Virginia Retirement System®

VRS Overview

Presented to the Joint Legislative Audit and Review Commission (JLARC)

A. Scott Andrews, Chair, VRS Board of Trustees

Andrew H. Junkin, VRS Chief Investment Officer

Patricia S. Bishop, VRS Director

July 1, 2024

Agenda

VRS Overview

A. Scott Andrews
Chair, VRS Board of Trustees

Investments Overview

Andrew H. Junkin
VRS Chief Investment Officer

Administration Overview

Patricia S. Bishop
VRS Director

VRS Overview

A. Scott Andrews

Chair, VRS Board of Trustees

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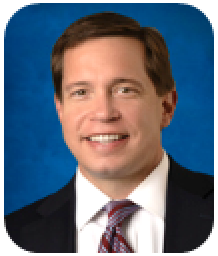
Board Members

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



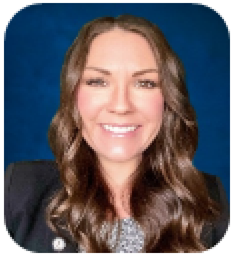
Michael P. Disharoon, *Vice Chair*
Cerity Partners

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

John M. Bennett
VCU (Retired)

Lawrence A. Bernert III
Clearstead Advisory Solutions

Susan T. Gooden, Ph.D.
VCU



Jessica L. Hood
Wise County and City of Norton Commonwealth's Attorney's Office

The Hon. Matthew James
MJames Consulting LLC

Lindsey K. Pantele
Henrico County Public Schools

Virginia Retirement System®



Our mission is to deliver retirement and other benefits
to Virginia public employees
through sound financial stewardship
and superior customer service.



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Investments

- VRS investment decisions are made in the best interest of members, retirees and beneficiaries.
- By balancing risk with reward in the portfolio, the fund is projected to grow over time, meeting or exceeding the assumed rate of return.

External Assessment of the Investment Program

- VRS saves $58.1 million in fees annually by managing a portion of the total fund in-house.
- Also, VRS' skilled negotiating in external investment management costs results in about $34.8 million a year in savings.
- Active management has resulted in an average added value of $930 million annually to the trust fund over the past decade.
- TUCS places VRS in the optimal quadrant, producing more return and more importantly, at less risk when compared to peers.

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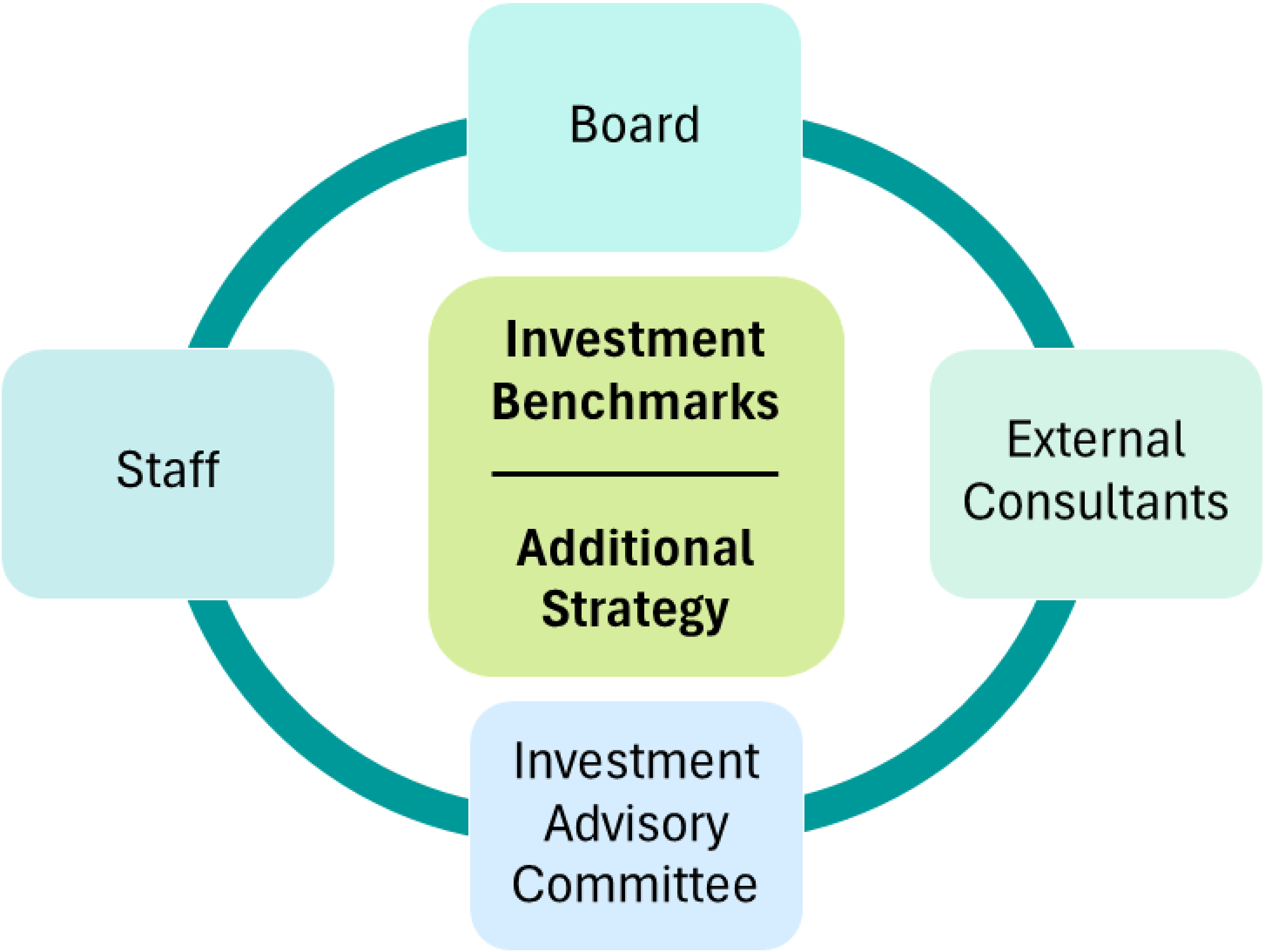
Fiscal Year 2024 Actions



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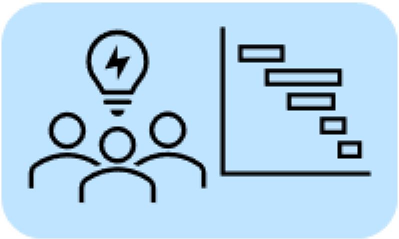
Administration

- Members and retirees count on VRS to deliver benefits efficiently and reliably.
- VRS distributes more than $6 billion in benefit payments.
- CEM Benchmarking rates VRS in the low-cost, high-service quadrant of their peer comparison assessment.

