

Defined Contribution Plans Advisory Committee (DCPAC) Meeting

1111 E. Main St., Richmond Pavilion Building Thursday, 9/12/2024 1:00 - 3:00 PM ET

1. Welcome

2. Meeting Minutes

- Adoption of the Minutes from the May 23, 2024 Meeting 2024.5.23 DCPAC Minutes - Page 2

3. Investments

- Annual Investment Review DCPAC Investments Slide Deck 9-12-24 Final - Page 7

4. Defined Contribution Plans Advisory Committee Charter Review

Defined Contribution Plans Advisory Committee Charter Revision 2024 - Page 37 Defined Contribution Plans Advisory Committee Charter Clean revisions 2024 - Page 43

5. Administration

2024Q2 Administrative Summary - Page 48 Sageview Advice and Managed Accounts Monitoring FINAL - Page 68

- a. Administration Reports & Communications
- b. DC Plans Record Keeper Transition Update
- 6. Other Business
- 7. Discussion of New Ideas
- 8. 2024 Meetings
 - a. 2024 Meeting
 - December 5, 2024, at 1:00 p.m.
 - b. ORPHE Annual Employer Update (not a meeting of the DCPAC)
 - September 25, 2024, at 10:10 a.m.



Defined Contribution Plans Advisory Committee Meeting Minutes

May 23, 2024 Page 1 of 5

Minutes

A regular meeting of the Defined Contribution Plans Advisory Committee (DCPAC) of the VRS Board of Trustees convened on May 23, 2024, with the following members present:

Susan T. Gooden, Chair
Hon. Matthew James, Vice Chair
Ravindra Deo
C. Matt Harris
Rick Larson
Brenda Madden
Arun Muralidhar (remotely in accordance with § 2.2-3708.3(B)(3))
David Winter

Members of the Board of Trustees:

John M. Bennett

VRS Staff:

Trish Bishop, Jeanne Chenault, Michael Cooper, David Cotter, Antonio Fisher, Josh Fox, Kelly Hiers, KC Howell, Robert Irving, Sandy Jack, Andrew Junkin, Brian Lackey, Ryan LaRochelle, Joyce Monroe, Robert Osborne, Laura Pugliese, Michael Scott, Jennifer Schreck, Jacob Schwartz, Virginia Sowers, Ashley Spradley, Bridgette Watkins-Smith, Rachel Webb, Leslie Weldon and Tanya Williams.

Guests:

Jamie Bitz, JLARC; Andrew Ness, Sageview; Lauren Albanese, Financial Investment News.

The meeting convened at 1:00 p.m.

Opening Remarks

Dr. Gooden welcomed Committee members, Board members, agency officials, representatives from stakeholder groups and other members of the public joining in person and through electronic means, to the DCPAC. Dr. Gooden introduced herself as the new Chair of the committee and welcomed the new Vice Chair, Delegate Matthew James.

Approval of Minutes

Upon a motion by Mr. Winter and a second by Mr. Larson, the minutes of the March 14, 2024, meeting were approved by the Committee.



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Administrative Reports and Communications Update

DC Plans Overview

Robert Irving, Director of Customer Service, provided an overview of the DC Plans and an update on administrative reports for the first quarter of 2024. An overview of assets and accounts across the various defined contribution plans, as well as account trends, was also provided.

Mr. Irving advised the Committee that total assets across all plans have increased 7% from the previous quarter, which is primarily attributable to market conditions. Hybrid Retirement Plan assets and accounts continue to increase each year because of new members since this is the primary plan. Mr. Irving discussed the National Association of Government Deferred Contribution Administrators (NAGDCA) and its work to advocate for stakeholders, educational resources and networking opportunities. Kelly Hiers, VRS Defined Contribution Plans Administrator, is currently serving as president of the organization. DC Plans received Communicator Awards, including the Excellence Award for the contribution increase campaign and the Distinction Award for the Start, Stop, Connect Retirement Planning Campaign. The Gold Stevie Award was won for Marketing Campaign of the Year by The American Business Awards, also for the Start, Stop, Connect Retirement Planning Campaign. Further, Mr. Irving provided updates on plan assets and accounts, hybrid voluntary contribution elections, hybrid rate separation (effective July 1, 2024), ORPHE and upcoming DC Plans events.

DC Plans Recordkeeper Transition Update

Mr. Irving provided an update on the DC Plans Recordkeeper transition to Voya. VRS staff have been meeting with MissionSquare and Voya in preparation for the transition. Highlights of the overall project were provided along with a communications timeline.

RBA for Plan Document Updates

Sandy Jack, Director of Policy, Planning and Compliance, presented a Request for Board Action regarding the amended and restated plan documents, including: (i) Commonwealth of Virginia 457 Deferred Compensation Plan (COV Plan), (ii) Virginia Hybrid 457 Deferred Compensation Plan (Hybrid Plan), and (iii) Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education (ORPHE plan), effective January 1, 2025. Proposed changes included eliminating the first day of the month rule for initial elections and the exception to that rule for new hires in the Hybrid Retirement Plan; amending the maximum amount of elective deferrals to reflect the current federal level in the Hybrid Retirement Plan and COV Plans; allowing additional elective age-based catch-up deferrals for participants ages 60 to 63 in the COV Plan; allowing additional unforeseen emergency withdrawals in the Hybrid Retirement Plan; allowing self-certification for unforeseen emergency withdrawals under certain circumstances in the Hybrid Retirement Plan and COV Plans; eliminating the de minimus withdrawal option in the COV Plan; allowing for in-plan Roth conversations to the COV Plan, and adding a provision governing the mandatory cash-out of participants' accounts when the participant severs employment if the balance in the account is \$1,000 or less in the ORPHE Plan.



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Following a motion by Mr. Deo, with a second by Ms. Madden, the Committee recommended approval of the following action to the full Board of Trustees:

RBA: Approve Plan Document Updates.

Request for Board Action: The Virginia Retirement System Board of Trustees approves the amended and restated (i) Commonwealth of Virginia 457 Deferred Compensation Plan (COV Plan), (ii) Virginia Hybrid 457 Deferred Compensation Plan (Hybrid Plan), and (iii) Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education, effective January 1, 2025.

Dr. Gooden thanked Mr. Irving and Ms. Jack for their presentations.

DC Plans Investments Update

Performance Reports

Laura Pugliese, Portfolio Manager of Defined Contribution Plans, provided an overview of the March 31, 2024, performance reports to the DCPAC, including the unbundled DC plans investment options and the bundled TIAA investment menu in the Retirement Choice (RC) contract for ORPHE.

Callan 2024 DC Trends Survey

Ms. Pugliese provided an overview of highlights from the Callan 2024 DC Trends survey, which was included in the meeting materials Appendix for the Committee to review. The Callan 2024 DC Trends survey results represented 132 large DC plan sponsors that span a range of industries across corporate, tax-exempt and government organizations.

Ms. Pugliese's highlights of the report included an update on fiduciary initiatives, investment types, retirement income solutions and advisory services. Ms. Pugliese noted the top three areas public and corporate DC plan sponsors intend to focus on in 2024 are their investment policy statements, plan fees and investment structures.

Dr. Gooden thanked Ms. Pugliese for her presentation.

Other Business

Advice and Managed Accounts

Trish Bishop, Director, introduced Andrew Ness from the SageView Advisory Group. Mr. Ness, Retirement Plan Consultant at SageView, gave a presentation covering investment advice and managed accounts, the difference between the two services, how both services differ from target date funds, the availability of such services in other states, industry observations and the adoption process should VRS allow investment advice and managed account services to be provided to defined contribution plans participants. A recommendation was made to allow investment advice and managed account services to be provided to defined contribution plans participants by the third-party record keeper beginning



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January 1, 2025. Staff will work with Mr. Ness and present a proposed implementation and monitoring plan to the DCPAC at its September meeting. VRS staff will also work with the third-party record keeper to execute contract language reflecting the provisions intended for the program, including but not limited to required outreach and re-enrollment.

Dr. Muralidhar experienced technical audio difficulties during the meeting but expressed via email his opposition to the provision of advice and managed accounts, and that he wished for the record to reflect that he did not vote in favor of the proposal. Further, he shared by email his opposition to the use of Target Date Funds as default investment options in DC Plans.

Following a motion by Mr. Harris, with a second by Ms. Madden, the Committee recommended approval of the following action to the full Board of Trustees:

RBA: Approve the provision of investment advice and managed account services to defined contribution plans participants by the third-party record keeper.

Request for Board Action: The Virginia Retirement System Board of Trustees accepts the recommendation of the Defined Contribution Plans Advisory Committee (DCPAC) to allow investment advice and managed account services to be provided to defined contribution plans participants by the third-party record keeper beginning January 1, 2025.

Dr. Gooden thanked Mr. Ness for his presentation.

DCPAC Appointments

Ms. Bishop informed the Committee of the request for reappointment of Ravindra Deo, Brenda Madden and C. Matt Harris, each to a two-year term ending June 20, 2026. Their current terms expire on June 20, 2024. Ms. Bishop further informed the Committee that Ms. Irvin resigned her DCPAC position because she is not able to continue her role with the committee, and Dr. Muralidhar was not reappointed. Ms. Bishop consulted with the Virginia Association of School Business Officials (VASBO) and the Virginia Association of School Superintendents (VASS), to find a suitable candidate to fill the local school division vacancy.

Following a motion by Mr. Winter, with a second by Mr. Deo, the Committee recommended approval of the following actions, in a block, to the full Board of Trustees:

RBA: Reappointment of DCPAC Members.

Request for Board Action: The Board reappoints Ravindra Deo, Brenda Madden and C. Matt Harris to the Defined Contribution Plans Advisory Committee (DCPAC), each for a two-year term ending June 20, 2026.

RBA: Appointment of DCPAC Members.



Defined Contribution Plans Advisory Committee

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Request for Board Action: The Board appoints Kate Jonas and Monique G. Barnes to the Defined Contribution Plans Advisory Committee (DCPAC) for two-year terms ending June 20, 2026.

Dr. Gooden thanked Ms. Bishop for her presentation.

Discussion of New Ideas

No new ideas were presented.

Upcoming Defined Contribution Plans Advisory Committee Meetings

Dr. Gooden confirmed the remaining DCPAC meeting dates in 2024, all at 1:00 p.m.:

- Thursday, September 12th
- Thursday, December 5th

Additionally, the ORPHE Annual Employer Update will be scheduled for September 2024 (TBD) and will appear on the DCPAC agenda as an upcoming event. This is not a DCPAC meeting; however, members may attend if interested.

Adjournment

•	ss, Dr. Gooden adjourned the meeting at 2:25 p.m. upon a motion by Mr adden, and a vote of the Committee.
 Chair	 Date









Defined Contribution Plans Investment Program

September 12, 2024



Agenda

Target Date Portfolios

Annual Investment Review Highlights



- Target Date Portfolios = BlackRock LifePath Index Funds Class N
 - Unbundled DC Plans white label naming convention
 - TIAA ORPHE manager fund name

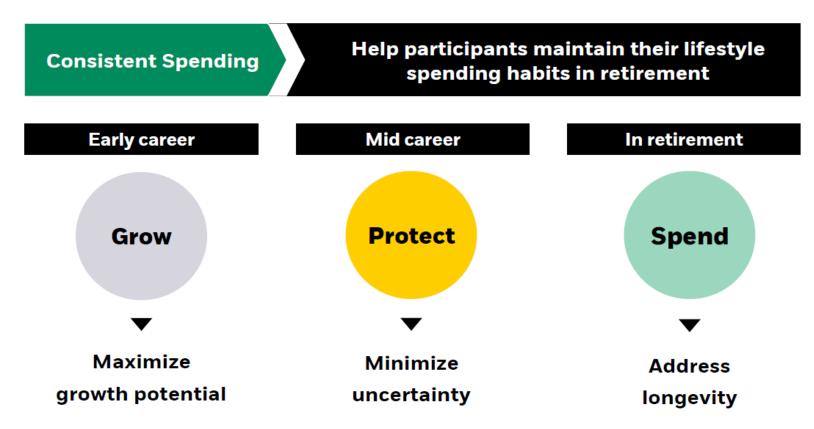




LifePath Objective

Source: BlackRock

Lifetime Asset Allocation: Model end-to-end lifecycle problems, not just portfolios





BlackRock GlidePath

Source: BlackRock

With glidepath risk, when is as important as how much



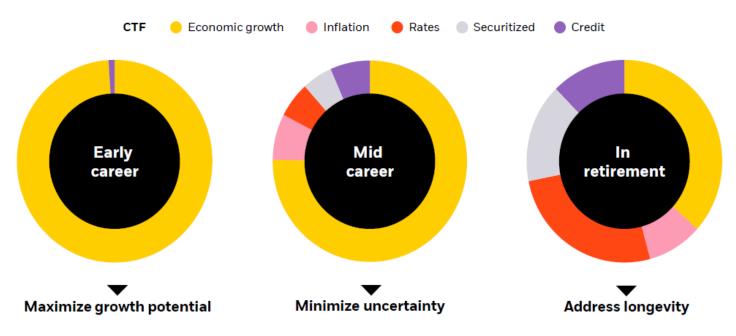
For illustrative purposes only.



