currently serve on the Investment Advisory Committee (IAC) and are willing to be reappointed for another two-year term. Mr. Economou is Chief Investment Officer Multi-Asset at Lombard Odier Asset Management (Switzerland) SA, and Dr. Hewitt is Clinical Professor Emerita at the Mason School of Business at the College of William & Mary.

Authority for Requested Action

Code of Virginia § 51.1-124.26 requires the Board to appoint an Investment Advisory Committee to provide the Board with sophisticated, objective, and prudent investment advice, which will further assist the Board in fulfilling its fiduciary duty as trustee of the funds of the Retirement System.

The above action is approved.		
O'Kelly E. McWilliams, Chairman	Date	
VRS Board of Trustees	Date	

THÉODORE ECONOMOU, CFA

5, Avenue Gaspard-Vallette 1206 Geneva, Switzerland

Mobile: +41 79 696 0694 theodore.economou@cern.ch

Chief Investment Officer & Investment Advisor with global experience

- Experience in pension fund management and asset management, in Europe and USA.
- Professional experience in private assets including transactions, balance sheet structuring (equity & debt), and private equity portfolio investments.
- Won pension industry distinctions for innovations in risk management, management of equities, real estate, and alternative assets.

LOMBARD ODIER ASSET MANAGEMENT (Geneva, Switzerland) 2015–Present Chief Investment Officer, Multi-Asset

Oversee multi-asset institutional portfolios, with direct responsibility for CHF 6Bn in institutional client assets, including pension funds and foundations.

- Direct team of 10 in London and Geneva
- Developed and implemented portfolio construction model "by time-horizon" to increase performance while actively controlling risk.
- Led growth of flagship "All Roads" DGF strategy.

LOMBARD ODIER PENSION FUND (Geneva, Switzerland) 2014—Present Chair, Investment Committee

Led restructuring of 1.5Bn CHF investment portfolio to target higher performance.

- Restructured portfolio around time horizons in order to reconcile return, risk, and liquidity goals and constraints.
- Increased private assets allocation to 30%, strengthening the private equity program with a focus on buyouts and venture; initiated private credit allocation.
- Implemented dynamic cross-asset allocation in short-term-oriented portfolio.

CERN PENSION FUND (Geneva, Switzerland) Chief Executive Officer & CIO

2009-2015

Led restructuring of the 4Bn CHF pension investment portfolio of the European Organization for Nuclear Research (CERN) to target absolute performance while managing risk.

- Designed and implemented comprehensive investment governance framework, later featured in the Journal of Investment Consulting.
- Implemented first ever private equity and alternatives programs.
- Fund won several awards (<u>Investments & Pensions Europe</u>, <u>CIO Magazine</u>, <u>HFR</u> award for "outstanding career contribution by an individual investor").

ITT CORPORATION (New York, USA)

1993 - 2009

Assistant Treasurer, Corporate Finance & Pensions

2002 - 2009

Led capital markets and pension investment activities.

- Designed debt financing to support \$3b in acquisitions of portfolio companies
- Led restructuring of \$5 billion U.S. DB pension investments portfolio, increasing private equity program to 20% of assets; among first to implement LDI in US (2003).
- Restructured DC plan options to include default target-date funds (2005).

• ITT Pension Fund realized top decile performance among US large pension funds, winning several awards, including *Institutional Investor's* 2005 Corporate Plan Sponsor of the Year Award.

Investment Trustee, ITT Industries Ltd Pension Scheme (Basingstoke, UK) 2003 – 2009 Achieved major diversification of investment portfolio, increasing non-UK exposure, and introducing private assets.

Director, Investor Relations

1996-2002

Directed ITT Corporation's relations with Wall Street, during a period of acquisitions and divestitures of private and public companies. Supported more than \$2b in acquisitions of portfolio companies and concurrent divestitures of another \$5b across several industries. Recognized among "Best Investor Relations Officers" in U.S. (2001) in Barron's survey.

Manager, Corporate Development

1993-1995

Analysis, planning, negotiation and execution of acquisitions and divestitures transactions in the global automotive industry

ACCENTURE (Geneva and Zurich, Switzerland)

1987 - 1991

Senior Consultant, Financial Services Group

Designed and implemented financial risk management systems for multinational financial corporations, exchanges, and banks.

