

VRS Overview

Presented to the Joint Legislative Audit and Review Commission

July 5, 2022

Presenters:

A. Scott Andrews, Chair, VRS Board of Trustees Ronald D. Schmitz, Chief Investment Officer Patricia S. Bishop, Director



Agenda





VRS Overview

A. Scott Andrews
Chair, VRS Board of Trustees



Investments Overview

Ronald D. Schmitz
Chief Investment Officer



Administration Overview

Patricia S. Bishop Director



VRS Overview



Board Members





A. Scott Andrews, Chair
Northern Contours & Harvest Equity Investments



Joseph W. Montgomery, Vice Chair
The Optimal Service Group, Wells Fargo Advisors



The Hon. J. Brandon Bell II, CRPC
Brandon Bell Financial Partners



John M. Bennett VCU (Retired)



Michael P. Disharoon
Principal, Palladium Registered Investment Advisors



William A. Garrett Chief, Manassas Fire and Rescue Department



Susan T. Gooden, Ph.D.

Dean, L. Douglas Wilder School
of Government and Public Affairs, VCU



W. Brett Hayes Wells Fargo Advisors Financial Network



Troilen Gainey Seward, Ed.S.

Dinwiddie County

Public Schools (Retired)

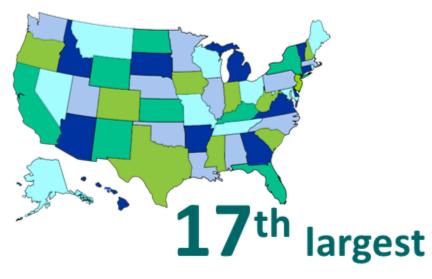
VRS Overview



^^^^

active and retired members

As of June 30, 2021



46th largest

public or private pension system

in the world*



public or private pension system in the United States*

^{*} As ranked by Pensions & Investments in 2022

VRS Celebrates 80 Years



VRS was created July 1, 1942, succeeding the Retired Teachers' Fund that traced its origins to 1908.

Early VRS membership was limited to teachers, school administration employees and state employees, though eligibility soon expanded to include employees of political subdivisions.



80 Years of Serving Those Who Serve Others.

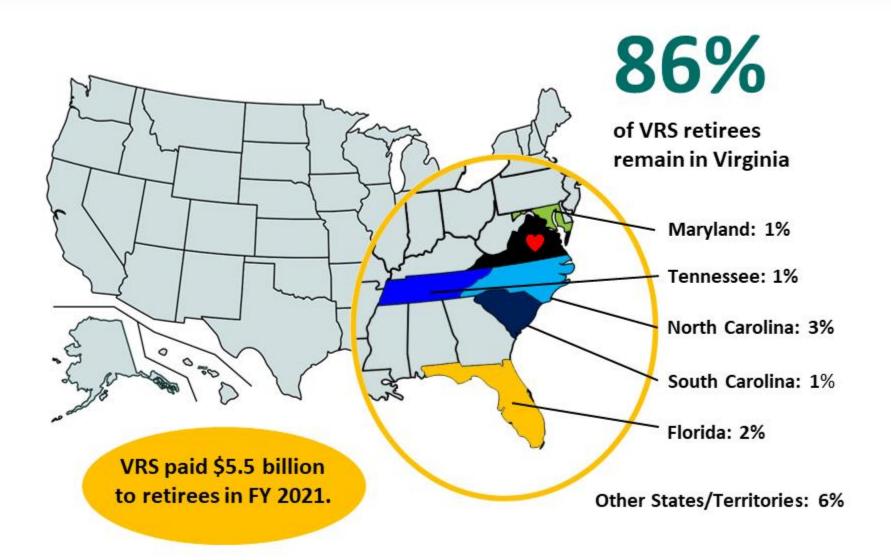
Collaboration in Service





Where VRS Retirees Live





New Chief Investment Officer





Andrew H. Junkin has been appointed as VRS chief investment officer by the VRS Board of Trustees and will begin serving in that role in September.

- Joins VRS from Rhode Island where he serves as the chief investment officer managing a team that oversees the state's pension plan, a defined contribution plan and other funds.
- Previously served as president of Wilshire Consulting, where he worked with public and corporate pension funds, foundations, endowments and insurance companies.