Asset Allocation

Source: BlackRock

Asset allocation addresses key risks faced over a lifetime









Upcoming Changes



Target Date 2025 & 2070 Portfolios

2025 Portfolio Reaching Its Target Date

 October 4, 2024 - assets move into the Retirement Portfolio (MissionSquare & TIAA ORPHE)

2070 Portfolio Added to Target Date Suite

- TIAA ORPHE on or about October 4, 2024
- Voya January 2025 live date

Communications

 Staff working with all stakeholders regarding participant communications



BlackRock Enhancements

Improving Inflation Responsiveness Through Asset Class Research

TIPS

Replace full curve TIPS with short curve TIPS

Real Estate

Replace Global REITs with U.S. REITs

Commodities

 Benchmark change from Bloomberg Commodities Index to Bloomberg Enhanced Roll Yield Index

Global Infrastructure

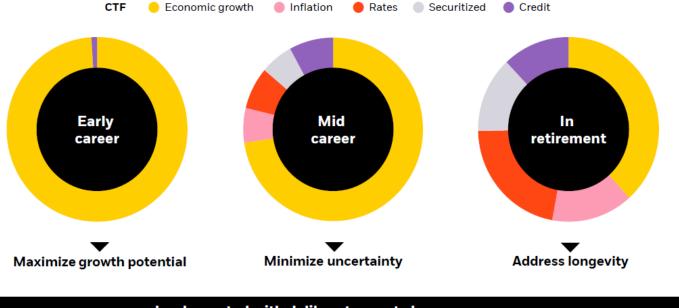
Add publicly-listed infrastructure



Asset Allocation

Source: BlackRock

Anticipated allocation: Accounting for enhanced inflation hedging asset allocation





Note: Asset allocation reflects the proposed allocation post inflation hedging research implementation



Asset Class Roles

Source: BlackRock

Components of LifePath's inflation hedging allocation play complementary roles

Enhanced optimization framework seeks to increase precision of allocation across the glidepath to more closely align with objectives at each stage of life (Grow, Protect, Spend)

	Role of As	sset Class
	Seek Return	Hedge Inflation
TIPS	✓	/ / /
Real Estate	/ /	✓
Commodities	✓	/ / /
Infrastructure	/ /	√ √

Change vs Current Allocation (+/-)¹											
Young Investors	Mid Career	Near Retirement									
-	_	+									
-	Neutral	Neutral									
-	-	Neutral									
NA	+	+									

Source: BlackRock. For illustrative purposes only. 1. Over/underweights represent anticipated allocation differences within LifePath's strategic asset allocation relative to the current allocations for the respective asset class exposures.



Annual Investment Review Highlights





Governing Documents

Defined Contribution Plans Advisory Committee Charter

Defined Contribution Plans Investment Belief Statements

Investment Policy Statement for an Unbundled Defined Contribution Plan Structure

Investment Policy Statement for a Bundled Defined Contribution Plan Structure

Master Trusts

Plan Documents





The DC Investment Belief Statements and the DC Investment Policy Statements (unbundled & bundled) are being reviewed by staff





Performance and Other Reports

Due Diligence



Investment Manager Meetings



Annual Supplemental Questionnaire



The Plans

- As of June 30, 2024 DC plans assets overseen by investment staff totaled \$8.6 billion (\$8.2 billion unbundled DC plans; \$446.3 million TIAA ORPHE)
- An unbundled DC plan structure provides investment staff with maximum flexibility whereas a bundled plan structure does not provide the same flexibility
 - TIAA operates as a bundled plan provider for the ORPHE



Benchmark Correlations

Five Years Ending June 30, 2024

	FTSE 3-Month	Bloomberg	Bloomberg	ICE BofA U.S.	S&P 500	Russell	MSCI	MSCI	FTSE
	Treasury Bill	U.S.	U.S. TIPS	High-Yield		2500	ACWI ex-	ACWI	EPRA/Nariet
		Aggregate		Constrained			U.S. IMI	IMI	Developed
FTSE 3-Month Treasury Bill	1.00								
Bloomberg U.S. Aggregate	0.14	1.00							
Bloomberg U.S. TIPS	(0.01)	0.85	1.00						
ICE BofA US High-Yield Constrained	0.08	0.58	0.68	1.00					
S&P 500	0.05	0.53	0.66	0.83	1.00				
Russell 2500	(0.03)	0.45	0.55	0.86	0.90	1.00			
MSCI ACWI ex-U.S. IMI	0.05	0.55	0.59	0.84	0.88	0.89	1.00		
MSCI ACWI IMI	0.05	0.55	0.64	0.87	0.98	0.94	0.96	1.00	
FTSE EPRA Nareit Developed	(0.02)	0.57	0.66	0.84	0.88	0.89	0.90	0.91	1.00

Source: Zephyr StyleAdvisor





Investment Program – Unbundled DC Plans

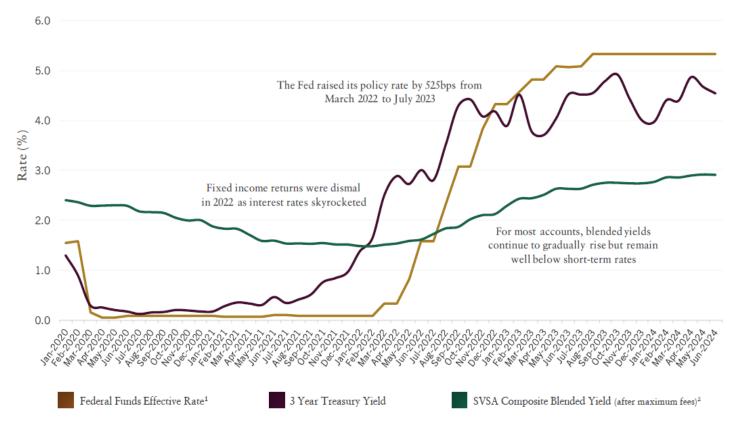
- Collective Investment Trusts and Separate Accounts
- White Labeling of Fund Names
- Primarily Passively Managed Investment Approach
- Default Investment Option Target Date Portfolios
 - BlackRock LifePath Index Funds N
- Unitized VRS Investment Portfolio (VRSIP)



Stable Value Market Update June 30, 2024

Source: Galliard

Despite volatility in the market over the past three years and a backdrop of higher interest rates, stable value crediting rates have continued to deliver positive total returns to participants. Blended yields are trending higher as they follow the general direction of interest rates, but on a lag.



1: Federal Funds Effective Rate sourced from the Federal Reserve. Rates are not annualized. 2: Blended yield is after all fees including the current maximum investment management fee of 0.20% which may be charged by Galliard for management of a client's account. From April 1, 2017, to June 30, 2020, Galliard's maximum fee was 0.35%. Historical amounts reflect these fee deductions on their respective dates.



				Returns				3 Year Statistics			5 Year Stat	istics	
Fund	Туре	Fund Expense Ratio	1 Year	3 Years*	5 Years*		Sharpe Ratio	Tracking Error	Information Ratio				Information Ratio
Tuliu	Турс	%			%	%		%		%		%	
Money Market Fund FTSE 3 Month Treasury Bill Index Excess Return	Capital Preservation	0.08	5.70 5.64 0.06	3.37 3.17 0.20	2.38 2.22 0.16	n/a n/a	n/a	n/a	n/a	n/a n/a	n/a	n/a n/a	n/a
Stable Value Fund ¹	Capital	0.24	3.18	2.24	2.21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Custom Benchmark ² Excess Return	Preservation (Book Value)		4.90 -1.72	3.57 -1.33	2.50 -0.29	n/a	n/a	n/a		n/a	n/a	n/a	
eVestment Alliance Median: Stable Value Universe ³			2.96	2.35	2.29								
Bloomberg U.S. Aggregate Bond Index Excess Return	Passive	0.03	2.66 2.63 0.03	-2.98 -3.02 0.04	-0.19 -0.23 0.04	7.42 7.43			n/a	6.22 6.23		0.14	n/a
MSTAR Ave: IntermediateTerm Bond Inflation-Protected Bond Fund	Passive	0.03	2.99 2.78	-3.13 -1.29	-0.29 2.14	7.21	-0.63	0.22	n/a	6.27	-0.02	0.18	n/a
Bloomberg U.S. TIPS Index Excess Return	rassive	0.03	2.76 2.71 0.07	-1.29 -1.33 0.04	2.14 2.07 0.07	7.21	-0.64		11/4	6.25		0.16	II/a
MSTAR Ave: Inflation-Protected Bond			2.66	-0.82	2.18								
High-Yield Bond Fund ICE BofA U.S. HY BB-B Constrained Index Excess Return	Active	0.39	9.78 10.08 -0.30	1.47 1.62 -0.15	3.87 3.66 0.21	7.70 8.47	-0.23 -0.20		-0.09	8.81 9.07	0.18 0.15		0.13
MSTAR Ave: High-Yield Bond			9.76	1.36	3.16								
	Passive	0.01	24.55 24.56 -0.01 21.19	10.01 10.01 0.00 7.63	15.06 15.05 0.01 12.57	17.86 17.86			n/a	18.08 18.08		0.02	n/a
Small/Mid-Cap Stock Fund Russell 2500 Index Excess Return MSTAR Ave: Mid-Cap Blend	Passive	0.02	10.57 10.47 0.10	-0.20 -0.29 0.09 3.54	8.38 8.31 0.07 9.32	20.91 20.91	-0.17 -0.17		n/a	22.70 22.71		0.06	n/a
International Stock Fund MSCI ACWI ex-U.S. IMI Index (linked to MSCI World ex-U.S. Index	Passive	0.06	11.17 11.57	0.32 0.19	5.79 5.62	17.09			n/a				n/a
July 2012 - July 2016) Excess Return MSTAR Ave: Foreign Large Blend			-0.40 10.53	0.13 1.28	0.17 5.72	16.39	-0.19			17.50	0.19		
	Passive	0.08	5.48	-3.87	0.18	19.85	-0.35	1.07	n/a	20.58	-0.10	0.68	n/a
FTSE EPRA/NAREIT Developed Index Excess Return MSTAR Ave: Global Real Estate	1 433146	0.00	4.54 0.94 4.94	-4.77 0.90 -5.35	-0.69 0.87 -0.37	19.78			II/a	20.63			Ilva

^{*}Annualized.

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¹ Stable value funds typically track the general movements of interest rates with a lag. It is expected that when interest rates are falling stable value yields do not fall as quickly and when when interest rates are rising stable value yields do not rise as quickly.

² Effective August 2016, the benchmark represents a hypothetical return generated by the monthly yields of actively traded U.S. Treasuries based on [50% 2-year maturity + 50% 3-year maturity] plus an annualized spread of 0.25% and is representative of the Fund's expected return profile, given how the Fund is managed and book value accounting treatment.

³ eVestment Alliance universe returns are gross of investment management fees and net of wrap fees. The Stable Value Fund returns are net of all fees.