BOARD AND COMMITTEE MEMBERSHIPS

BAE SYSTEMS PENSION SCHEME (London, United Kingdom) 2019–Present External Advisor

Attend 4-6 investment committee meetings per year to advise on the management of £16b in scheme assets, with a particular focus on private markets.

VIRGINIA RETIREMENT SYSTEM (Virginia, USA)

2013-Present

Member, Investment Advisory Committee

Attend 3-4 investment committee and board meetings per year to advise on the management of \$80 billion in assets owned by the retirement system for the government employees of the commonwealth of Virginia, USA.

EDUCATION

Chartered Financial Analyst, CFA Institute, Charlottesville, Vir-	1999
ginia, U.S.A.	

Master of Management, J.L. Kellogg Graduate School of Management, Northwestern University, Evanston, Illinois, U.S.A.
Recipient of Alexander S. Onassis Scholarship

Diplôme d'Ingénieur Mécanicien, Ecole Polytechnique Fédérale de Lausanne, Switzerland

(M.Sc., Federal Institute of Technology)

LANGUAGES

• French (mother tongue), German (fluent)

OTHER BOARD & COMMITTEE MEMBERSHIPS

- Investor Steering Committee, Alternative Investment Management Association (AIMA), London, United Kingdom (2013-2014)
- Secretary, European Commission Task Force For A Pan-European Pension Fund, Brussels, Belgium (2012-2013)
- Financial Engineering Advisory Board, *The Peter F. Drucker and Masatoshi Ito Graduate School of Management*, Claremont University, Claremont, USA (2014 to present)

Dr. Deborah Allen Hewitt-Biographical Information

Deborah Allen Hewitt is Clinical Professor Emerita at the Mason School of Business at the College of William & Mary. She specializes in the macroeconomics of emerging countries, as well as exchange rates, and the use of scenario analysis for long-run strategic planning. She has focused on the growth and global implications of political and economic developments in China for the past 10 years, during which she served on the Faculty Advisory Board of the W&M Confucius Institute.

Dr. Hewitt lived and worked abroad for nearly 20 years while serving as President of Claremont Economics Institute, an economics consulting and forecasting firm which advised multinational businesses and investment firms in the US and abroad. She lived in Japan during the height of their bubble economy in the late 1980s-early 1990s, and in Thailand during their rapid growth period. She maintains her international expertise by leading MBA Global Immersion classes to destinations such as China, India, Brazil, Poland, Czech Republic, and South Africa.

Dr. Hewitt has published numerous academic and business articles on the subjects of international trade and finance. She has also worked as an international economist at the US Treasury, and taught at UCLA and Claremont Graduate School.

Dr. Hewitt has served on several Boards, including the Endowment of the College of William & Mary, The Muscarelle Museum, and the Respite Program. She currently serves on the Investment Advisory Committee of the Virginia Retirement System, The Reves International Advisory Board, and the Endowment Committee of the Williamsburg United Methodist Church.

Dr. Hewitt holds her Ph.D. from Duke University, where she was a James B. Duke scholar. She is a member of Phi Beta Kappa and Beta Gamma Sigma.



Reappointment of DCPAC Member.

Requested Action

The Board reappoints Ravindra Deo to the Defined Contribution Plans Advisory Committee (DCPAC) for a two-year term ending June 20, 2022.

Rationale for Requested Action

Ravindra Deo currently serves on the DCPAC and is willing to be reappointed for another two-year term. Mr. Deo is Executive Director of the Federal Retirement Thrift Investment Board.

Authority for Requested Action

Code of Virginia § 51.1-124.26 authorizes the Board to appoint such other advisory committees as it deems necessary. Each member appointment requires a two-thirds vote of the Board, and advisory committee members serve at the pleasure of the Board.

The above action is approved.		
O'Kelly E. McWilliams, Chairman	Date	
VRS Board of Trustees		

Ravindra Deo Ravindra Deo serves as the Executive Director of the largest defined contribution plan in the world. Ravindra joined the FRTIB in 2015 as the Chief Investment Officer. During his time at FRTIB, he also served as acting COO from June 2016 to February 2017, and acting Executive Director from May 2017 to August 2017. Ravindra started his career in 1986 and worked in the asset management industry for 29 years prior to joining the FRTIB. He has worked in a variety of roles including as an overlay asset allocator focused on risk reduction, as part of a team that worked on the creation of the first ETFs, as a team leader focused on lifestyle funds, and as an investment advisory consultant to some of the largest institutional investors in the world. He has been the lead on investment and manager research teams and has conducted extensive manager research on both alternative and traditional asset classes. Ravindra has a Bachelor of Technology from the Indian Institute of Technology, Delhi and an MBA from the University of California, Berkeley