Looking to the Future



- Staff continues to innovate and explore opportunities to better serve those who serve others.

- The Board uses external expertise to:
  - Inform decision-making
  - Support asset allocation
  - Review benchmarks
  - Monitor performance
  - Enhance service delivery

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Summary

Your actions help VRS:

- Reinforce our strong funded status.
- Keep contribution rates steady.
- Assist the Commonwealth in maintaining the highest bond rating.

VRS remains committed
to serving those who serve others.

Investments Overview

Andrew H. Junkin

VRS Chief Investment Officer

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Investments Agenda

- Board Policy Changes – Risk Reduction
- Performance Update
- Staff Value Add
    - Internal management
    - Cost-effective implementation
- Markets & Economy

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Asset Liability Study – Risk Reduction

- After a comprehensive Asset Liability Management study, the VRS Board adopted a new long-term asset allocation that increases the overall diversification of the portfolio without sacrificing expected returns in the future.
- *Code of Virginia* requires the Board to "diversify such investments so as to minimize the risk of large losses."
- Implementation began in 2024 and will be phased in prudently over time.

	Prior Target Allocation	Long Term Target Allocation
Public Equity	34%	32%
Fixed Income	15%	16%
Credit Strategies	14%	16%
Real Assets	14%	15%
Private Equity	16%	15%
Private Investment Partnerships	2%	1%
Diversifying Strategies	4%	6%
Cash	1%	2%
Total	100%	103%
Leverage included in the Total	*0%*	*3%*

	Prior Target Allocation	Long Term Target Allocation
Expected Annualized Return	7.14%	7.14%
Expected Annualized Volatility	12.63%	12.00%
Return Greater Than 6.75% - 10 Years	53%	55%
Return Greater Than 6.75% - 20 Years	55%	61%

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Asset Allocation – Risk Reduction

- The expected likelihood of financial success is improved over a variety of measures.
- Probability of significant drawdown in portfolio is reduced.

State Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
Prior Target Allocation	11.0%	2.9%	6.6%	10.3%	10.9%	53.3%	61.3%
Long Term Target Allocation	10.2%	2.4%	5.9%	9.3%	10.5%	53.5%	61.6%

Teachers Plan

	Contribution Rates > 20%	Market Value Falls > 20%	Funded Status <60%		Cash Flow Need > 5% of Market Value	> 85% Funded	> 90% Funded
			Avg over 10 years	Avg over 20 years		In year 10	In year 20
Prior Target Allocation	12.5%	2.5%	5.0%	7.8%	10.9%	57.2%	63.0%
Long Term Target Allocation	11.7%	2.0%	4.3%	6.9%	10.5%	57.6%	63.4%

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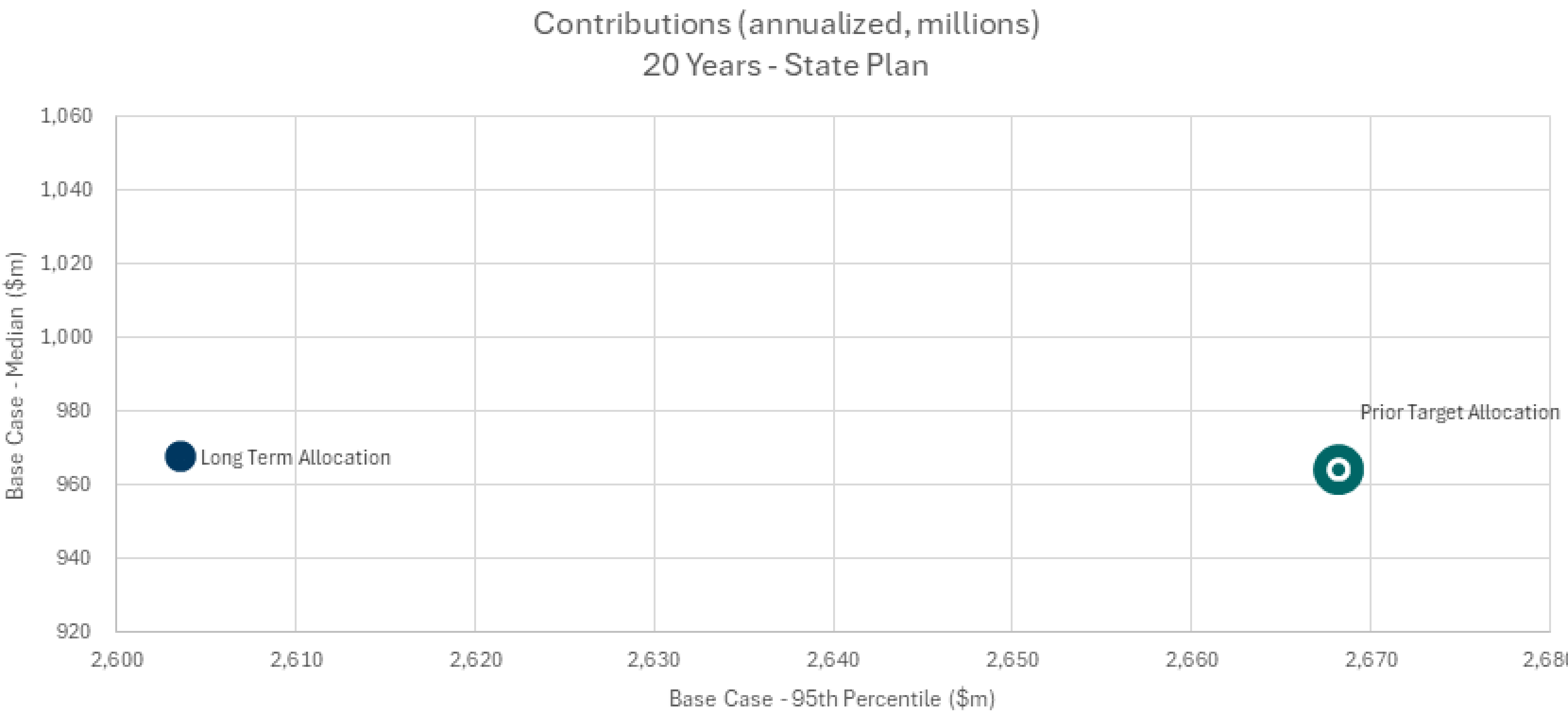
Asset Allocation – Risk Reduction

- Actuarily expected contributions remain stable and the new allocation better protects against negative outcomes.