Unbundled DC Plans

Data for period ending June 30, 2024

					3 Year	Statistics		5 Year Statistics					
Fund	Type	Fund Expense Ratio	1 Year	3 Years*	5 Years*		Sharpe Ratio	Tracking Error	Information Ratio	Standard Deviation	Sharpe Ratio		Information Ratio
	71	%	%	%	%	%		%		%		%	
Retirement Portfolio	Passive	0.06	8.37	0.17	4.32	10.47	-0.30	0.35	n/a	9.65	0.21	0.29	n/a
Custom Benchmark ⁴			8.44	0.21	4.31	10.39	-0.30			9.60	0.21		
Excess Return			-0.07	-0.04	0.01								
Target Date 2025 Portfolio	Passive	0.06	8.78	0.43	5.01	11.28	-0.25	0.39	n/a	10.98	0.25	0.33	n/a
Custom Benchmark ⁴			8.85	0.45	4.99	11.17	-0.25			10.92	0.25		
Excess Return			-0.07	-0.02	0.02								
Target Date 2030 Portfolio	Passive	0.06	10.72	1.42	6.27	12.72			n/a				n/a
Custom Benchmark ⁴			10.83	1.44	6.24	12.60	-0.15			12.63	0.31		
Excess Return			-0.11	-0.02	0.03								
Target Date 2035 Portfolio	Passive	0.06	12.61	2.34	7.45	14.02			n/a	14.28			n/a
Custom Benchmark ⁴			12.74	2.34	7.42	13.87	-0.07			14.22	0.36		
Excess Return		0.00	-0.13	0.00	0.03	15.00	0.00	0.00	,	15.01	0.40	0.50	,
Target Date 2040 Portfolio	Passive	0.06	14.47	3.21 3.19	8.55	15.28		0.68	n/a	15.81			n/a
Custom Benchmark ⁴			14.59 -0.12		8.50	15.10	-0.01			15.72	0.39		
Excess Return	Passive	0.00		0.02	0.05	40.07	0.05	0.77		17.00	0.40	0.65	
Target Date 2045 Portfolio Custom Benchmark ⁴	Passive	0.06	16.23 16.35	4.01 3.97	9.52 9.45	16.37		0.77	n/a				n/a
Excess Return			-0.12	0.04	0.07	16.17	0.04			16.92	0.42		
Target Date 2050 Portfolio	Passive	0.06	17.48	4.55	10.10	16.93	0.07	0.82	n/a	17.61	0.44	0.70	n/a
Custom Benchmark ⁴	assive	0.00	17. 4 0	4.49	10.10	16.71			11/4	17.51			II/a
Excess Return			-0.13	0.06	0.08	10.71	0.07			17.51	0.44		
Target Date 2055 Portfolio	Passive	0.06	18.00	4.75	10.28	17.05	0.09	0.84	n/a	17.71	0.45	0.71	n/a
Custom Benchmark ⁴			18.14	4.70	10.20	16.84				17.63		_	.,
Excess Return			-0.14	0.05	0.08		0.00				00		
Target Date 2060 Portfolio	Passive	0.06	18.01	4.76	10.27	17.05	0.09	0.84	n/a	17.72	0.45	0.71	n/a
Custom Benchmark ⁴			18.16	4.70	10.21	16.84	0.08			17.63	0.45		
Excess Return			-0.15	0.06	0.06								
Target Date 2065 Portfolio	Passive	0.06	18.02	4.76	N/A	17.05	0.09	0.84	n/a	n/a	n/a	n/a	n/a
Custom Benchmark ⁴			18.16	4.70	N/A	16.85	0.08		 	n/a	n/a		
Excess Return			-0.14	0.06	N/A				[

^{*}Annualized.

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.

Underperformance for an actively managed fund.

Excess performance for an actively managed fund

Below benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the the nature of book value accounting treatment for stable value funds as it relates to interest rates.

Data provided by BlackRock, Galliard, MissionSquare and Zephyr StyleADVISOR.

⁴ The Custom Benchmark is calculated using blended returns of third party indices that proportionally reflect the respective weightings of the Fund's asset classes. Weightings are adjusted quarterly to reflect the Fund's changing asset allocations over time. As of May 11, 2022 the indices used to calculate the Custom Benchmark are the: Russell 1000 Index, Russell 2000 Index, MSCI ACWI ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Intermediate Credit Bond Index, Bloomberg U.S. Securitiezed MBS,ABS and CMBS Index, Bloomberg U.S. Treasury Inflation Protected Securities Index, FTSE EPRA NAREIT Developed Index and the Bloomberg Commodity Total Return Index.

Unbundled DC Plans - Fund Annual Operating Expenses Information as of June 30, 2024

	Investment		Investment Management	•	Fund Embedded	State Street Cost to Strike Net	Total Annual Expense	Expense Ratio
Investment Option ¹	Manager	Туре	Costs	Fund ² Costs	Costs ²	NAV	Ratio	YOY Change
Money Market Fund	BlackRock	Capital Preservation	0.080000%	n/a	0.000600%	n/a	0.08%	0.00%
Stable Value Fund	Galliard	Capital Preservation (Book Value)	0.066000%	0.170000%	n/a	n/a	0.24%	+0.01%
Bond Fund	BlackRock	Passive	0.030000%	n/a	0.003600%	n/a	0.03%	0.00%
Inflation-Protected Bond Fund	BlackRock	Passive	0.020000%	n/a	0.007100%	n/a	0.03%	0.00%
High-Yield Bond Fund	JPMorgan	Active	0.380000%	n/a	0.010000%	0.004663%	0.39%	0.00%
Stock Fund	BlackRock	Passive	0.007500%	n/a	0.000900%	0.004393%		0.00%
Small/Mid-Cap Stock Fund	BlackRock	Passive	0.012500%	n/a	0.003400%	0.004313%	0.02%	0.00%
International Stock Fund	BlackRock	Passive	0.040000%	n/a	0.019900%	0.004399%		0.00%
Global Real Estate Fund	BlackRock	Passive	0.070000%	n/a	0.008700%	0.004257%		0.00%
Retirement Portfolio	BlackRock	Passive	0.050000%	n/a	0.005300%	n/a		
Target Date 2025 Portfolio	BlackRock	Passive	0.050000%	n/a	0.005600%	n/a	0.06%	0.00%
Target Date 2030 Portfolio	BlackRock	Passive	0.050000%	n/a	0.006100%	n/a	0.06%	0.00%
Target Date 2035 Portfolio	BlackRock	Passive	0.050000%	n/a	0.006800%	n/a	0.06%	0.00%
Target Date 2040 Portfolio	BlackRock	Passive	0.050000%	n/a	0.007500%	n/a	0.06%	0.00%
Target Date 2045 Portfolio	BlackRock	Passive	0.050000%	n/a	0.008200%	n/a	0.06%	0.00%
Target Date 2050 Portfolio	BlackRock	Passive	0.050000%	n/a	0.008600%	n/a	0.06%	0.00%
Target Date 2055 Portfolio	BlackRock	Passive	0.050000%	n/a	0.009000%	n/a		0.00%
Target Date 2060 Portfolio	BlackRock	Passive	0.050000%	n/a	0.009700%	n/a	0.06%	0.00%
Target Date 2065 Portfolio	BlackRock	Passive	0.050000%	n/a	0.010000%	n/a	0.06%	0.00%
VRSIP	VRS	Active	n/a	n/a	n/a	n/a	0.63%	+0.04%

¹ There are no short-term trading redemption costs associated with any of the investment options.

² Includes custody, audit and other specific investment option related administrative costs.

Below are the totals for the period ending June 30, 2024. Returns greater than one year are annualized.

Investment Options	1 Month	3 Months	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs / Since Inception ¹	Fund Expense Ratio ²	Inception Date	Market Value	% of Market Value ²⁵	% of Participar Selecting an Option ²⁶
Do-It-For-Me: Target Date Portfolios ^{3,4}	%	%	%	%	%	%	%	%			%	
Retirement Portfolio Custom Benchmark	1.22 1.28	1.01 0.98	3.54 3.48	8.37 8.44	0.17 0.21	4.32 4.31	4.28 4.26	0.06	8/1/05	384,996,912	4.7	4.1
Target Date 2025 Portfolio Custom Benchmark	1.24 1.30	1.03 1.01	3.77 3.73	8.78 8.85	0.43 0.45	5.01 4.99	5.04 4.99	0.06	7/5/06	385,078,063	4.7	5.3
Target Date 2030 Portfolio Custom Benchmark	1.34 1.42	1.23 1.20	5.01 4.96	10.72 10.83	1.42 1.44	6.27 6.24	5.89 5.82	0.06	8/1/05	479,849,660	5.9	7.6
Target Date 2035 Portfolio Custom Benchmark	1.43 1.53	1.46 1.43	6.25 6.20	12.61 12.74	2.34 2.34	7.45 7.42	6.68 6.60	0.06	7/5/06	528,618,364 ²²	6.4	9.0
Target Date 2040 Portfolio Custom Benchmark	1.51 1.63	1.68 1.65	7.45 7.41	14.47 14.59	3.21 3.19	8.55 8.50	7.40 7.29	0.06	8/1/05	477,522,406	5.8	9.2
Target Date 2045 Portfolio Custom Benchmark	1.58 1.73	1.89 1.86	8.58 8.53	16.23 16.35	4.01 3.97	9.52 9.45	7.97 7.85	0.06	7/5/06	482,192,912	5.9	10.5
Target Date 2050 Portfolio Custom Benchmark	1.64 1.79	2.06 2.04	9.43 9.38	17.48 17.61	4.55 4.49	10.10 10.02	8.28 8.15	0.06	9/30/07	497,744,545	6.1	12.0
Target Date 2055 Portfolio Custom Benchmark	1.67 1.83	2.17 2.14	9.84 9.79	18.00 18.14	4.75 4.70	10.28 10.20	8.35 8.23	0.06	5/19/10	587,852,445	7.2	15.4
Target Date 2060 Portfolio	1.67	2.17	9.85	18.01	4.76	10.27	8.77	0.06	11/17/14	339,259,932	4.1	13.5
Custom Benchmark Target Date 2065 Portfolio	1.84 1.67	2.15 2.18	9.80 9.86	18.16 18.02	4.70 4.76	10.21 n/a	8.63 10.52	0.06	9/23/19	69,440,740	0.9	6.6
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	n/a	10.50					
Help-Me-Do-It: Individual Options												
Money Market Fund ^{5,6} FTSE 3 Month Treasury Bill Index	0.46 0.45	1.39 1.37	2.80 2.76	5.70 5.64	3.37 3.17	2.38 2.22	1.70 1.53	0.08	11/1/99	142,524,696	1.7	1.7
Yield as of 06/30/24: 5.53% ⁷												
Stable Value Fund ^{8,9} Custom Benchmark ¹⁰	0.25 0.40	0.82 1.22	1.63 2.38	3.18 4.90	2.24 3.57	2.21 2.50	2.02 2.20	0.24	2/1/95	607,426,321	7.4	5.2
Yield as of 06/30/24: 3.36% ¹¹	00				0.0.	2.00						
Bond Fund ¹² Bloomberg U.S. Aggregate Bond Index	0.95	0.13	-0.61	2.66	-2.98	-0.19	1.40	0.03	11/1/99	155,708,770	1.9	2.6
Inflation-Protected Bond Fund ¹³ Bloomberg U.S. TIPS Index	0.95 0.78 0.78	0.07 0.87 0.79	-0.71 0.89 0.70	2.63 2.78 2.71	-3.02 - 1.29 -1.33	-0.23 2.14 2.07	1.35 2.00 1.91	0.03	7/30/02	51,765,661	0.6	1.2
High-Yield Bond Fund ¹⁴	0.87	1.38	2.66	9.78	1.47	3.87	4.52	0.39	5/31/04	54,563,453	0.7	1.5
ICE BofA U.S. High-Yield BB-B Constrained Index Stock Fund ¹⁵	1.02 3.59	1.21 4.28	2.52 15.29	10.08 24.55	1.62 10.01	3.66 15.06	4.23 12.89	0.01	11/1/99	1,995,754,406	24.3	8.4
S&P 500 Index	3.59 - 1.49	4.28 - 4.26	15.29 2.37	24.56 10.57	10.01 - 0.20	15.05 8.38	12.86 8.08		44/4/00	454.050.400		
Small/Mid-Cap Stock Fund ¹⁶ Russell 2500 Index	-1. 49 -1.50	-4.26 -4.27	2.35	10.37	-0.20 - 0.29	8.31	7.99	0.02	11/1/99	451,376,496	5.5	4.6
International Stock Fund ¹⁷	-0.73	0.96	5.41	11.17	0.32	5.79	4.08	0.06	11/1/99	226,602,370	2.8	3.7
MSCI ACWI ex-U.S. IMI Index ¹⁸	-0.23	0.92	5.28	11.57	0.19	5.62	3.85	0.00		220,002,010	2.0	
Global Real Estate Fund ¹⁹	0.30	-2.13	-3.12	5.48	-3.87	0.18	2.92	0.08	10/1/02	88,378,568	1.1	2.3
FTSE EPRA/NAREIT Developed Index	0.34	-2.43	-3.70	4.54	-4.77	-0.69	2.04					
VRSIP ²⁰ VRS Custom Benchmark ²¹	1.72 2.37	2.47 3.03	4.18 5.18	11.93 13.09	6.14 3.84	9.28 7.62	7.70 6.75	0.63	7/1/08	67,918,598 ²³	0.8	0.4

VRSIP and benchmark returns are reported with a one month lag. [Return information shown is as of May 31st, 2024.] [Market value as of May 31st, 2024 was \$66,616,043.]