Investments



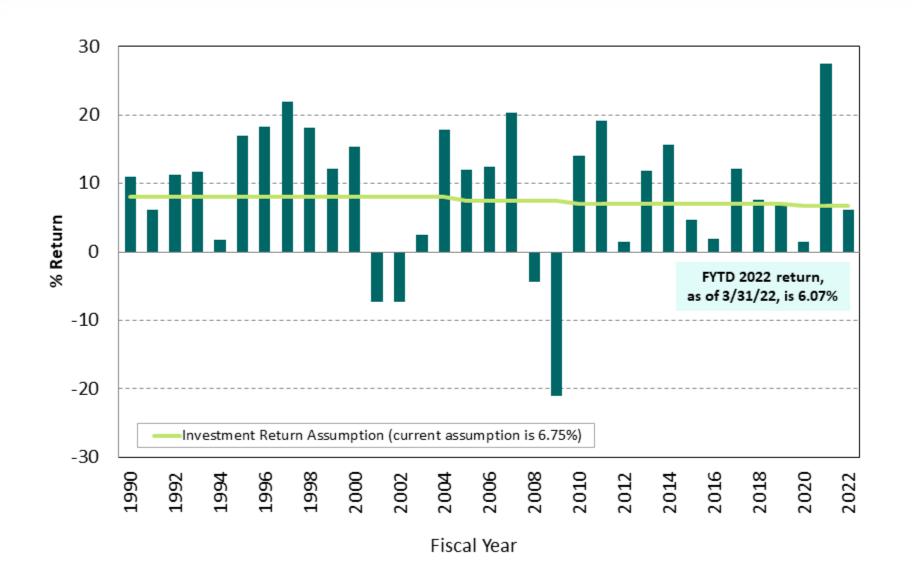
Investments Agenda



- Performance
 - Long-term results
 - Second quarter update
 - Public Equity performance
- Asset Allocation as of 3/31/22
- Board Policy Changes
- Staff Value Add
 - Internal management
 - Cost-effective implementation
- Markets & Economy

VRS Fiscal Year Returns





Total Fund Performance* as of March 31, 2022



	VRS Return	Benchmark	
1-year	12.3	7.4	+
3-year	12.1	10.5	+
5-year	10.2	9.0	+
10-year	9.2	8.4	+
15-year	6.7	6.0	+
20-year	7.7	7.0	+
25-year	8.0	7.3	+

^{*}Percent; net of fees

Source: Bank of New York Mellon

Total Fund Performance* as of March 31, 2022



	10 Year	5 Year	3 Year	1 Year	Market Value (\$MM)
Total Public Equity Strategies	10.0	10.3	12.2	4.9	35,475
Benchmark	10.2	11.4	13.7	6.7	
Total Investment-Grade Fixed Income	3.0	3.3	3.3	-3.4	12,818
Benchmark	2.3	2.2	1.7	-4.1	
Total Credit Strategies	6.8	7.2	8.5	8.3	14,779
Benchmark	5.4	5.0	4.9	1.3	
Total Real Assets	10.9	9.9	10.4	22.4	14,579
Benchmark	9.0	7.8	8.1	17.4	
Total Private Equity	18.1	22.9	27.4	43.6	18,856
Benchmark	15.8	17.2	22.5	19.0	
Total Private Investment Partnerships	n/a	11.2	12.9	25.2	2,458
Benchmark	n/a	10.1	12.8	12.8	
Total Multi-Asset Public Strategies	n/a	n/a	6.5	5.8	3,982
Benchmark	n/a	n/a	7.7	3.4	
Total Fund	9.2	10.2	12.1	12.3	106,289
VRS Custom Benchmark	8.4	9.0	10.5	7.4	

^{*}Percent; net of fees

Total Fund Performance* as of April 30, 2022



	10 Year	5 Year	3 Year	1 Year	Fiscal YTD	Market Value (\$MM)
Total Public Equity Strategies	9.4	8.5	8.9	-5.3	-7.6	33,119
Benchmark	9.4	9.3	9.4	-5.9	-8.4	
Total Investment-Grade Fixed Income	2.5	2.3	1.9	-8.0	-9.2	12,835
Benchmark	1.7	1.2	0.4	-8.7	-9.7	
Total Credit Strategies	6.7	6.8	7.8	6.4	3.2	14,614
Benchmark	5.2	4.5	4.0	-0.7	-1.8	
Total Real Assets	10.8	9.7	10.2	20.4	16.9	14,477
Benchmark	9.0	7.9	8.4	17.2	15.4	
Total Private Equity	18.0	22.5	27.3	40.8	26.6	18,815
Benchmark	14.6	15.5	17.7	13.0	6.9	
Total Private Investment Partnerships	n/a	11.2	12.9	25.2	15.1	2,482
Benchmark	n/a	9.8	10.7	10.6	7.4	
Total Multi-Asset Public Strategies	n/a	n/a	5.0	1.2	-0.5	3,887
Benchmark	n/a	n/a	5.7	-2.8	-4.4	
Total Fund	8.9	9.3	10.6	6.8	3.1	102,714
VRS Custom Benchmark	7.9	7.8	8.1	0.6	-1.8	