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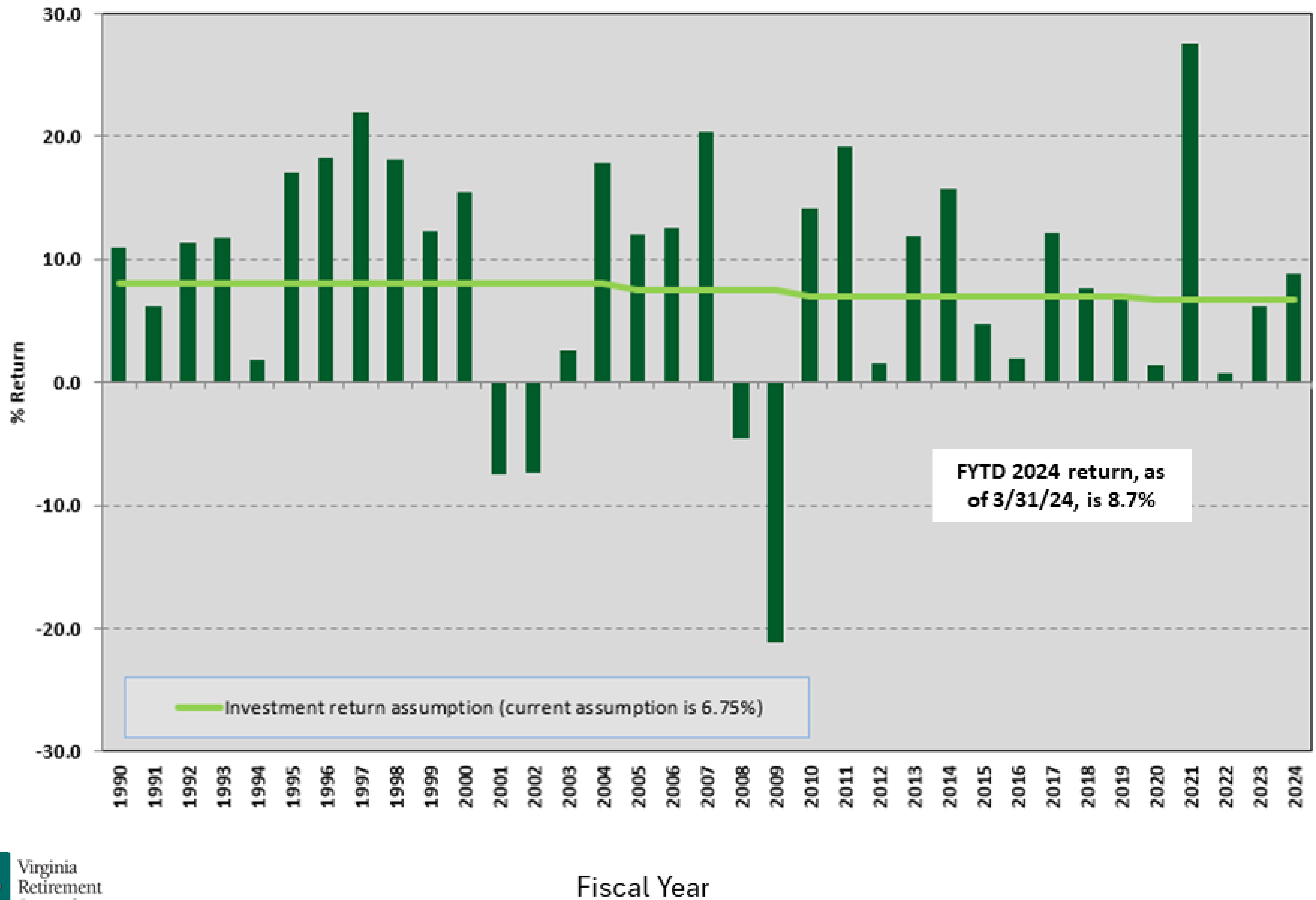
VRS Fiscal Year Returns



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Total Fund Performance* as of March 31, 2024

	VRS Return	Benchmark	
1-year	11.5	12.8	−
3-year	7.1	4.6	+
5-year	9.1	7.6	+
10-year	7.9	6.9	+
15-year	9.8	8.8	+
20-year	7.4	6.6	+
25-year	6.9	6.0	+

*Percent; net of fees

Source: Bank of New York Mellon

Total Fund Performance* as of March 31, 2024

	10 Year	5 Year	3 Year	1 Year	Market Value ($MM)
Total Public Equity Strategies	**8.9**	**10.9**	**7.5**	**24.4**	**38,340**
Benchmark	8.8	10.8	6.7	22.6	
Total Private Equity	**14.8**	**16.6**	**14.3**	**7.7**	**19,407**
Benchmark	10.8	13.1	6.2	22.7	
Total Real Assets	**8.6**	**6.6**	**7.8**	**-3.3**	**14,099**
Benchmark	6.5	4.3	4.6	-6.3	
Total Credit Strategies	**6.1**	**7.5**	**6.8**	**12.3**	**16,181**
Benchmark	5.0	5.3	4.3	11.5	
**Total Diversifying Strategies ** **	**n/a**	**5.8**	**5.1**	**13.1**	**3,533**
Benchmark	n/a	5.8	3.1	9.9	
Total Private Investment Partnerships	**n/a**	**9.6**	**11.2**	**7.2**	**2,415**
Benchmark	n/a	8.5	5.7	8.3	
Total Investment-Grade Fixed Income	**2.4**	**1.6**	**-1.7**	**2.9**	**15,972**
Benchmark	1.6	0.6	-2.2	2.5	
Total Fund	**7.9**	**9.1**	**7.1**	**11.5**	**113,044**
VRS Custom Benchmark	6.9	7.6	4.6	12.8	

*Percent; net of fees **Previously known as Multi-Asset Public Strategies Source: Bank of New York Mellon

Virginia Retirement System®

Total Fund Performance* as of April 30, 2024

	10 Year	5 Year	3 Year	1 Year	Fiscal YTD	Market Value ($MM)
Total Public Equity Strategies	**8.5**	**9.5**	**4.9**	**18.8**	**14.4**	**36,468**
Benchmark	8.4	9.4	4.0	17.0	11.8	
Total Private Equity	**14.7**	**16.6**	**13.7**	**7.4**	**4.6**	**19,417**
Benchmark	11.2	11.7	6.4	14.9	15.3	
Total Real Assets	**8.5**	**6.6**	**7.4**	**-3.4**	**-2.7**	**14,046**
Benchmark	6.3	4.1	4.1	-6.2	-5.3	
Total Credit Strategies	**6.1**	**7.3**	**6.5**	**11.6**	**9.3**	**16,248**
Benchmark	4.9	5.0	4.0	10.3	8.9	
Total Diversifying Strategies **	**n/a**	**5.7**	**4.9**	**13.4**	**10.5**	**3,577**
Benchmark	n/a	5.6	2.6	9.8	7.7	
Total Private Investment Partnerships	**n/a**	**9.6**	**11.2**	**7.2**	**6.0**	**2,415**
Benchmark	n/a	7.6	5.5	5.6	5.7	
Total Investment-Grade Fixed Income	**2.1**	**1.1**	**-2.8**	**-0.2**	**0.9**	**16,264**
Benchmark	1.3	0.1	-3.3	-0.6	0.7	
Total Fund	**7.7**	**8.5**	**5.8**	**9.2**	**7.2**	**111,314**
VRS Custom Benchmark	6.7	6.8	3.4	9.2	7.6	