Do-It-Myself: Self-Directed Brokerage Account												
Schwab PCRA	n/a	128,916,165	1.6	0.2								

Total \$8,203,491,483²⁴

- 1 If the fund was not in existence for 10 years, fund and corresponding benchmark returns shown represent performance from the since inception date.
- 2 Fund investment advisers may voluntarily agree to waive expenses. Expense waivers may be terminated at any time.
- 3 Effective February 2023, the Target Date Portfolios invest in units of BlackRock's LifePath Index Funds N. The LifePath Index Funds N invest in the master Lifepath Index Funds F. The inception dates shown reflect that of the master LifePath Index Funds F. Prior to February 2023, the Target Date Portfolios invested in BlackRock's LifePath Index Funds O which also invested in the master LifePath Index Funds F. All performance returns are linked.
- 4 Benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the Portfolios' asset classes. Weightings are adjusted quarterly to reflect the Portfolios' asset allocation shifts over time. Indices currently used to calculate the custom benchmarks are: Russell 1000 Index, Russell 2000 Index, MSCI ACWI ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Long Government Bond Index, Bloomberg U.S. Intermediate Government Bond Index, Bloomberg U.S. Securitized: MBS, ABS, and CMBS Index, Bloomberg U.S. TIPS Index, FTSE EPRANAREIT Developed Index and the Bloomberg Commodity Index Total Return.
- 5 The Money Market Fund invests in units of BlackRock's Short-Term Investment Fund W. The inception data shown reflects the VRS Defined Contribution Plan's investment strategy inception date. Returns of the Fund from July 2012 through July 2016 represent performance of other BlackRock funds. Performance returns are linked.
- 6 An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment it is possible to lose money by investing in the Fund.
- 7 The current yield more closely reflects the earnings of the Fund than the total net return information. There is no quarantee that the Fund will earn the current yield in the future.
- 8 The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 9 Direct transfers from the Stable Value Fund to the Money Market Fund (considered a "competing fund") are not permitted. Before transferring to the Money Market Fund, participants must first transfer to a "non-competing" fund for 90 days.

 Optional Retirement Plan for Higher Education (ORPHE) participants who want to make a direct exchange to another ORPHE provider, must first exchange to a "non-competing" fund on the MissionSquare Retirement investment platform for 90 days.
- 10 Effective August 2016, the benchmark represents a hypothetical return generated by the monthly yields of actively traded U.S. Treasuries based on [50% 2- year maturity + 50% 3- year maturity] plus an annualized spread of 0.25% and is representative of the Fund's expected return profile, given how the Fund is managed and book value accounting treatment. Prior to August 2016 the custom benchmark was based on the monthly yield of actively traded U.S Treasuries with a 3-year maturity plus an annualized spread of 0.50%. The benchmark returns are linked.
- 11 The current yield more closely reflects the earnings of the Fund than the total net return information. There is no guarantee that the Fund will earn the current yield in the future.
- 12 The Bond Fund invests in units of BlackRock's U.S. Debt Index Fund M. The U.S. Debt Index Fund M invests in the master Fund F. The inception date shown reflects the VRS Defined Contribution Plans strategy inception date.
- 13 The Inflation-Protected Bond Fund invests in units of BlackRock's U.S. Treasury-Inflation Protected Securities Fund M. The U.S. Treasury Inflation-Protected Securities Fund M invests in the master Fund F. The inception date shown reflects the inception date of the master Fund F.
- 14 The High-Yield Bond Fund invests in units of JPMorgan's Corporate High-Yield Fund-Investment Class. The inception date shown reflects the date the current investment team at JPMorgan commenced management responsibility of the Fund.
- 15 The Stock Fund invests in units of BlackRock's Equity Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 16 The Small/Mid-Cap Stock Fund invests in units of BlackRock's Russell 2500 Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy date.
- 17 The International Stock Fund invests in units of BlackRock's MSCI ACWI ex-U.S. IMI Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plan's investment strategy inception date. Returns from July 2012 through July 2016 represent performance of another BlackRock Fund. Performance returns are linked.
- 18 Effective August 2016, the performance benchmark is the MSCI ACWI ex.-U.S. IMI Index. It was the MSCI World ex-U.S. Index from July 2012 through July 2016. The benchmark returns are linked.
- 19 The Global Real Estate Fund invests in units of BlackRock's Developed Real Estate Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 20 The inception date shown reflects the date the VRS Investment Portfolio (VRSIP) was unitized.
- 21 The VRS Custom Benchmark is a blend of the asset class benchmarks at policy weights
- 22 Includes Pending Account VRSIP amount of \$0.
- 23 Includes Preliminary Investment Portfolio Account PIP amount of \$749.726.
- 24 Includes \$8,604,622 held in the administrative Special Accounts.
- 25 May not equal 100% due to rounding.
- 26 The data reflects the percentage of participants who selected a particular investment option as of June 30, 2024. There were 619,485 participant accounts as of June 30, 2024 across all unbundled DC plans.

All fund performance returns shown reflect all fund management fees and expenses, but do not reflect the Plan administrative fee charged by MissionSquare Retirement which would further reduce the returns shown.

All calculations assume reinvestment of dividends and capital gains. All returns are calculated in U.S. dollars. Performance returns are provided by BlackRock, Galliard Capital Management, JPMorgan, Bank of New York

Mellon, and MissionSquare Retirement. Benchmark returns are provided by BlackRock, Russell/Mellon Analytical Services, Galliard, and MissionSquare Retirement. Although data is gathered from sources believed to be reliable, we cannot guarantee completeness or accuracy.

Plan Administrative Fee: An annual record keeping and communication services fee of \$30.50 is deducted from participant accounts on a monthly basis (approximately \$2.54 per month). Only one annual fee of \$30.50 is deducted from participant accounts for those participants participants participants participants participants participants.

Below benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the nature of book value accounting treatment for stable value funds as it relates to interest rates.

Underperformance for an actively managed fund.

Excess performance for an actively managed fund.

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.

24



Investment Program – Bundled TIAA ORPHE

- Investments Under TIAA Retirement Choice (RC) Contract
 - VRS investment staff does not oversee/monitor TIAA proprietary investments under the TIAA legacy contracts
- TIAA Proprietary Fixed and Variable Annuities
- Collective Investment Trusts
- Primarily Passively Managed Investment Approach
- Default Investment Option BlackRock LifePath Index Funds N
- No White Labeling of Fund Names



Bundled ORP for Higher Education - TIAA RC Contract^{1,2}

Data for period ending June 30, 2024

				Returns			3 Year Sta	itistics		5 Year Statistics				
Fund	Туре	Fund Expense Ratio	1 Year	3 Years*	5 Years*		Sharpe Ratio	Tracking Error	Information Ratio	Standard Deviation (%)		•	Information Ratio	
		%	%	%	%	%		%		%		%		
BlackRock Equity Index Fund J S&P 500 Index	Passive	0.01	24.56 24.56	10.01 10.01	15.07 15.05	17.86 17.86			n/a	18.08 18.08		0.02	n/a	
Excess Return			0.00	0.00	0.02									
MSTAR Ave: Large Blend			21.19	7.63	12.57									
BlackRock Russell 2500 Index Fund M	Passive	0.02	10.57	-0.20	8.39	20.91		0.03	n/a			0.06	n/a	
Russell 2500 Index			10.47	-0.29	8.31	20.91	-0.17			22.71	0.27			
Excess Return			0.10	0.09	0.08									
MSTAR Ave: Mid-Cap Blend			13.15	3.54	9.32									
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M	Passive	0.11	11.12	0.28	5.74	17.10			n/a		0.19	1.89	n/a	
MSCI ACWI ex-U.S. IMI Index			11.57	0.19	5.62	16.39	-0.19			17.50	0.19			
Excess Return			-0.45	0.09	0.12									
MSTAR Ave: Foreign Large Blend			10.53	1.28	5.72									
BlackRock MSCI ACWI IMI Index Non-Lendable														
Fund M	Passive	0.05	18.44	4.93	10.59	17.07		0.88	n/a	17.83			n/a	
MSCI ACWI IMI Index			18.40	4.70	10.36	16.87	0.08			17.75	0.45			
Excess Return			0.04	0.23	0.23									
MSTAR Ave: World Stock			14.34	3.41	8.79									
TIAA Real Estate Account	Active	1.02	-11.28	-0.26	1.35	8.41	-0.41	3.94	-0.46	6.75	-0.14	3.35	-0.36	
Custom Benchmark ³			-5.26	1.57	2.55	6.48	-0.25			5.46	0.05			
Excess Return			-6.02	-1.83	-1.20									

^{*}Annualized.

Excess over benchmark return by 10 bps or more for index funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing. Below benchmark return by 10 bps or more for index funds Reasonable expectations due to impact of typical sources of tracking including fair value pricing.

Underperformance for an actively managed fund.

Data provided by TIAA, BlackRock, VRS and Zephyr StyleADVISOR.

¹ Refer to the unbunded DC plans for information regarding BlackRock's LifePath Index Funds N, Short-Term Investment Fund W, U.S. Debt Index Fund M and U.S. TIPs Fund M. Although the unbundled DC plans use white lable fund names and TIAA does not these funds are the same exact funds.

² The TIAA Traditional Annuity is not included in this exercise due to the fact there is no performance benchmark associated with TIAA's fixed annuity product offering.

³ Effective January 2014, the Custom Benchmark is 70% NCREIF Open End Diversified Core Equity (ODCE) Net Index, 20% Bloomberg 3-Month Treasury Bill Index and 10% Dow Jones U.S. Select REIT Index.TIAA's investment management team does not manage its real estate account to a published index benchmark. The Custom Benchmark represents a reasonable proxy of how TIAA allocates among real property, short-term investments and REITS over time. VRS anticipates that the TIAA Real Estate Account's returns may vary greatly from those of the custom benchmark.

Bundled ORP for Higher Education - TIAA RC Contract Fund Annual Operating Expenses^{1,2,3} Information as of June 30, 2024

Investment Option	Investment Manager			Plan Administration			•	Expense Ratio YOY Change
TIAA Real Estate Account	TIAA	Active (variable annuity)	0.380000%	0.295000%	0.060000%	0.280000%	1.02%	+0.15%
BlackRock Equity Index Fund J	BlackRock	Passive	0.010000%	n/a	n/a	0.001000%	0.01%	-0.01%
BlackRock Russell 2500 Index Fund J	BlackRock	Passive	0.012500%	n/a	n/a	0.010000%	0.02%	0.00%
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M	BlackRock	Passive	0.090000%	n/a	n/a	0.020000%	0.11%	0.00%
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M	BlackRock	Passive	0.040000%	n/a	n/a	0.010000%	0.05%	0.00%

¹ There are no short-term trading redemption costs associated with any of the investment options.

² Refer to the unbunded DC plans for information regarding BlackRock's LifePath Index Funds N, Short-Term Investment Fund W, U.S. Debt Index Fund M and U.S. TIPs Fund M. The unbundled DC plans use white label fund names for the aforementioned funds. However, TIAA does not have the capability to use white label fund names.

³ Effective July 2022, TIAA no longer provides an estimated expense ratio for its TIAA Traditional Annuity product.

Defined Contribution Plans Advisory Committee Report

TIAA RC Contract Investment Performance

Below are the totals for the period ending June 30, 2024. Returns greater than one year are annualized.