^{*}Percent; net of fees

Source: Bank of New York Mellon

Insights on Public Equity Performance



Excess returns as of April 30

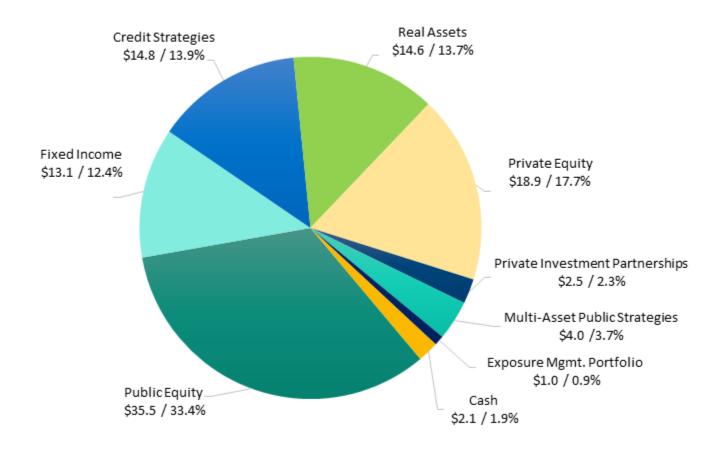
	10 Yr	5 Yr	3 Yr	1 Yr	FYTD
Public Equity	-	-0.8%	-0.5%	+0.6%	+0.8%

- Looking at returns by calendar year
 - For the 10-year period, 2013-2022, VRS outperformed in 7 out of 10 years.
 - VRS outperformed in every year post-GFC (2008) through 2017.
 - Performance is typically within +/- 1% of benchmark.
 - As the pandemic inception year, 2020 was an exception, with the bulk of market returns driven by five to six tech stocks.
 - Our disciplined approach to portfolio management impacted performance in 2018-2020 (especially 2020) and will continue to affect longer-term results for a few more years.
 - The portfolio has resumed its pattern of outperformance relative to the benchmark for the most recent periods.

Asset Allocation as of March 31, 2022



Total Fund Market Value = \$106.3 billion (Dollar Amounts in Billions/Percent of Total Fund)



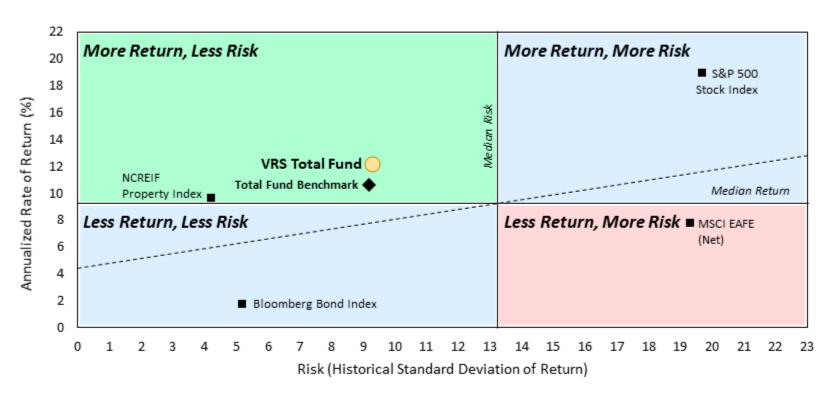
Difference in totals are due to rounding Source: Bank of New York Mellon

Trust Universe Comparison Services



Risk vs Total Return

5 Years Ending March 31, 2022



Source: Staff Analysis of Wilshire Trust Universe Comparison Service® (TUCS®)

Asset Liability Study Implementation Asset Class Phase-in



	FY 2022 Target	Proposed FY 2023 Target	Current Long Term Target	Allowabl Min	e Ranges Max
Public Equity	36%	34%	34%	-5%	+5%
Fixed Income	15%	15%	15%	-3%	+5%
Credit Strategies	14%	14%	14%	-5%	+5%
Real Assets	14%	14%	14%	-5%	+5%
Private Equity	14%	16%	14%	-5%	+5%
PIP	2%	2%	3%	-2%	+2%
MAPS	4%	4%	6%	-2%	+2%
Exposure Management	0%	0%	0%	-	+3%
Cash	1%	1%	0%	-1%	+4%
Total Fund	100%	100%	100%		