Virginia Retirement System (VRS)

FY 2020 Budget Update

	Current Budget ¹ A	YTD Expenses through 05/20/20	Projected Remaining Expenses ²	Projected	Projected Variance Favorable/ (Unfavorable) E = A - D	% Remaining E/A	
Administration						•	
Personnel							
Salaries, Wages & Benefits ³	32,002,000	28,290,000	2,800,000	31,090,000	912,000	2.8%	
Bonuses & Incentives	1,063,000	1,039,000	-	1,039,000	24,000	2.3%	
Training & Travel ⁴	604,000	316,000	28,000	344,000	260,000	43.0%	
Facility	2,050,000	1,417,000	275,000	1,692,000	358,000	17.5%	
Contractual Services							
Fiscal & Management Services	1,954,000	1,157,000	384,000	1,541,000	413,000	21.1%	
Medical Review Services	804,000	667,000	76,000	743,000	61,000	7.6%	
Other Contractual Services	2,979,000	1,487,000	717,000	2,204,000	775,000	26.0%	
Information Technology							
Modernization	799,000	447,000	69,000	516,000	283,000	35.4%	
Software Solution Delivery & Support	10,872,000	7,482,000	3,095,000	10,577,000	295,000	2.7%	
Supporting Infrastructure	3,867,000	2,593,000	1,269,000	3,862,000	5,000	0.1%	
Technology Security	1,387,000	527,000	698,000	1,225,000	162,000	11.7%	
Other Operating	954,000	315,000	158,000	473,000	481,000	50.4%	
Retirement Commission	300,000	-	-	-	300,000	100.0%	
Administration Total	59,635,000	45,737,000	9,569,000	55,306,000	4,329,000	7.3%	
Investments							
Personnel							
Salaries, Wages & Benefits ³	16,282,000	14,282,000	1,340,000	15,622,000	660,000	4.1%	
Bonuses & Incentives	4,345,000	4,311,000	-	4,311,000	34,000	0.8%	
Training & Travel ⁴	787,000	342,000	15,000	357,000	430,000	54.6%	
Facility	764,000	540,000	108,000	648,000	116,000	15.2%	
Contractual Services							
Fiscal & Management Services	1,418,000	1,087,000	128,000	1,215,000	203,000	14.3%	
Other Contractual Services	496,000	229,000	53,000	282,000	214,000	43.1%	
Data Feeds & Data Management	10,829,000	8,215,000	1,587,000	9,802,000	1,027,000	9.5%	
Other Operating	165,000	95,000	18,000	113,000	52,000	31.5%	
Investments Total	35,086,000	29,101,000	3,249,000	32,350,000	2,736,000	7.8%	
VRS Total	94,721,000	74,838,000	12,818,000	87,656,000	7,065,000	7.5%	
Appropriation Adjustment Pending - Central Accounts ³ Projected Ending FY 2020 Balance						9.4%	

¹ Current Budget includes an appropriation adjustment for \$699K processed by DPB, which was authorized under Chapter 1283 for VRS to implement the provisions of legislation enacted by the 2020 General Assembly.

² Projected expenses are best estimates as of a point in time and are subject to change.

³ \$1.985M is the calculated FY 2020 impact of the salary increases authorized by Item 474 of the 2019 Appropriation Act; appropriation in this amount is pending transfer to VRS by the Department of Planning and Budget (DPB).

⁴ Training & Travel category includes training, training-related travel, business travel and tuition reimbursement. Although in-person training and related travel spending were naturally reduced beginning in March due to the COVID-19 pandemic, online and virtual training has been encouraged. Actuals include recent online training registrations.



Virginia Retirement System (VRS)

FY 2020 Budget Update

Projections incorporate approximately \$623K in expected discretionary spending reductions as a result of the COVID-19 pandemic and subsequent information received from the Governor's chief of staff:

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Training & Travel	175,000
Facility	8,000
Fiscal & Management Services	45,000
Other Contractual Services	9,000
Other Operating	118,000
Total Admin	355,000
Investments	
Training & Travel	235,000
Other Contractual Services	15,000
Other Operating	18,000
Total Investments	268,000
Total VRS	623,000