								Fund				% of Participants
La contract O Cons	4.84	0.14	\/TD	4.37	0.14	- W	10 Yrs / Since	•	Inception		% of Market	Selecting an
Investment Options		3 Months	YTD	1 Yr	3 Yrs	5 Yrs	Inception ¹	Ratio ²	Date	Market Value	Value 19	Option ²⁰
Target Date Portfolios 3,4	%	%	%	%	%	%	%	%		\$	%	
BlackRock LifePath Index Retirement Fund N	1.22	1.01	3.54	8.37	0.18	4.34	4.30	0.06	8/1/05	23,887,213	5.4	6.9
Custom Benchmark	1.28	0.98	3.48	8.44	0.21	4.31	4.26					
BlackRock LifePath Index 2025 Fund N	1.24	1.03	3.77	8.78	0.45	5.03	5.06	0.06	7/5/06	21,275,065	4.8	6.3
Custom Benchmark	1.30	1.01	3.73	8.85	0.45	4.99	4.99					
BlackRock LifePath Index 2030 Fund N	1.34	1.23	5.01	10.72	1.43	6.28	5.90	0.06	8/1/05	35,824,919	8.0	8.4
Custom Benchmark	1.42	1.20	4.96	10.83	1.44	6.24	5.82	0.06	7/5/06	24 006 667	7.0	0.0
BlackRock LifePath Index 2035 Fund N Custom Benchmark	1.43	1.46	6.25	12.61	2.35	7.47	6.70	0.06	7/5/06	31,006,667	7.0	8.9
BlackRock LifePath Index 2040 Fund N	1.53	1.43	6.20	12.74	2.34	7.42	6.60	0.06	8/1/05	35,577,637	8.0	9.9
Custom Benchmark	1.51 1.63	1.68 1.65	7.45 7.41	14.47 14.59	3.22 3.19	8.57 8.50	7.41 7.29	0.00	0/1/03	33,377,037	0.0	3.3
BlackRock LifePath Index 2045 Fund N	1.58	1.89	8.58	16.23	4.03	9.54	7.99	0.06	7/5/06	30,899,387	6.9	10.3
Custom Benchmark	1.73	1.86	8.53	16.35	3.97	9.45	7.85	0.00		55,555,551	0.0	
BlackRock LifePath Index 2050 Fund N	1.64	2.06	9.43	17.48	4.56	10.12	8.30	0.06	9/30/07	19,797,470	4.4	8.4
Custom Benchmark	1.79	2.04	9.38	17.61	4.49	10.02	8.15					
BlackRock LifePath Index 2055 Fund N	1.67	2.17	9.84	18.00	4.77	10.29	8.37	0.06	5/19/10	10,962,921	2.5	7.1
Custom Benchmark	1.83	2.14	9.79	18.14	4.70	10.20	8.23					
BlackRock LifePath Index 2060 Fund N	1.67	2.17	9.85	18.01	4.77	10.29	8.77	0.06	11/17/14	3,239,517	0.7	3.8
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	10.21	8.63			, ,		
BlackRock LifePath Index 2065 Fund N	1.67	2.18	9.86	18.02	4.77	n/a	10.53	0.06	9/23/19	7,326,819	1.6	2.5
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	n/a	10.50			,,-		
Individual Options		-										
BlackRock Short-Term Investment Fund W ⁵	0.46	1.39	2.80	5.70	3.37	2.38	1.74	0.08	7/1/03	6,629,208	1.5	7.4
FTSE 3 Month Treasury Bill Index	0.45	1.37	2.76	5.64	3.17	2.22	1.53	0.00	111100	0,020,200	1.0	7
Yield as of 06/30/24: 5.53% ⁶	0.43	1.57	2.70	5.04	5.17	2.22	1.55					
BlackRock U.S. Debt Index Fund M ⁷	0.95	0.13	-0.61	2.66	-2.98	-0.19	1.40	0.03	6/6/96	44 490 CEC	2.5	16.9
Bloomberg U.S. Aggregate Bond Index								0.03	0/0/90	11,180,656	2.5	10.9
BlackRock U.S. TIPS Fund M ⁸	0.95 0.78	0.07 0.87	-0.71 0.89	2.63 2.78	-3.02 - 1.29	-0.23 2.14	1.35 2.00	0.03	7/30/02	E 667 600	1.3	11.8
Bloomberg U.S. TIPS Index								0.03	7/30/02	5,667,620	1.3	11.0
	0.78 3.59	0.79 4.28	0.70 15.29	2.71 24.56	-1.33 10.01	2.07 15.07	1.91 12.89	0.04	0/5/07	50 550 000	40.4	04.4
BlackRock Equity Index Fund J 9								0.01	3/5/97	59,559,963	13.4	24.4
S&P 500 Index BlackRock Russell 2500 Index Fund J 10	3.59	4.28	15.29	24.56	10.01	15.05	12.86	0.00	0/00/00	0.040.704	0.4	4.0
	-1.49	-4.26	2.37	10.57	-0.20	8.39	8.09	0.02	9/30/08	9,218,724	2.1	4.8
Russell 2500 Index	-1.50	-4.27	2.35	10.47	-0.29	8.31	7.99		0100111	10.0-1.100		
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M ¹¹	-0.73	0.95	5.39	11.12	0.28	5.74	4.10	0.11	2/28/11	18,071,163	4.1	16.5
MSCI ACWI ex-U.S. IMI Index	-0.23	0.92	5.28	11.57	0.19	5.62	3.92					
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M 12	1.66	2.37	10.41	18.44	4.93	10.59	8.50	0.05	4/12/13	62,122,565	13.9	29.9
MSCI ACWI IMI Index	1.85	2.38	10.28	18.40	4.70	10.36	8.17					
TIAA Real Estate Account ¹³	-0.66	-1.76	-4.36	-11.28	-0.26	1.35	3.83	1.02	10/2/95	11,298,745	2.5	25.3
Custom Composite Benchmark 14	0.20	- 0.18	-1.75	- 5.26	1.57	2.55	4.82			. ,		
TIAA Traditional Annuity RC ^{15,16,17,18}	0.37	1.12	2.31	4.81	4.35	4.17	4.20	21	8/1/05	36.170.392	8.1	27.4
Self-Directed Brokerage Account									5	23,170,002		
TIAA - Self-Directed Account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6,540,642	1.5	0.9
Total								-		\$446,257,293		
TOTAL										Ψ0,201,290		

Footnotes >

- 1 If the fund was not in existence for 10 years, fund and corresponding benchmark returns shown represent performance from the since inception date.
- 2 Fund investment advisers may voluntarily agree to waive expenses. Expense waivers may be terminated at any time.
- 3 The BlackRock LifePath Index Funds N invest in the master LifePath Index Funds N were 8/15/17. The 2065 Fund's N inception date of the master LifePath Funds F. The inception dates for most LifePath Funds N were 8/15/17. The 2065 Fund's N inception date was 11/15/19. Returns prior to Funds' N inception dates are those of Funds F with deductions taken for Funds N investment management fees.
- 4 Benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the Portfolios' asset classes. Weightings are adjusted quarterly to reflect the Portfolios' asset allocation shifts over time. Indices currently used to calculate the custom benchmarks are: Russell 1000 Index, Russell 2000 Index, MSCI ACWI Ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Long Government Bond Index, Bloomberg U.S. Intermediate Credit Bond Index, Bloomberg U.S. TIPS Index, FTSE EPRA/NAREIT Developed Index and the Bloomberg Commodity Index Total Return.
- 5 An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment it is possible to lose money by investing in the Fund.
- 6 The current yield more closely reflects the earnings of the Fund than the total net return information.
- 7 The BlackRock U.S. Debt Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 7/20/12. Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M's investment management fees.
- 8 The BlackRock U.S. Treasury Inflation-Protected Securities Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 7/20/12.

 Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M' investment management fees.
- 9 The BlackRock Equity Index Fund J invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund J was 3/20/17. Returns prior to Fund J's investment management fees.
- 10 The BlackRock Russell 2500 Fund J invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund J was 10/15/21. Returns prior to Fund J's inception date are those of Fund F with deductions taken for Fund J's investment management fees.
- 11 The BlackRock MSCI ACWI ex-U.S. IMI Index Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 12/31/12. Returns prior to Fund M's investment management fees.
- 12 The BlackRock MSCI ACWI IMI Index Non-Lendable Fund M invests in the master Fund F. Inception dates for the master Fund F and Fund M are both 4/12/13.
- 13 Transfers out of the TIAA Real Estate Account (REA) are limited to one per quarter. Currently, these transfers do not require a minimum transaction amount; however, in the future TIAA reserves the right, in its sole discretion, to impose minimum transaction levels, which levels will generally be at least \$1,000 (except for systematic transfers, which must be at least \$100) or your entire accumulation, if less. Participants may not make a lump-sum transfer into the REA if their aggregated balances across all contracts is greater than \$150,000. Systematic transfers and recurring contributions are not subject to this limitation.
- 14 Effective January 2014, the Custom Composite Index is 70% NCREIF Open End Diversified Core Equity (ODCE) Net Index, 20% Bloomberg 3-Month Treasury Bill Index, and 10% Dow Jones U.S. Select REIT Index. Prior periods include other representative indices. TIAA's investment management team does not manage its real estate portfolio to a specific published index benchmark. The Custom Composite Index represents a reasonable proxy of how TIAA allocates assets among real property, short-term investments, and REITs over time. The Virginia Retirement System anticipates that Fund returns may vary greatly from those of the Custom Composite Index. Benchmark returns are not available for months that do not end on a calendar quarter due to the fact that NCREIF ODCE Index returns are only published each calendar quarter.
- 15 Upon separation from service or retirement participants can convert their TIAA Traditional accumulation dollars amount to a lifetime income option or withdraw funds through a fixed period annuity ranging from five to 30 years or a Transfer Payout Annuity, which enables participants to move funds out of the TIAA Traditional Annuity in 7 annual installments for the Retirement Choice (RC) contract.
- Each installment includes a portion of principal and interest, based on the rate in effect when transfer or withdrawal funds are made. However, there are two exceptions to the payout installment. First, if the
- TIAA Traditional account balance is less than \$5,000, participants can transfer the total amount at any time following termination of employment, but only once during the life of the contract. Second, TIAA Traditional can be withdrawn or transferred to another company up to the full balance within 120 days following termination of employment, subject to 2.5% surrender charge. After the 120-day period, participants can withdraw funds only through a fixed period annuity ranging from five to 30 years or the Transfer Payout Annuity.
- 16 The TIAA Traditional Annuity RC contract has minimum guaranteed rate during the accumulation phase of 1% to 3%. The current minimum rate for the RC contract is 1%. Further, the TIAA Traditional Annuity RC contract applies to premiums deposited during the applicable calendar year and is guaranteed for 10 years, at which point the minimum rate for these premiums will be reset.
- 17 TIAA's annual credited rate on new money for the RC contract for the month of June was 5.75%.
- 18 The TIAA Traditional Annuity is not an investment for purposes of federal securities laws; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, the TIAA Traditional Annuity does not include an identifiable expense ratio. Each premium allocated to the TIAA Traditional Annuity buys a definite amount of lifetime income for participants based on the rate schedule in effect at the premium is paid. In addition, the TIAA Traditional Annuity provides a guarantee of principle, a guaranteed minimum rate of interest and the potential for additional amounts of interest when declared by TIAA's Board of Trustees. Additional amounts, when declared, remain in effect for the "declaration year" that begins each March for the accumulating annuities and January for lifetime payout annuities. Additional amounts are not guaranteed for future years.
- 19 May not equal 100% due to rounding
- 20 The data reflects the percentage of participants who selected a particular investment option as of June 30, 2024. There were 5,389 (RC contract) participants as of June 30,2024.
- 21 Effective July 2022,TIAA no longer provides an estimated expense ratio for its TIAA Traditional Annuity product.

Performance returns shown reflect all fund management fees and other investment related expenses, but do not reflect the TIAA annual administrative fee of \$28 (deducted at \$7.00 per quarter) which would further reduce the returns shown. Performance returns do not reflect redemption fees and/or surrender charges, if applicable.

All calculations assume reinvestment of dividends and capital gains. All returns are calculated in U.S dollars. Fund and benchmark returns are provided by TIAA and BlackRock. Although data is gathered from sources to be reliable, the Virginia Retirement System cannot guarantee completeness or accuracy.

Below benchmark return by 10 bps or more for index funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds

Underperformance for an actively managed fund.

Excess performance for an actively managed fund

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.

Thank you!





COMMITTEE CHARTER FOR THE DEFINED CONTRIBUTION PLANS ADVISORY COMMITTEE

PURPOSE

The purpose of the Defined Contribution Plans Advisory Committee (DCPAC) is to review matters relating to or affecting the plan administration, plan design and investments of the various defined contribution plans established pursuant to the *Code of Virginia* and to make recommendations to the Board regarding those matters.

In addition to the duties and responsibilities outlined in its charter, the DCPAC shall assist the Board with its statutory responsibilities to review and oversee the policies and procedures constituting the process by which the Board reviews and determines whether to approve requests by institutions of higher education that seek to withdraw from participation in the Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education (ORPHE).

AUTHORITY

Sections 51.1-126, 51.1-126.5, 51.1-126.6, 51.1-169, 51.1-602, 51.1-608, and 51.1-618 of the *Code of Virginia* authorize the Board to establish, maintain, and administer various defined contribution plans for eligible employees. Section 51.1-124.26(A) of the *Code of Virginia* authorizes the Board to appoint advisory committees, as it deems necessary.