*Percent; net of fees **Previously known as Multi-Asset Public Strategies Source: Bank of New York Mellon

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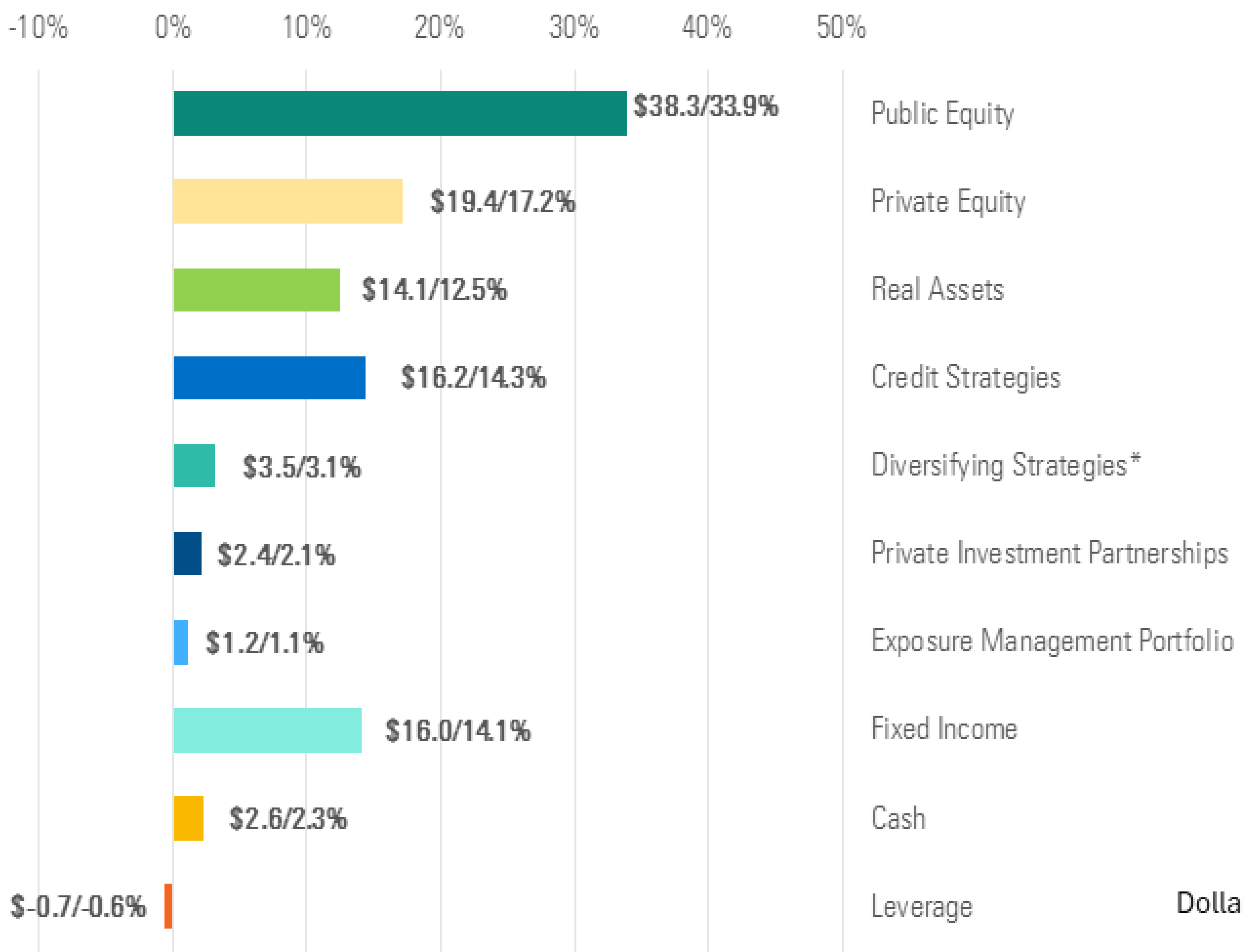
Asset Allocation as of March 31, 2024

Total Fund Market Value = $113.0 billion *(Dollar Amounts in Billions/Percent of Total Fund)*



* Previously known as Multi-Asset Public Strategies

Dollar Amounts in Billions / Percent of Total Fund
Difference in totals are due to rounding
Source: Bank of New York Mellon