Internal Asset Management (IAM)



Asset Class	Objective	\$MM
	Core	11,147.8
Fixed Income	Non-Core	882.1
	Subtotal	12,029.9
	Low Tracking Error	10,550.8
Equity	Low Volatility	4,488.4
Equity	Other	2,158.5
	Subtotal	17,197.7
	Total	29,227.6

As of March 31, 2022

IAM Track Record as of March 31, 2022

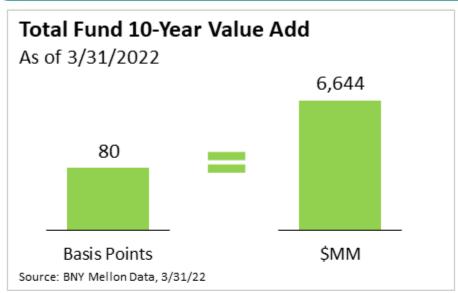


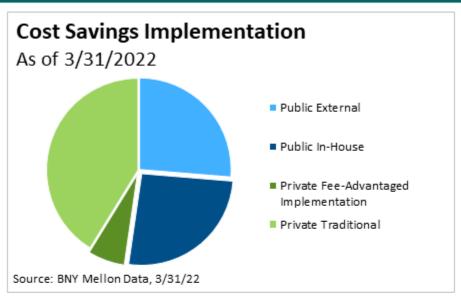
		1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
	Return	-3.4%	3.2%	3.2%	3.0%	4.6%	4.7%
Fixed Income*	Benchmark	-4.2%	1.7%	2.1%	2.2%	3.9%	4.2%
	Excess	0.8%	1.5%	1.1%	0.8%	0.7%	0.5%
	Return	12.2%	13.1%	11.4%	11.6%	8.5%	8.3%
Equity	Benchmark	9.7%	13.6%	12.0%	11.4%	7.9%	7.8%
	Excess	2.5%	-0.5%	-0.6%	0.2%	0.6%	0.5%

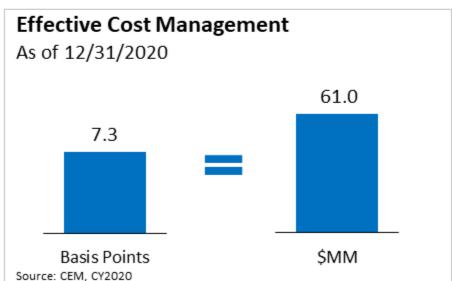
^{*}Core only

Adding Value Multiple Ways











Markets & Economy





Fed interest rate hikes triggered repricing of stocks as future earnings are worth less.



The war in Ukraine continues, keeping upward pressure on energy and food prices.



Analysts still predicting strong revenue and earnings growth; could dampen price declines.



Housing showing signs of a slowdown as mortgage applications are down through May.



Labor market is strong and balance sheets are healthy.



Supply chain issues are easing in some areas but are only improving slowly in others.

Summary



- The VRS portfolio is positioned defensively underweight both stocks (given current uncertainty) and bonds (in the face of rising interest rates). Private markets are performing very well, largely offsetting losses in public stocks and bonds.
- Uncertainty has increased as the magnitude of Fed hikes and the possible slowdown in corporate earnings create unknowns.
- The Board has continued its measured pace of evolution in its longterm risk/reward policy.
- Staff continues to add value through strong performance and by costeffective implementation practices.



Administration Overview



VRS Overview





 Health of plans improves with commitment of the General Assembly and Governor to maintaining budget efforts to support contribution rates.



 One-time infusion of \$750 million and additional budgeted one-time payments reduce unfunded liabilities, generate longer-term savings, reduce rate volatility and improve plan health.



- Funded status of the plans has improved over time:
 - Portfolio experienced exceptional FY 2021 return.
 - FY 2021 return will serve to mitigate future market fluctuations.
 - Unfunded liabilities from prior periods remain.

VRS Overview





- Two-thirds of benefit funding comes from investment income; receiving timely contributions is critical.
- Hybrid Retirement Plan becoming dominant plan for most employees:









- Created risk-sharing model between the employer and employee.
- Reduced longevity and investment risk for the employer.
- Lowered the future cost of the plan.
- Increased portability for plan participants.