DUTIES AND RESPONSIBILITIES

The DCPAC is an advisory committee with the purpose of- assisting the Board in fulfilling its statutory responsibilities to review and oversee the policies and procedures constituting the process by which the Board reviews and determines whether to approve requests by institutions of higher education that seek to withdraw from participation in the Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education (ORPHE). The DCPAC accomplishes this by providing defined contribution plan administration, plan design, and investment advice to the Board. The Board has developed the following objectives established the following duties and responsibilities for the DCPAC on an as needed basis unless otherwise specified in consideration of its the Board's need for certain types of information and advice and the requirements of the Code of Virginia:

 The DCPAC is an advisory committee with the purpose of providing defined contribution plan administration, plan design, and investment advice to the Board. **Commented [SJ1]:** This is moved to a later section.

Commented [SJ2]: Moved the committee's responsibility to approve requests to withdraw from ORPHE participation from the Purpose to the Duties and Responsibilities section.

Commented [SJ3]: Conformed the introductory language across all committee charters to clarify that the duties below are performed as needed unless a different frequency is identified.

Commented [SJ4]: Removed duplicative language.

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- Such advice should always be prudent within the context of managing public sector defined contribution plans.
- 2. The DCPAC's recommendations are not binding on the Board, and the DCPAC has no authority over staff or administrative and investment decisions.
- 3. On an ongoing basis, the DCPAC will review defined contribution plan national trends and identify best practices.
- 4. On an ongoing basis, the DCPAC will review statistical information relating to the status of the defined contribution plans and aggregate participant activities in the respective plans.
- 5. On an ongoing basis, the DCPAC will assist staff in identifying potential asset classes and investment strategies that might help each plan achieve its investment objectives and will recommend changes to the Board as needed.
- At least on an annual basis, the DCPAC will review administrative expenses incurred by the defined contribution plans and participant administrative fees assessed as may be applicable and recommend adjustments to the Board as needed.
- Periodically, the DCPAC will review the VRS Defined Contribution Plans
 Investment Policy Statements and VRS Defined Contribution Plans Investment
 Belief Statements and make recommendations to the Board regarding any
 changes or revisions.
- 8. The DCPAC will receive defined contribution plans investment performance and investment fee information at least on a quarterly basis. Atypical performance or other items of a serious nature are brought to the attention of the DCPAC by investment staff as soon as possible. At least on an annual basis, the DCPAC will perform a comprehensive review of the investment program for each plan. Primary emphasis for investment performance should be on longer time frames, such as 3 three (3) and 5 five (5) years, but shorter-term trends should be considered if significant. The DCPAC may provide recommendations, as appropriate, to the Board regarding any investment options that should be considered for addition or deletion, and any significant performance issues as appropriate.
- 9. The DCPAC will sponsor an Annual Employer Update for representatives institutions of higher education whose employees participate in the ORPHE. The purpose of the update Update is to communicate to and receive feedback from the institutions on plan performance, service provider activities, plan or procedure changes, and legislation affecting the plans. The information presented may include a service review for prior year activities and any other preapproved information and materials related to communication, new services to be offered or products under consideration. The DCPAC may be represented by the chairperson or the vice-chairperson as available or by the VRS Director. In addition, the DCPAC member who represents a state-supported college or university may also participate in the Annual Employer Update.

Commented [SJ5]: Clarified this function is performed by investment staff.

Commented [SJ6]: Added language to allow the Director to attend the Annual Employer Update if the chair and vice-chair are unavailable.

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- 10. As needed, the DCPAC will review any changes to the Master Trusts and Plan Documents and make any necessary recommendations to the Board for revisions.
- 11. The DCPAC will receive recommendations from staff regarding bids for defined contribution plans record keepers and recommend to the Board defined contribution plans record keepersthe preferred candidate for Board approval.
- 12. The DCPAC will review data and reports from consultants, as needed, inform the Board about such information received, and advise the Board as to any recommended changes in the defined contribution plans as a result of such data and reports.
- 13. The DCPAC will address any ad hoc request by the Board for specific information or recommendations regarding plan administration and existing or potential investments.
- <u>14.</u> The DCPAC, through the DCPAC chairperson, is authorized to request and consider whatever information it deems relevant in carrying out its duties and responsibilities as outlined in this <u>charterdocument</u>.
- 14.15. Perform such other duties when directed to do so by the Board.

COMPOSITION

The DCPAC is composed of nine members, no more than two of whom mayshall be members of the Board and neither of whom may serve on another VRS advisory committee, in accordance with Va. Code § 51.1-124.26.- The DCPAC shall include two members of the Board. Except for such Board members, no elected or appointed officials may serve on the DCPAC. Appointees to the DCPAC must be approved by a two-thirds vote of the Board. All members of the DCPAC shall serve at the pleasure of the Board and may be relieved of their positions at any time by a majority vote of the Board.- Each non-Board member is appointed to a two-year term; and may be reappointed for an unlimited number of additional terms. \(\frac{1}{2} \)

The seven non-Board member appointees shall be as follows: one shall be an active participating faculty member or employee of a state-supported institution of higher education that participates in the ORPHE; one shall be an active employee of a local school division of the Commonwealth who demonstrates expertise in the administration of retirement benefits; one shall be an active employee of a local government of the Commonwealth that is a participating VRS employer who demonstrates expertise in the administration of retirement benefits; two shall demonstrate expertise in the management

DCPAC Charter Amended 11/16/2017 Page 3 of 6 **Commented [SJ7]:** Clarified process for a record keeper bid process.

Commented [SJ8]: Added a clause for other assigned duties as needed

Commented [SJ9]: Modified language relating to Board members serving on the committee to match the Investment Advisory Committee charter and Code language.

Commented [SJ10]: Removed a footnote regarding DCPAC member terms that expired in 2017.

¹ The terms of all non-Board members expired on June 20, 2017. Upon expiration of their terms, the non-Board members were divided into two groups, with each group being as nearly equal in number as possible. The non-Board members in the first group were appointed to a one-year term, and the non-Board members in the second group were appointed to a two-year term. Thereafter, non-Board members shall be appointed to a term of two years to succeed non-Board members whose terms expire.

and administration of employee DC plans; and two shall demonstrate expertise in the management, analysis or supervision of investments.

OFFICERS

Chairperson

The VRS Board chairperson shall appoint the chairperson of the DCPAC, subject to a two-thirds vote by the Board. The DCPAC chairperson shall be one of the Board members sitting on appointed to the DCPAC. The DCPAC chairperson is appointed for a two-year term that shall not extend past their Board term; and may be reappointed for additional two-year terms unless their term on the Board ends.

The chairperson is charged with has the following duties:

- 1. Facilitating the operation of the DCPAC meetings;
- 2. Reviewing proposed agendas for DCPAC meetings;
- 3. Presiding over meetings of the DCPAC;
- 4. Reporting to the Board on the matters considered by the DCPAC; and the recommendations of the DCPAC; and
- 5. Performing such additional duties as are required to facilitate the DCPAC's fulfillment of its responsibilities.

Vice-Chairperson

The DCPAC vice-chairperson shall be the Board member-sitting on appointed to the DCPAC who is not the chairperson. The DCPAC vice-chairperson is appointed for a two-year term that shall not extend past their Board term and may be reappointed for additional two-year terms as vice-chairperson unless their term on the Board ends or they are appointed as the DCPAC chairperson. Their term shall

The term of the vice-chairperson shall commence upon appointment and shall terminate at the first meeting of the DCPAC following the appointment or reappointment of a DCPAC chairperson, or at the first meeting following such time as the sitting vice-chairperson becomes unable or unwilling to complete his or her term.

The DCPAC vice-chairperson is appointed for a two-year term, and may be reappointed for additional two-year terms.

In the event of the absence or incapacity of the DCPAC chairperson, the vice-chairperson shall preside at meetings of the DCPAC and shall fulfill such other duties and responsibilities of the chairperson as may be necessary.

DCPAC Charter Amended 11/16/2017 Page 4 of 6 **Commented [SJ11]:** Clarified term of chairperson cannot extend beyond their term on the Board.

Commented [SJ12]: Clarified vice-chairperson term may not extend beyond their term on the Board.

Secretary

The Director, or the Director's designee, shall act as secretary to the DCPAC.

The Director shall continue to serve as secretary until such time as he or she is unable or unwilling to continue to do so, or until such time as the DCPAC appoints another secretary.

The secretary has the following duties:

- 1. Help the chairperson develop the agenda for DCPAC meetings;
- 2. Notify DCPAC members of meetings;
- 3. Coordinate and distribute information to DCPAC members;
- 4. Act as primary liaison between the DCPAC and VRS staff;
- 5. Coordinate matters on the agenda and presentations for the DCPAC; and
- 6. Maintain the minutes and records of all DCPAC meetings.

CONDUCT OF BUSINESS

- 1. The rules contained in the current edition of *Robert's Rules of Order Newly Revised* shall govern all DCPAC meetings insofar as they are applicable and not inconsistent with any of the policies adopted by the Board, including this charter, with particular attention to the rules provided for conduct of business in committees. Special note is to be made of the rules provided for procedure in small boards which are deemed to be appropriate for use in all meetings contemplated in this charter.
- 2. Unless otherwise specified by the Board, voting by proxy is not allowed.
- 3. A majority of the members of the DCPAC shall constitute a quorum at meetings of the DCPAC.—For the purposes of determining the presence of a quorum, an abstention or disqualification shall be considered an absence.
- 4. Except as otherwise specified herein, approval of an action or decision shall be by a majority of those DCPAC members present and voting at a DCPAC meeting.
- 5. The DCPAC chairperson will seek at all times to develop a consensus of opinion among DCPAC members in order to be able to present clear and concise recommendations to the Board. In the event that a consensus is not obtainable, the DCPAC chairperson will present the range of opinions and their rationale to the Board.
- 6. The DCPAC chairperson, vice-chairperson or, in their absence, a staff designee, will report to the Board on the content and results of each DCPAC meeting. The chairperson or vice-chairperson will sign all meeting minutes, as applicable.
- 7. The DCPAC will generally meet at least three times per year, and more often if necessary to meet the objectives listed in this charter.

DCPAC Charter Amended 11/16/2017 Page 5 of 6 **Commented [SJ13]:** Removed language that the committee may appoint a secretary other than the Director or the Director's designee across all charters. Do not anticipate this authority being needed.

Commented [SJ14]: Added procedural language relating to small boards. Language was previously in the Board Governance Policy, and is being added to all committee charters.

Commented [SJ15]: Removed language indicating that an abstention vote be considered an absence for purposes of establishing a quorum. This is atypical for board procedures. Usually an abstention does not impact a quorum. In addition, members should be able to abstain if needed without affecting the committee's ability to conduct business.

Commented [SJ16]: Added language to clarify that additional persons may give the committee report to the Board if the chair is unavailable.

CHANGES IN THE CHARTER

The Board may consider changes to this charter at any of its meetings, and a two-thirds vote of the Board is necessary to implement the changes. The DCPAC may from time to time consider changes in the charter that are expected to enable the DCPAC to better serve the needs of the Board. Any charter changes suggested to the Board by the DCPAC must be approved by a majority vote of the DCPAC before submission to the Board, where a two-thirds vote of the Board is necessary to implement the changes.

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COMMITTEE CHARTER FOR THE DEFINED CONTRIBUTION PLANS ADVISORY COMMITTEE

PURPOSE

The purpose of the Defined Contribution Plans Advisory Committee (DCPAC) is to review matters relating to or affecting the plan administration, plan design and investments of the various defined contribution plans established pursuant to the *Code of Virginia* and to make recommendations to the Board regarding those matters.

AUTHORITY

Sections 51.1-126, 51.1-126.5, 51.1-126.6, 51.1-169, 51.1-602, 51.1-608, and 51.1-618 of the *Code of Virginia* authorize the Board to establish, maintain, and administer various defined contribution plans for eligible employees. Section 51.1-124.26(A) of the *Code of Virginia* authorizes the Board to appoint advisory committees as it deems necessary.