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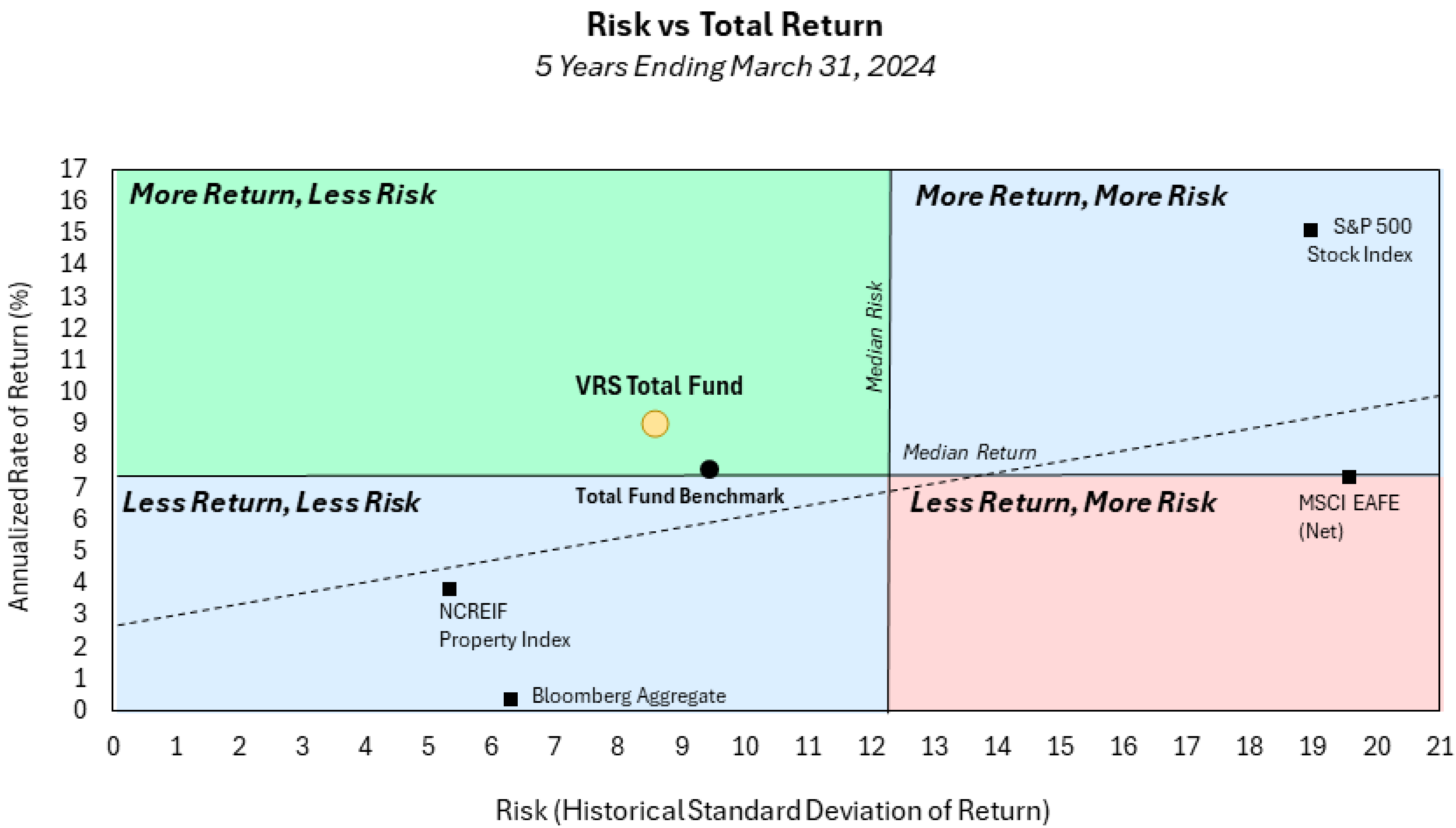
Trust Universe Comparison Services



Source: Wilshire Trust Universe Comparison Service® (TUCS®)

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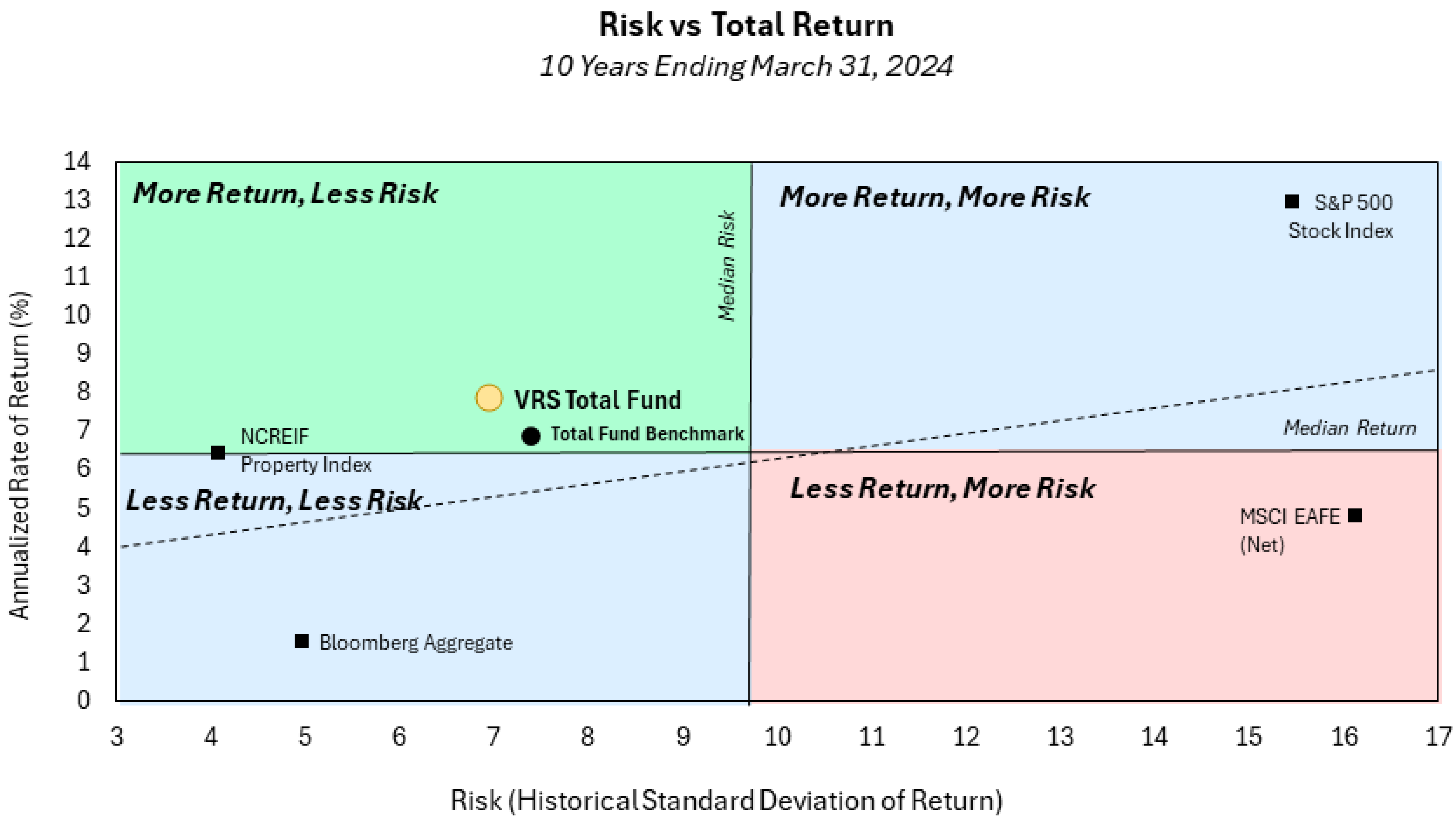
Trust Universe Comparison Services



Source: Wilshire Trust Universe Comparison Service® (TUCS®)

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Internal Asset Management (IAM)