VRS Total Membership as of May 31, 2022



	Plan 1	Plan 2	Hybrid	Total
Teachers	61,741	28,891	67,017	157,649
Political Subdivision Employees	35,026	30,535	43,996	109,557
State Employees	26,929	13,098	33,925	73,952
State Police Officers' Retirement System (SPORS)	971	882	_	1,853
Virginia Law Officers' Retirement System (VaLORS)	2,153	5,069	_	7,222
Judicial Retirement System (JRS)	156	46	255	457
Total Active Members	126,976	78,521	145,193	350,690

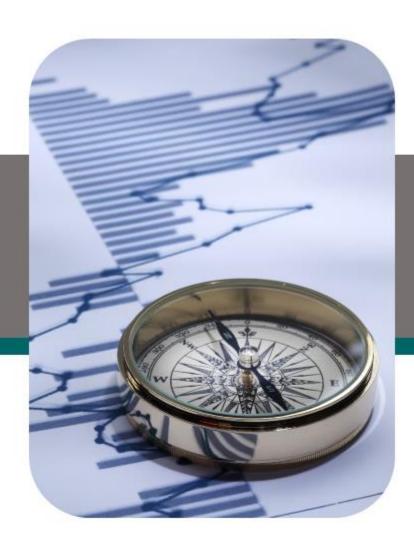
Total Active Members 350,690

Retirees/ Beneficiaries 234,181 Inactive/Deferred Members 187,186

VRS Total Population **772,057**



Funded Status and Contribution Rates



Funded Status: State



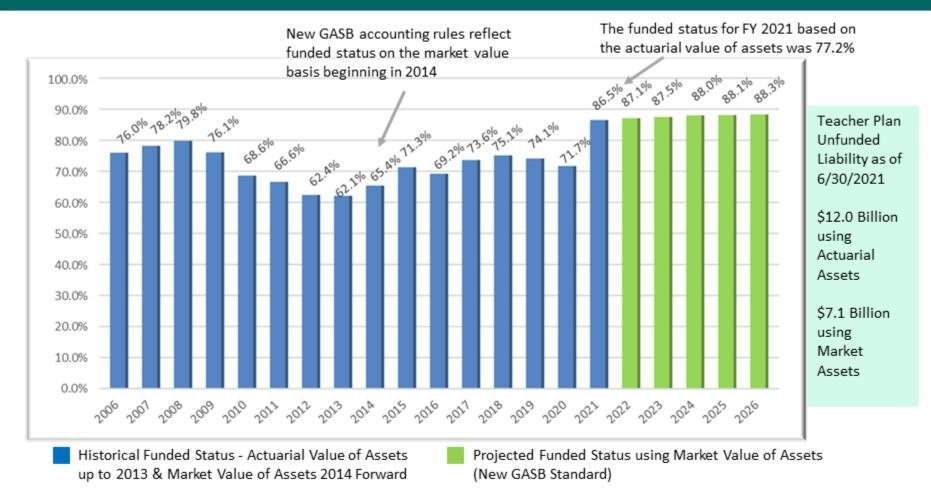


Notes:

- Projected funded status based on assumed investment returns of 6.75% and inflation of 2.5%.
- GASB Accounting rules reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.
- Projections do not include the impacts of additional payments included in the Appropriation Act.

Funded Status: Teachers



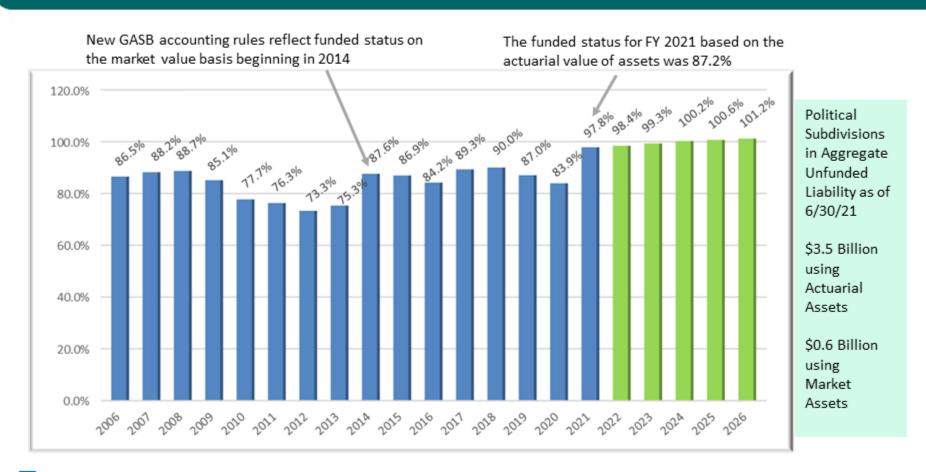


Notes:

- Projected funded status based on assumed investment returns of 6.75% and inflation of 2.5%.
- GASB Accounting rules reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.
- Projections do not include the impacts of additional payments included in the Appropriation Act.