DUTIES AND RESPONSIBILITIES

The DCPAC is an advisory committee with the purpose of assisting the Board in fulfilling its statutory responsibilities to review and oversee the policies and procedures constituting the process by which the Board reviews and determines whether to approve requests by institutions of higher education that seek to withdraw from participation in the Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education (ORPHE). The DCPAC accomplishes this by providing defined contribution plan administration, plan design, and investment advice to the Board. The Board has established the following duties and responsibilities for the DCPAC on an as needed basis unless otherwise specified in consideration of the Board's need for certain types of information and advice:

- 1. DCPAC advice should always be prudent within the context of managing public sector defined contribution plans.
- 2. The DCPAC's recommendations are not binding on the Board and the DCPAC has no authority over staff or administrative and investment decisions.
- 3. On an ongoing basis, the DCPAC will review defined contribution plan national trends and identify best practices.
- 4. On an ongoing basis, the DCPAC will review statistical information relating to the status of the defined contribution plans and aggregate participant activities in the respective plans.

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- 5. On an ongoing basis, the DCPAC will assist staff in identifying potential asset classes and investment strategies that might help each plan achieve its investment objectives and will recommend changes to the Board as needed.
- 6. At least on an annual basis, the DCPAC will review administrative expenses incurred by the defined contribution plans and participant administrative fees assessed as may be applicable and recommend adjustments to the Board as needed.
- 7. Periodically, the DCPAC will review the VRS Defined Contribution Plans Investment Policy Statements and VRS Defined Contribution Plans Investment Belief Statements and make recommendations to the Board regarding any changes or revisions.
- 8. The DCPAC will receive defined contribution plans investment performance and investment fee information at least on a quarterly basis. Atypical performance or other items of a serious nature are brought to the attention of the DCPAC by investment staff as soon as possible. At least on an annual basis, the DCPAC will perform a comprehensive review of the investment program for each plan. Primary emphasis for investment performance should be on longer time frames, such as three (3) and five (5) years, but shorter-term trends should be considered if significant. The DCPAC may provide recommendations, as appropriate, to the Board regarding any investment options that should be considered for addition or deletion and any significant performance issues.
- 9. The DCPAC will sponsor an Annual Employer Update for institutions of higher education whose employees participate in the ORPHE. The purpose of the Update is to communicate to the institutions on plan performance, service provider activities, plan or procedure changes, and legislation affecting the plans. The information presented may include a service review for prior year activities and any other preapproved information and materials related to communication, new services to be offered or products under consideration. The DCPAC may be represented by the chairperson or the vice-chairperson as available or by the VRS Director. In addition, the DCPAC member who represents a state-supported college or university may also participate in the Annual Employer Update.
- 10. As needed, the DCPAC will review any changes to the Master Trusts and Plan Documents and make any necessary recommendations to the Board for revisions.
- 11. The DCPAC will receive recommendations from staff regarding bids for defined contribution plans record keepers and recommend to the Board the preferred candidate for Board approval.
- 12. The DCPAC will review data and reports from consultants, as needed, inform the Board about such information received, and advise the Board as to any recommended changes in the defined contribution plans as a result of such data and reports.
- 13. The DCPAC will address any ad hoc request by the Board for specific information or recommendations regarding plan administration and existing or potential investments.

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- 14. The DCPAC, through the DCPAC chairperson, is authorized to request and consider whatever information it deems relevant in carrying out its duties and responsibilities as outlined in this charter
- 15. Perform such other duties when directed to do so by the Board.

COMPOSITION

The DCPAC is composed of nine members, no more than two of whom may be members of the Board and neither of whom may serve on another VRS advisory committee, in accordance with Va. Code § 51.1-124.26. The DCPAC shall include two members of the Board. Except for such Board members, no elected or appointed officials may serve on the DCPAC. Appointees to the DCPAC must be approved by a two-thirds vote of the Board. All members of the DCPAC shall serve at the pleasure of the Board and may be relieved of their positions at any time by a majority vote of the Board. Each non-Board member is appointed to a two-year term and may be reappointed for an unlimited number of additional terms.

The seven non-Board member appointees shall be as follows: one shall be an active participating faculty member or employee of a state-supported institution of higher education that participates in the ORPHE; one shall be an active employee of a local school division of the Commonwealth who demonstrates expertise in the administration of retirement benefits; one shall be an active employee of a local government of the Commonwealth that is a participating VRS employer who demonstrates expertise in the administration of retirement benefits; two shall demonstrate expertise in the management and administration of employee DC plans; and two shall demonstrate expertise in the management, analysis or supervision of investments.

OFFICERS

Chairperson

The VRS Board chairperson shall appoint the chairperson of the DCPAC, subject to a two-thirds vote by the Board. The DCPAC chairperson shall be one of the Board members appointed to the DCPAC. The DCPAC chairperson is appointed for a two-year term that shall not extend past their Board term and may be reappointed for additional two-year terms unless their term on the Board ends.

The chairperson has the following duties:

- 1. Facilitating the operation of the DCPAC meetings;
- 2. Reviewing proposed agendas for DCPAC meetings;
- 3. Presiding over meetings of the DCPAC:

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- 4. Reporting to the Board on the matters considered by the DCPAC and the recommendations of the DCPAC; and
- 5. Performing such additional duties as are required to facilitate the DCPAC's fulfillment of its responsibilities.

Vice-Chairperson

The DCPAC vice-chairperson shall be the Board member appointed to the DCPAC who is not the chairperson. The DCPAC vice-chairperson is appointed for a two-year term that shall not extend past their Board term and may be reappointed for additional two-year terms as vice-chairperson unless their term on the Board ends or they are appointed as the DCPAC chairperson. In the event of the absence or incapacity of the DCPAC chairperson, the vice-chairperson shall preside at meetings of the DCPAC and shall fulfill such other duties and responsibilities of the chairperson as may be necessary.

Secretary

The Director, or the Director's designee, shall act as secretary to the DCPAC.

The secretary has the following duties:

- 1. Help the chairperson develop the agenda for DCPAC meetings;
- 2. Notify DCPAC members of meetings;
- 3. Coordinate and distribute information to DCPAC members;
- 4. Act as liaison between the DCPAC and VRS staff:
- 5. Coordinate matters on the agenda and presentations for the DCPAC; and
- 6. Maintain the minutes and records of all DCPAC meetings.

CONDUCT OF BUSINESS

- 1. The rules contained in the current edition of *Robert's Rules of Order Newly Revised* shall govern all DCPAC meetings insofar as they are applicable and not inconsistent with any of the policies adopted by the Board, including this charter, with particular attention to the rules provided for conduct of business in committees. Special note is to be made of the rules provided for procedure in small boards which are deemed to be appropriate for use in all meetings contemplated in this charter.
- 2. Unless otherwise specified by the Board, voting by proxy is not allowed.
- 3. A majority of the members of the DCPAC shall constitute a quorum at meetings of the DCPAC.
- 4. Except as otherwise specified herein, approval of an action or decision shall be by a majority of those DCPAC members present and voting at a DCPAC meeting.

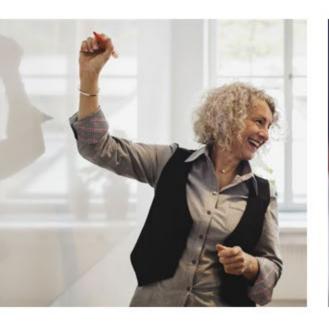
DCPAC Charter Amended 11/16/2017 Page 4 of 5

- 5. The DCPAC chairperson will seek at all times to develop a consensus of opinion among DCPAC members in order to be able to present clear and concise recommendations to the Board. In the event that a consensus is not obtainable, the DCPAC chairperson will present the range of opinions and their rationale to the Board.
- 6. The DCPAC chairperson, vice-chairperson or, in their absence, a staff designee, will report to the Board on the content and results of each DCPAC meeting. The chairperson or vice-chairperson will sign all meeting minutes, as applicable.
- 7. The DCPAC will generally meet at least three times per year, and more often if necessary to meet the objectives listed in this charter.

CHANGES IN THE CHARTER

The Board may consider changes to this charter at any of its meetings, and a two-thirds vote of the Board is necessary to implement the changes. The DCPAC may from time to time consider changes in the charter that are expected to enable the DCPAC to better serve the needs of the Board. Any charter changes suggested to the Board by the DCPAC must be approved by a majority vote of the DCPAC before submission to the Board, where a two-thirds vote of the Board is necessary to implement the changes.









VRS Defined Contribution Plans 2nd Quarter 2024

(April 1 - June 30, 2024)

Administrative Summary September 12, 2024

Agenda

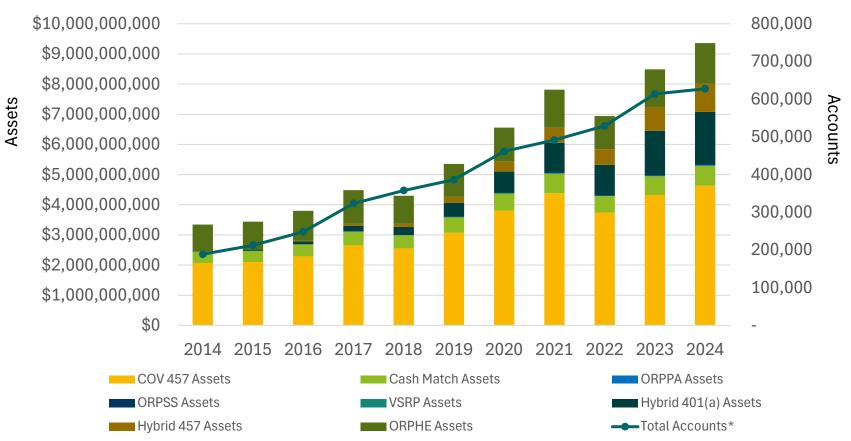
- General Updates
- COV 457 & Cash Match Plans
- Hybrid Retirement Plan
- ORPHE
- Upcoming Events
- DC Plans Unbundled Record Keeper Transition Update





Total Assets and Accounts Over Time

Totals as of 6/30/2024	Assets	Accounts	Assets ↑ 3%
	¢0 250 152 415	627,765	Accounts ↑ 1%
	\$9,359,152,415		Since 3/31/2024





Note: All data except for the current year reflects totals as of calendar year-end and includes ORPHE selected providers and MissionSquare participant, beneficiary, forfeiture & reserve accounts. 2024 data is as of 6/30/2024.

EVMS/ODU Merger Summary

Eastern Virginia Medical School
457 Deferred Compensation Plan

Old Dominion University
COV 457 Deferred Compensation Plan







- \$24M across 124 participant accounts
- Blackout period scheduled from June 28 through July 16
 - Lifted on July 11 after full reconciliation of accounts/assets



COV 457 SDBA De-commingling

- Initial participant notifications sent June 14
- Blackout window scheduled July 22 through July 29
 - Lifted July 29, all trading restored.
- \$4.7M in Roth assets transferred to 180 new Roth SDBA accounts with MissionSquare.





COV 457/Cash Match Plan Assets and Accounts

	Totals as of 6/30/2024	Assets	Accounts		
	COV 457	\$4,634,607,583	91,828	Assets ↑ 1.6% Since 3/31/2024	
	Cash Match	\$656,530,745	74,926	61116C 6/61/2024	
\$6	5,000,000,000			200,000)
				180,000)
\$5	5,000,000,000			160,000)
\$4	1,000,000,000			140,000	_
•	,,		_	120,000	Accounts
\$3	3,000,000,000	_		100,000	nts
Φ.		•		80,000	
\$2	2,000,000,000			60,000	
\$1				40,000	
				20,000	
	\$0				

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

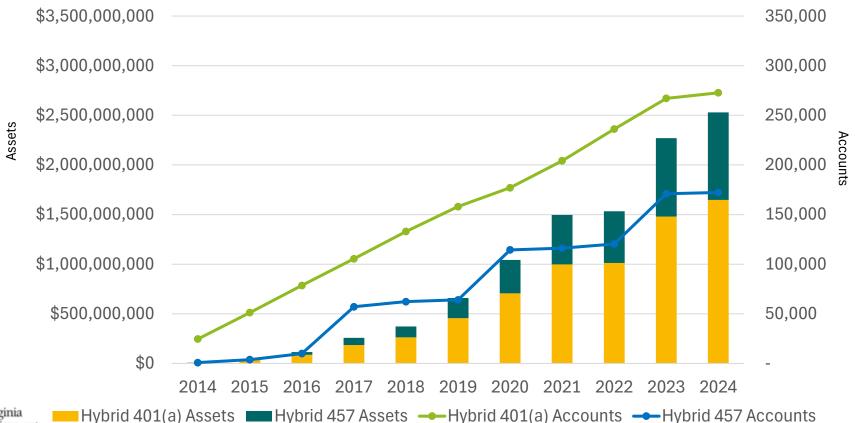
■COV 457 Assets Cash Match Assets COV 457 Accounts Cash Match Accounts



Assets

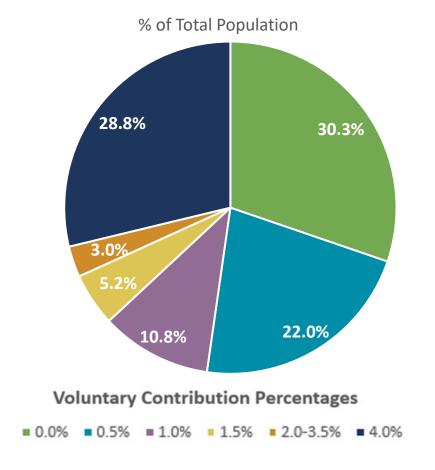
Hybrid Retirement Plan Assets and Accounts (DC only)

Totals as of 6/30/2024	Assets	Accounts	Assets ↑ 6.8%
Hybrid 401(a)	\$1,755,995,364	276,830	Accounts ↑ 1.1%
Hybrid 457	\$944,592,970	173,117	Since 3/31/2024





Hybrid Retirement Plan Voluntary Contribution Elections



Overall Voluntary Contribution Participation Rate 69.8%

Active Election Rate 33.5%

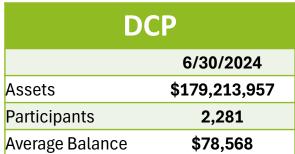


ORPHE

Administrative Summary

ORPHE Totals*			
	3/31/2024	6/30/2024	% Change
Assets	1,309,794,296	1,334,874,889	2%
Participants	10,612	10,561	0%
Average Balance	\$123,426	\$126,397	2%





27% of new hires through Q2 2024 elected DCP as their provider.