Asset Class	Objective	$MM
Fixed Income	Core	14,546.5
	Core Plus	651.9
	Subtotal	15,198.4
Equity	Low Tracking Error	13,213.4
	Low Volatility	5,953.7
	Other	0.7
	Subtotal	19,167.8
Other	Other	4,030.1
	Total	**38,396.3**

as of March 31, 2024

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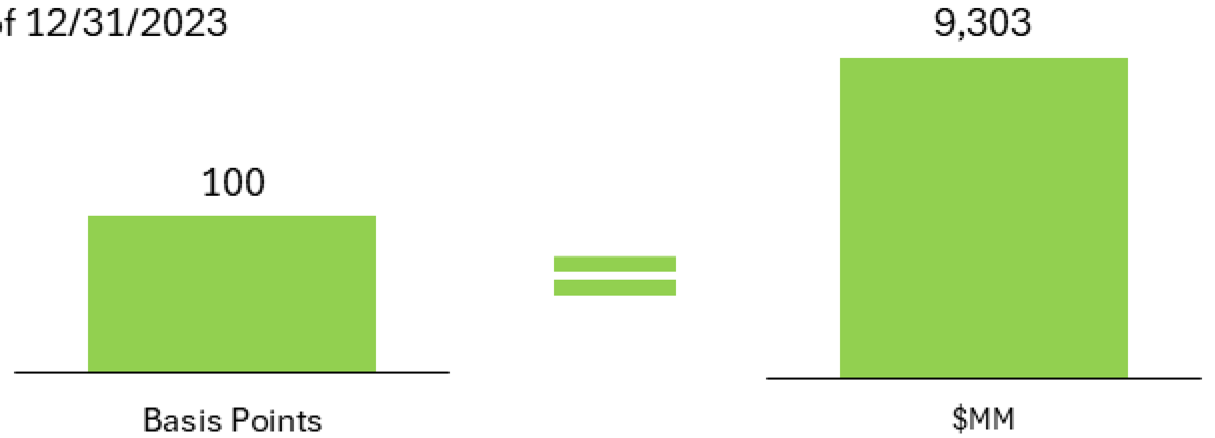
Adding Value Multiple Ways

Total Fund 10-Year Value Add

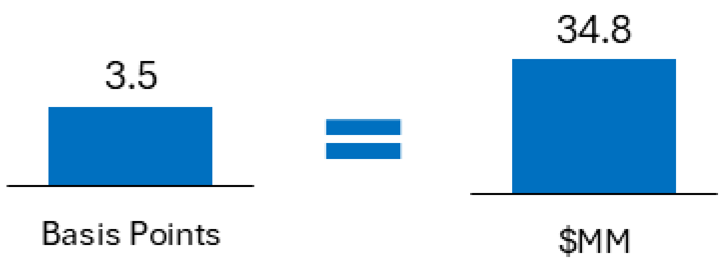
As of 12/31/2023



Source: BNY Mellon Data, 12/31/23

Effective Cost Management

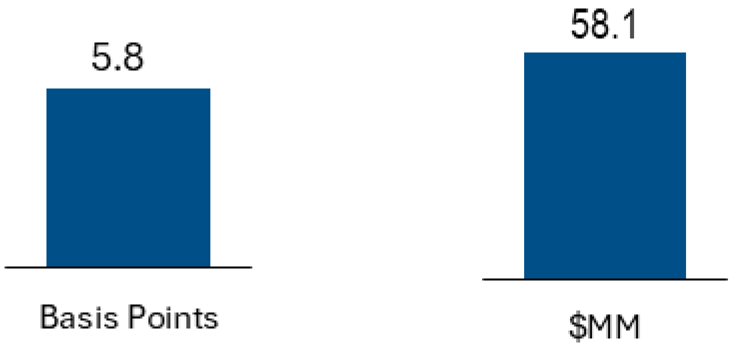
As of 12/31/2022



Source: CEM, CY2022

In-House Management Fee Savings

As of 12/31/2022



Source: CEM, CY2022

Markets & Economy

The Federal Reserve continues to fight inflation. Short-term interest rates remain at high levels.

The labor market remains strong with low unemployment and real wage gains. Overall, U.S. consumers continue to support the economy.

AI is changing the global economy and creating unique investment opportunities.

Recent Accomplishments

- Began implementation of new asset allocation, which is a multi-year process.
- Built out risk management team and liquidity/leverage management team.
- Outside consultant conducted review of benchmarks. Review was presented to and approved by the Investment Advisory Committee, the Investment Policy Committee, and the Board.
- Ongoing professional development and training.
  Nine new degrees/charters/certificates earned in 2023.
  - 33 Chartered Financial Analyst designations
  - 7 Chartered Alternative Investment Analyst designations
  - 49 Master's degrees
  - 6 Ph.D.s
  - 1 Juris Doctor

Summary

- VRS is a long-term investor.
- VRS continues to focus on managing risk while seeking returns. Newly adopted long-term allocation reduces overall risk without sacrificing long-term expected return.
- VRS portfolio has outperformed its benchmark and the 6.75% assumed rate of returns over longer (3-, 5-, 10-, 15-, 20-year) periods. Diversification and focus on risk-adjusted returns works.
- Strong stock markets have been a significant driver of returns for VRS over the last year. Higher interest rates are creating opportunities across the portfolio.
- Staff continues to add value through strong performance and by cost-effective implementation practices.

Administration Overview

Patricia S. Bishop

VRS Director

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VRS Total Membership as of May 31, 2024

	Plan 1	Plan 2	Hybrid	Total
Teachers	54,000	26,565	80,959	**161,524**
Political Subdivision Employees	29,645	31,949	57,102	**118,696**
State Employees	23,076	12,273	43,577	**78,926**
State Police Officers' Retirement System (SPORS)	879	972	—	**1,851**
Virginia Law Officers' Retirement System (VaLORS)	1,622	5,698	—	**7,320**
Judicial Retirement System (JRS)	124	39	299	**462**
Total Active Members	**109,346**	**77,496**	**181,937**	**368,779**

Total Active Members	Retirees/ Beneficiaries	Inactive/Deferred Members	VRS Total Population
368,779	**244,030**	**215,932**	**828,741**

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Hybrid Retirement Plan

Contributions Structure: July 1, 2024

Defined Benefit (DB) Component

Provides a lifetime monthly benefit based on a formula

- **Mandatory *Employee* Contribution 4%**
- **Fixed *Employer* Defined Benefit Rate**

Defined Contribution (DC) Component

Provides a balance to draw from in retirement based on contributions and investment performance

- **Mandatory *Employee* 401(a) Contribution 1%**
  - **Mandatory *Employer* 401(a) Contribution 1%**
- **Voluntary *Employee* 457 Contribution 0–4%**
  - ***Employer* Matching 401(a) Contribution 0–2.5%**