Funded Status: Political Subdivisions in Aggregate





Historical Funded Status - Actuarial Value of Assets up to 2013 & Market Value of Assets 2014 Forward

Projected Funded Status using Market Value of Assets (New GASB Standard)

Notes:

- Projected years' investment returns assume 6.75% with 2.5% inflation rate.
- New GASB Accounting Rules will reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.

Appropriation Act Maintains Prior Contribution Rates



State Plan					
VRS Board Certified	Appropriation Act				
Rates	Rates				
FY 23/24	FY 23/24				
14.13%	14.46%				

Teacher Plan				
VRS Board Certified Rates FY 23/24	Appropriation Act Rates FY 23/24			
14.78%	16.62%			

- Requires \$32 million in additional contributions:
 - \$13.9 million General Fund
 - \$18.1 million Non-General Fund
- Lowers Unfunded Liability by nearly \$34 million over two years
- Lowers future rates annually by approximately 5 basis points.
 - Approximately \$48 million in additional savings over next 15 years

- Requires \$345 million in additional contributions:
 - \$138 million General Fund
 - \$207 million Non-General Fund
- Lowers Unfunded Liability by nearly \$382 million over two years
- Lowers future rates annually by approximately 30 basis points.
 - Approximately \$500 million in additional savings over next
 15 years

Appropriation Act – Cash Infusions



The Appropriation Act provides over \$1 billion to reduce unfunded liabilities of state pension and OPEB plans.

- \$750 million appropriation in June 2022
 - Estimated cost savings of \$1.4 billion over next 20 years
- \$250 million contingent appropriation in June 2023*
 - Estimated cost savings of \$509 million over next 20 years
- \$80.4 million appropriation in total for State HIC plans paid in two installments (June 2023 and June 2024)
 - Estimated cost savings of \$99 million over next 20 years

^{*} Allocation of contingent \$250 million appropriation has not been set forth in the Act. Savings estimate assumes the contingent \$250 million will be allocated in similar fashion to the \$750 million appropriation.



Enhancing the Customer Service Experience



myVRS Features



Goal-based retirement planner

Benefit estimator

Beneficiary designation

Financial wellness resources

Survivor accounts



One unified system with a host of features:

Annual Statement/ Member Benefit Profile (MBP) Self-service purchase of prior service

Online retirement

Security enhancements

Direct deposit management

New features for retirees

Online Retirement





3,700+

online retirements submitted since launch in December 2020

- Holistic approach with built-in education tips and tools at every step of the process
- Efficient, convenient and paperless from start to finish
- Includes retirement process tracking
- One of three systems in our peer group with a true online retirement experience

myVRS Financial Wellness





Interactive learning resources



Courses



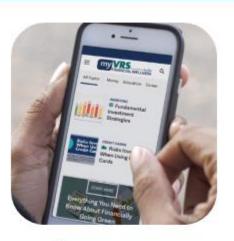
Personalized content in myVRS, including videos to get you started



Educational Games



Budgeting Tools



Easy access to courses for your needs and interests



Calculators

Financial Planning Services





- Complements the existing myVRS Financial Wellness program.
- Available to all VRS members and retirees, regardless of participation in a DC plan, through MissionSquare Retirement.
- Dedicated financial planners for VRS membership; no investment advice provided.

offer guidance and support to help you feel confident about your financial security and find a path forward.



varetire.org/make-a-plan



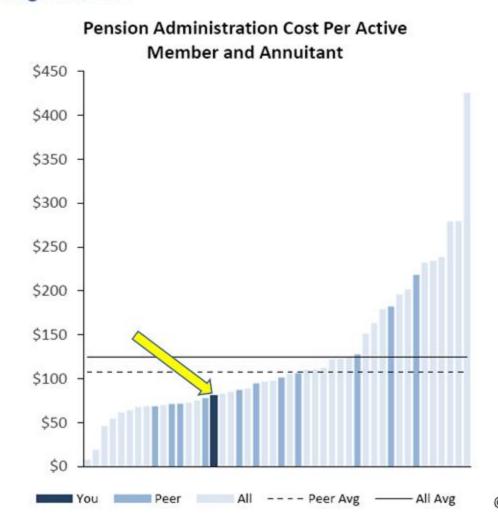
Peer Comparison



External Benchmarking – VRS Cost



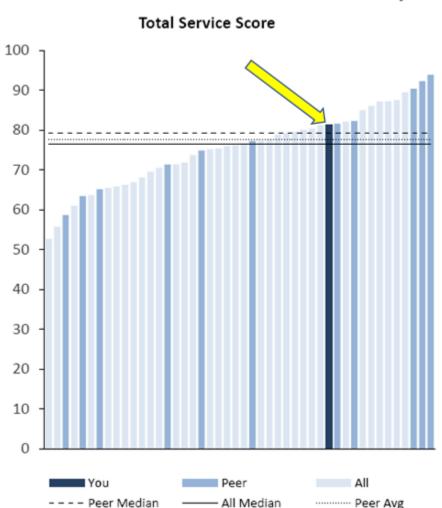
Your total pension administration cost of \$81 per active member and annuitant was \$26 below the peer average of \$107.



External Benchmarking – VRS Service



Your total service score was 81. This was above the peer median of 79.





80 years of serving those who serve others. Helping members plan for tomorrow, today.



Appendix

- OU		4.00		
,872.00	3,345,345.00	23,442.00	534,454.00	34,534
34,557.00	345.00	234,768.00	42,343.00	342.00
7,566.00	42,456.00	234,234.00	5,564.00	23,442.00
38,484.00	5,345.00	634,567.00	234,676.00	46,456.00
16,164.00	16,164.00	10,776.00	234,423.00	4,234,467.00
33,245.00	3,423.00	34,422.00	42,234.00	34,233.00
54,322.00	2,342.00	- Table 1	1.00	564,523.00
23,312.00	3,423.00	23,423.00	11,7	246,723.00
9,220.00	234,423	234,233.00	45,344.0	24,423.00
31,428.00	31,4 00	534,457.00	45,573.00	442,344.00
14,772.00	10 00	14,772.00	14,772.00	10,334.00
16,392.00	692.00	16,392.00	16,392.00	,744.00
15,168.00	168.00	15,168.00	15,168.00	096.00
58,680.00	680.00	58,680.00	58,680.00	4 100.00
13,704.00	8,704.00	13,704.00	13,704.00	562.00
15,924.00	5,924.00	15,924.00	15,924.00	3 465.00
51,000.00	00.000	51,000.00	51,000.00	1,7 ,000.00
46,884.00	884.00	46,884.00	46,884.00	1,448.00
37,872.00	3 72.00	37,872.00	37,872.00	3,184.00
550,009.00	3,955	2,580,255.00	1,835,094.00	88,520.00
		10/00/00/00		



Constitutional Duties and U.S. Code: Exclusive Benefit Rule



Constitution of Virginia, Article X, Section 11:

"The funds of the retirement system shall be deemed separate and independent trust funds, shall be segregated from all other funds of the Commonwealth, and shall be invested and administered solely in the interests of the members and beneficiaries thereof." [Emphasis added.]

26 United States Code § 401(a):

"A trust ... shall constitute a qualified trust under this section ... if under the trust instrument it is impossible ... for any part of the corpus or income to be (within the taxable year or thereafter) used for, or diverted to, purposes other than **for the exclusive benefit of his employees or their beneficiaries....**" [Emphasis added.]

VRS Fiduciary Duty





Administer the trust fund solely in the interests of VRS members, retirees and beneficiaries

- Constitution of Virginia
- Code of Virginia
- Internal Revenue Code



Manage assets with care, skill, prudence and diligence

- Trustees carry out the Board's fiduciary duties and responsibilities
- Protect long-term value of investment portfolio
- Provide benefit security to members and rate stability for employers



Maintain broadest possible opportunity set in the investment portfolio

- Divesting from/not investing in certain sectors may contradict fiduciary requirements
- Investment income has historically funded two-thirds of benefit payments

Unfunded Pension Liabilities and Funded Status by Plan (Dollars in Thousands)



		2020			2021		
System		AL based on AVA lars in Thousands)	Funded Status		AL based on AVA llars in Thousands)	Funded Status	
State	\$	6,417,661	75.1%	\$	6,112,670	77.1%	
Teachers	\$	13,278,662	73.9%	\$	12,021,814	77.2%	
SPORS	\$	325,590	73.0%	\$	389,314	70.7%	
VaLORS	\$	712,025	68.5%	\$	738,351	69.3%	
Judicial	\$	111,633	83.5%	\$	132,738	81.9%	
Total State-wide systems	\$	20,845,571	74.2%	\$	19,394,887	76.9%	
Political Subdivisions	\$	3,437,211	86.4%	\$	3,480,933	87.2%	
Total Fund	\$	24,282,782	77.1%	\$	22,875,820	79.4%	