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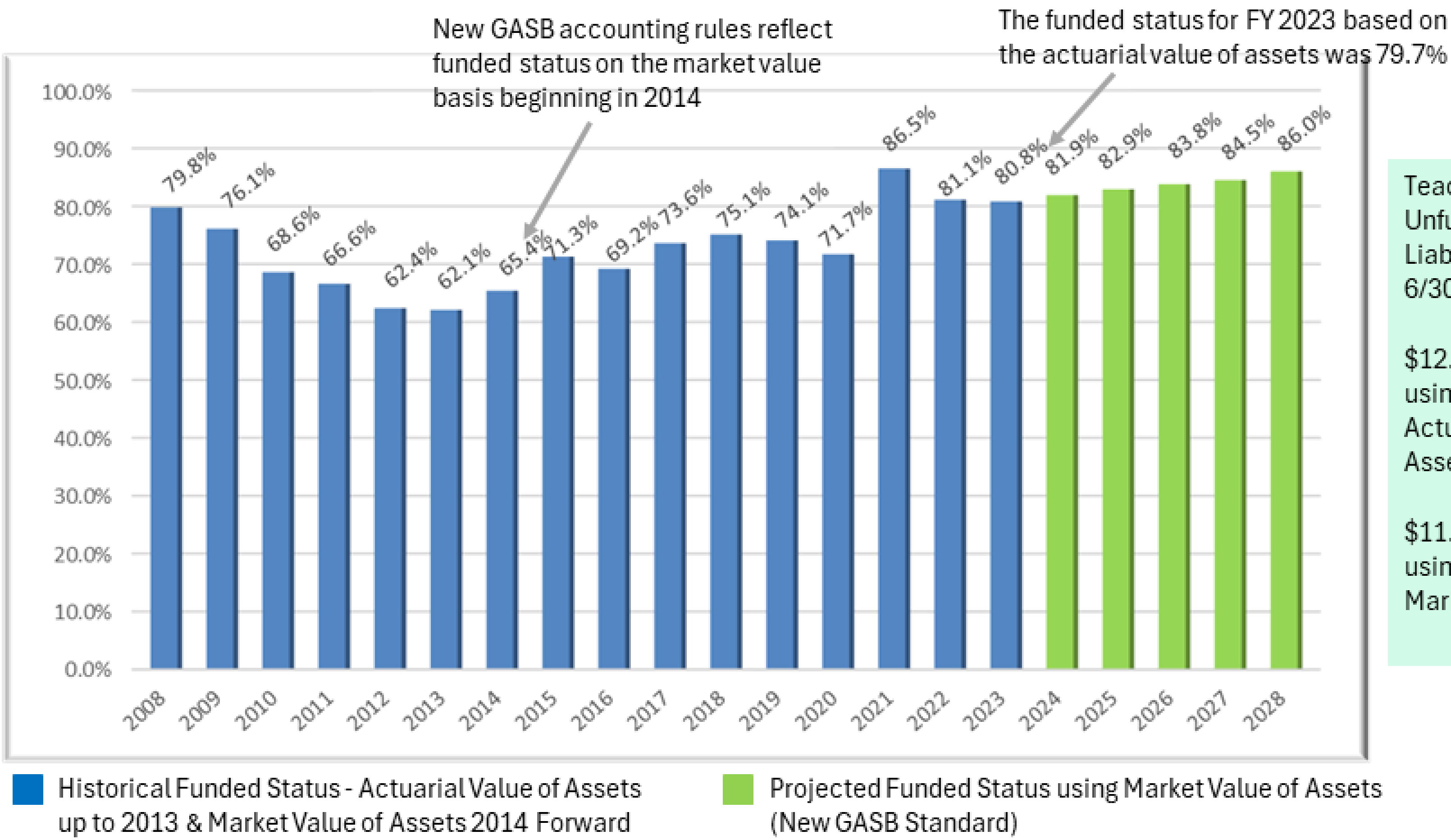
Prior Proposals: Improving Hybrid Plan Retirement Outcomes

- Accelerate auto-escalation to 0.5% increase in voluntary contributions every two years for members not at the maximum voluntary level.

- Auto-enroll with voluntary contribution at 0.5% upon date of hire, with ability to opt-out.

- Change allocation of member contribution.
  - Current 4% DB and 1% DC.
  - Proposed 3% DB and 2% DC.

Funded Status: Teachers



Teacher Plan Unfunded Liability as of 6/30/2023

$12.0 Billion using Actuarial Assets

$11.3 Billion using Market Assets

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.

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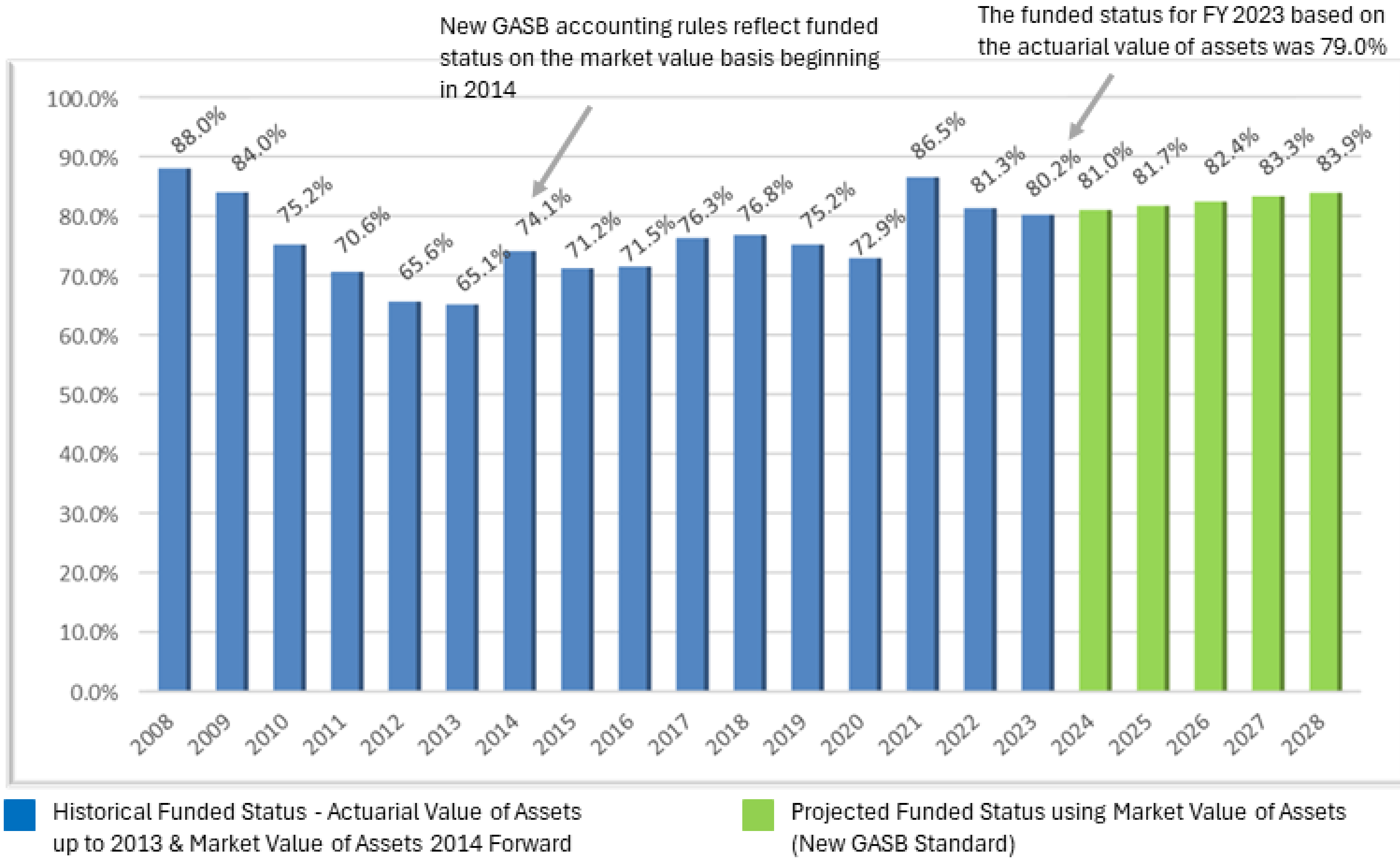
Funded Status: State