	2020			2021		
System		based on MVA s in Thousands)	Funded Status		AL based on MVA ars in Thousands)	Funded Status
State	\$	6,981,267	72.9%	\$	3,615,554	86.5%
Teachers	\$	14,385,554	71.7%	\$	7,129,718	86.5%
SPORS	\$	351,662	70.9%	\$	276,498	79.2%
VaLORS	\$	758,084	66.4%	\$	538,229	77.6%
Judicial	\$	128,417	81.1%	\$	60,256	91.8%
Total State-wide systems	\$	22,604,984	72.0%	\$	11,620,255	86.2%
Political Subdivisions	\$	4,073,047	83.9%	\$	609,465	97.8%
Total Fund	\$	26,678,031	74.8%	\$	12,229,720	89.0%

Unfunded OPEB Liabilities and Funded Status by Plan (Dollars in Thousands)



	2020			2021		
System		based on MVA s in Thousands)	Funded Status		based on MVA rs in Thousands)	Funded Status
Group Life	\$	1,728,029	51.8%	\$	1,111,390	68.5%
HIC State	\$	899,066	12.2%	\$	836,804	19.9%
HIC Teachers	\$	1,286,380	10.1%	\$	1,277,095	13.2%
VSDP	\$	(241,350)	197.0%	\$	(361,816)	244.7%
HIC Locals in Aggregate	\$	52,204	31.9%	\$	49,490	40.1%
HIC Constitutional Officers	\$	27,069	15.9%	\$	26,572	20.1%
HIC Social Services	\$	12,646	13.3%	\$	12,488	15.8%
HIC Registrars	\$	450	21.9%	\$	421	28.6%
VLDP Teachers	\$	447	86.6%	\$	(486)	109.5%
VLDP Political Subdivisions	\$	433	88.5%	\$	(1,163)	123.2%

Note: Unfunded liabilities and funded status using market value of plan assets.

Employer Contribution Rates and Funding Requirements for Statewide Plans



Plan	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2023 Appropriation Act
State	14.46%	14.46%	14.13%	14.46%
SPORS	26.33%	26.33%	29.98%	29.98%
VaLORS	21.90%	21.90%	24.60%	24.60%
JRS	29.84%	29.84%	30.67%	30.67%
Teachers	16.62%	16.62%	14.76%	16.62%
	•			
Total Estimated Employer Contributions	\$2,238,472,000	\$2,351,408,000	\$2,233,507,000	\$2,426,173,000
General Fund	\$977,577,000	\$1,027,328,000	\$990,033,000	\$1,067,437,000
Non-General Fund	\$1,260,895,000	\$1,324,080,000	\$1,243,474,000	\$1,358,736,000

- Estimated funding for FY 2022 is based on actual FY 2021 payroll with increases as outlined in the 2022
 Appropriation Act. Estimated funding for FY 2023 is based on estimated FY 2022 payroll projected forward with plan assumptions. Actual funding will be based on payrolls in effect at time of billing.
- Maintaining higher rates would collect an additional \$345 million for the Teacher plan over the biennium which could increase funded status by nearly 70 basis points and lower unfunded liabilities by nearly \$382 million without increasing budget.
- Maintaining higher rates would collect an additional \$32 million for the State plan over the biennium which could increase funded status by nearly 15 basis points and lower unfunded liabilities by nearly \$34 million without increasing budget.

OPEB Contribution Rates



System	2019 Actuarial Fiscal Years 2021/2022	2021 Actuarial Fiscal Years 2023/2024	Appropriation Act Fiscal Year 2023
Group Life	1.34%	1.19%	1.34%
HIC State	1.12%	1.04%	1.12%
HIC Teachers	1.21%	1.21%	1.21%
VSDP	0.61%	0.56%	0.61%
HIC Locals in Aggregate	0.59%	0.72%	0.72%
HIC Constitutional Officers	0.36%	0.36%	0.36%
HIC Social Services	0.38%	0.37%	0.37%
HIC Registrars	0.39%	0.32%	0.32%
VLDP Teachers	0.47%	0.47%	0.47%
VLDP Political Subdivisions	0.83%	0.85%	0.85%