State Plan Unfunded Liability as of 6/30/2023

$6.1 Billion using Actuarial Assets

$5.8 Billion using Market Assets

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.

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Progress in Plan Stability

Cash infusions and maintaining contribution rates have improved plan health by increasing funded status and generating savings over time.

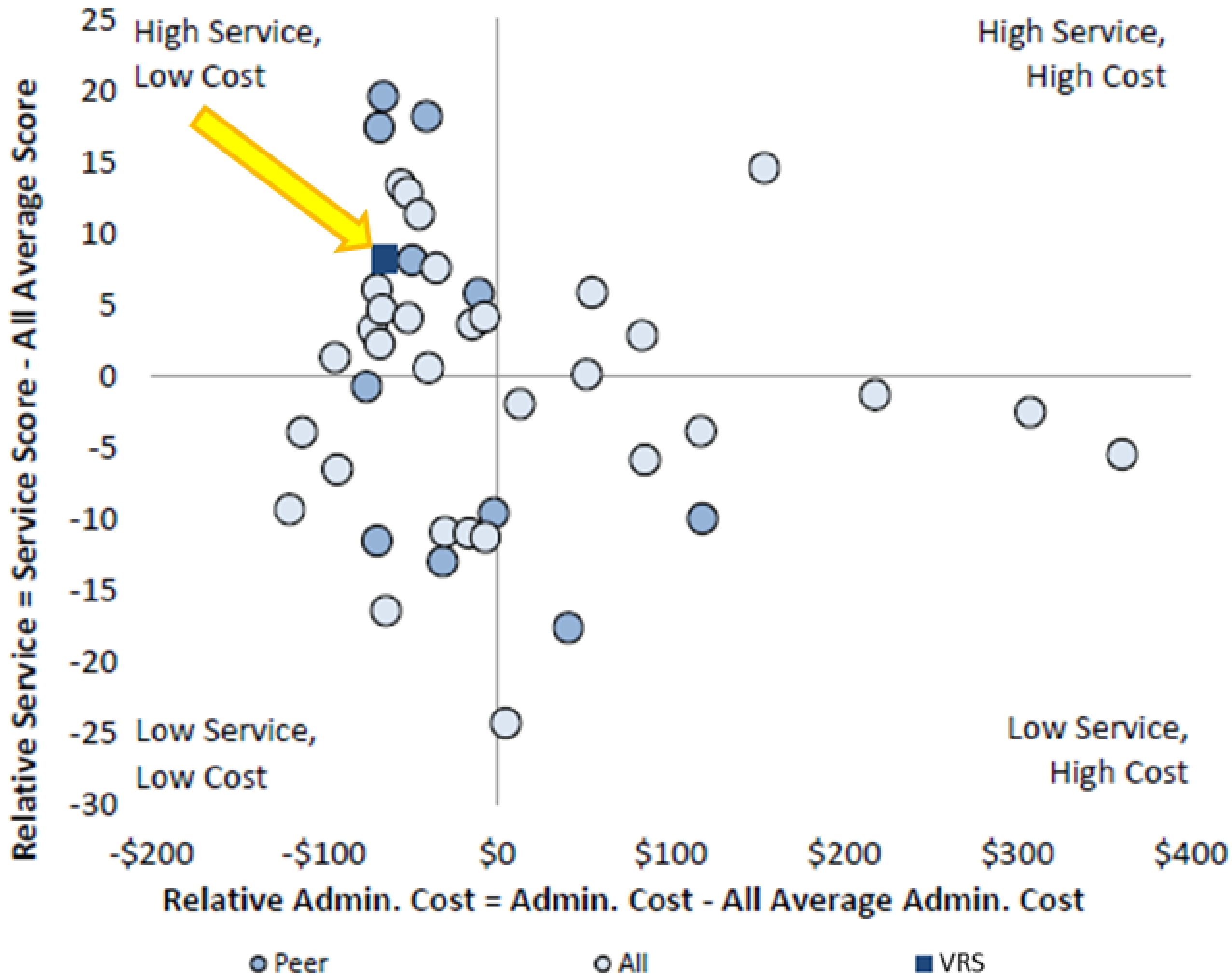
Cash infusions resulted in an estimated $2 billion in savings over 20 years.

Maintaining board-certified rates provided an estimated $548 million in savings over 15 years.

While funded status continues to improve, providing benefit enhancements adds to unfunded liabilities.

Service-Cost Relationship

Relationship between VRS service and pension administration cost



Pension Administration Cost

$74 VRS SCORE

$113 PEER AVERAGE COST

Total Service Score

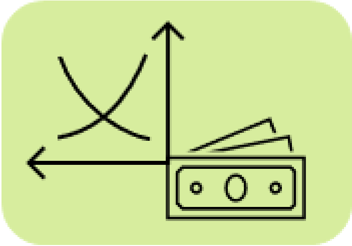
83 VRS SCORE

78 PEER MEDIAN SCORE

Summary

The Hybrid Retirement Plan is now the dominant plan.

- Reduces employer risk and costs
- Opportunities exist to improve outcomes for members



The cash infusions and additional contributions you provided to the plans achieved progress in plan stability.

- Decreasing unfunded liabilities
- Moderating contribution rates
- Producing future savings
- Improving overall plan health

VRS focuses on customer service delivery

- Provides high-level service at a low cost
- Leverages technology to securely expand service options

Helping members plan for tomorrow, today

Virginia Retirement System®

Appendix

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.]

Virginia Retirement System®

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.