TIAA**			
	6/30/2024		
Assets	\$1,155,660,932		
Participants	8,280		
Average Balance	\$139,573		

73% of new hires through Q2 2024 elected TIAA as their provider.



^{*}Excludes deselected providers.

^{**}Includes assets in GRA/RA and RC contracts. Data through 6/30/2024.

TIAA Updates

Record-keeping Agreement: Amendment #7

- Integrated TIAA's Cybersecurity Agreement to ensure compliance with VITA and VRS standards
- Updates Field Consulting employer outreach and campus counseling visits service level standards
- Execution anticipated for September 2024

Beneficiary Campaign



Targeted campaign to participants with and without a beneficiary election.

Participants with	Email	Direct Mail
No Beneficiaries on File	1,387	401
Beneficiaries on File	5,884	534
Total	7,271	935

Why naming beneficiaries is important.





Manage your beneficiary information at tiaa.org.

Reviewing and updating your beneficiaries puts you in control of where your assets go, and can make a difference for the people and causes you care about.

Manage Beneficiaries

Have you had any life changes in the last year? If so, you should review and update your Optional Retirement Plan for Higher Education (ORPHE) account beneficiary designations. Take five minutes to make sure your wishes are made clear.



Upcoming Events



Ongoing

Content review and approval cycle for various items.

September

Annual ORPHE Employer Update Annual ORPHE Fee Disclosure Voya Transition - Key Stakeholder Meetings

October

ORPHE Open Enrollment

Voya Transition – Employer Meetings

Voya Transition - Transition Communications Distributed

Voya Transition – Participant Meetings Begin

November

Voya Transition – Participant Meetings Continue Voya Transition – Continued Employer Engagement

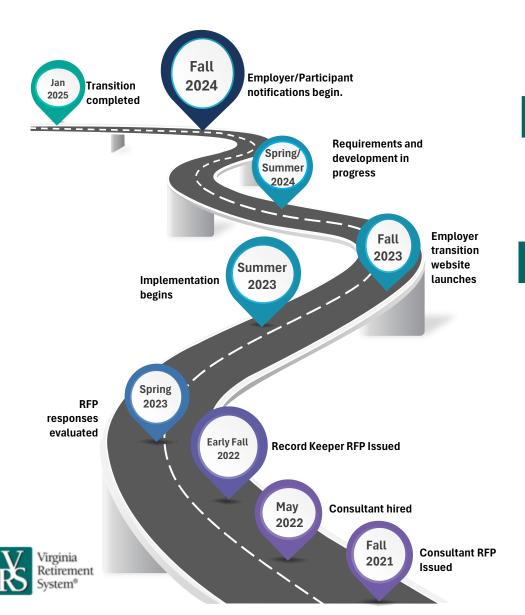


DC Plans Unbundled Record Keeper Project Status





Unbundled Record Keeper Contract



Project Status

- Overall status is GREEN.
- Although a few areas are slightly delayed including custom reporting/contracts.

Milestones

- Contract In progress, on track
- Employer transition website Completed
- Finalized conversion timeline Completed
- Detailed project plan Completed
- Initial requirements completed In progress
 - Reports Completed
 - Interface files Completed
 - Website development In progress, on track
 - Forms In progress, on track

Contracts/Agreements



Forms/Reporting/Procedural



- Primary contract
- Ancillary agreements
 - Approved Domestic Relations Orders.
 - Advice/Managed Accounts.
 - Be Ready Financial Planning.
 - Custodial.
 - Schwab SDBA.

- Custom reporting in review.
- Forms development/review in progress.
- VRS/Voya Administrative Guide in progress.



Participant and Employer Support

Participant Call Center



Employer Support Team



- Temporary toll-free number will open on October 1 for transitionrelated inquiries.
- Culture training scheduled for December 13.
- Current toll-free number will be reassigned to Voya on January 1, 2025.

- New toll-free number created for Employer Support Team.
- New Employer Support Email.
- Opened for data-gathering and Payroll Support July 1.
- One non-dedicated team member has been hired. Three dedicated positions are currently open.
- Goal is to be fully staffed by September 30.



Participant Education

Virginia-based Field Team



- All nine dedicated positions have been filled.
 - Staggered hiring dates beginning mid-September through January.
 - Plan Coordinator and Plan Manager will start mid-September.



Communications/Websites

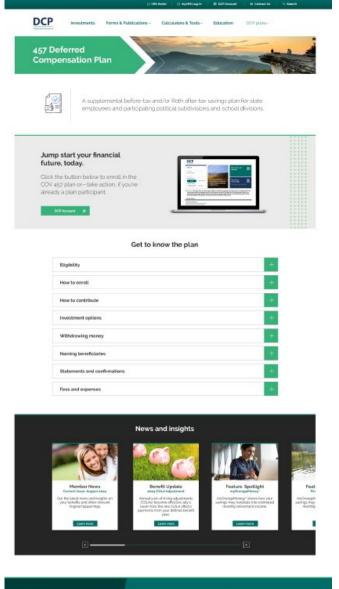
- Colors and imagery in final review.
- Content review cycle is underway for various items.
 - Publications.
 - Video scripts.
 - Web.
- Transition Communications.
 - Mailings.
 - Webpage.
 - Emails.





Communications/Websites

- Webpage design in final review.
- Persistent headers for centralized menu items.
 - Investments.
 - Forms & Publications.
 - Calculators & Tools.
 - Education.
- Landing page for each plan includes key data points in expandable sections.







Transition Communications Timeline

July 2024



October 2024



December 2024

January 2025



itial emn

Initial **employer** communication from Voya.

Data collection site launched.



Key Stakeholder informational meetings.



informational meetings to begin.

- Emails
- Webinars

Participant

communications begin.

- Mailings
- Website
- Meeting
- Webinars

Participant

communications continue.

Employer training sessions begin.

Participant communications continue.

Employer training sessions continue.

Participant

communications continue.

12/20/2024

- Transition process begins.
- Participant transactions limited.

12/31/2024

 Last day for MissionSquare to process contributions.

Week of 1/6/2025

- Transition period ends.
- Participants may process transactions online and by phone.



Thank you!





SageView Advisory Group September 12, 2024 SEE WHERE YOU'RE GOING



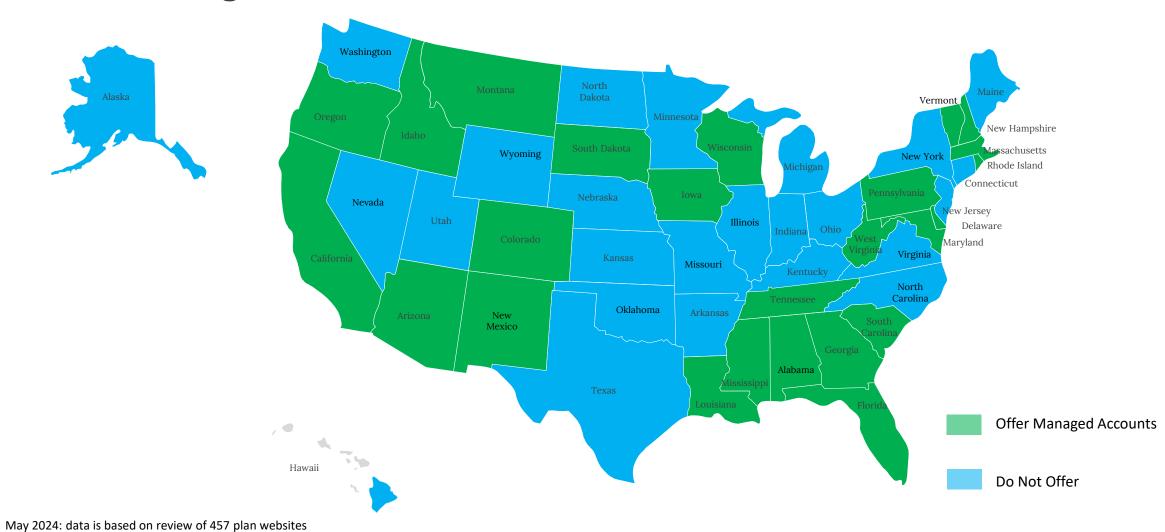
Advice & Managed Accounts

Virginia Retirement System



SageView Advisory Group SEE WHERE YOU'RE GOING

Advice & Managed Accounts



SageView Advisory Group SEE WHERE YOU'RE GOING

Advice & Managed Accounts – Outreach

457 Plans	Tennessee Deferred Compensation	California Savings Plus Program	Maryland Supplemental Retirement Plans	New Mexico PERA
Recordkeeper	Empower	Nationwide	Nationwide	Voya
Assets	\$7 B	\$22 B	\$6 B	\$1 B
Year began offering	2007	2013	2016	2019
Participant usage	17%	6%	11%	7%

Benefits & Recommendations

Retention is a perceived benefit

Users contribute more and are more diversified

Help participants identify optimal savings rate

Get allocation information

Get performance information

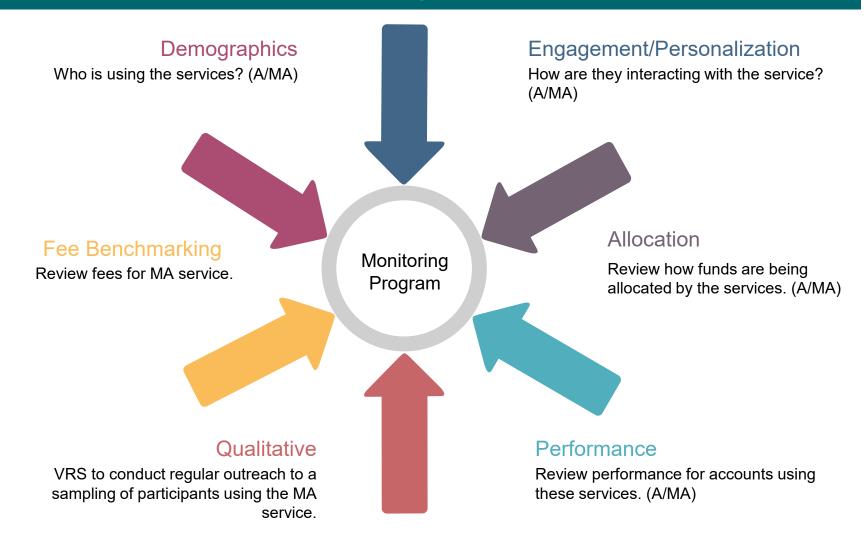
Best fit is for large accounts

Participant must remain engaged to get benefit

Remind participants they are enrolled

SageView Advisory Group SEE WHERE YOU'RE GOING

Advice (A) and Managed Accounts (MA)



Demographics

- Usage data by accounts and assets with age/salary. (A/MA)
- New users. (A/MA)
- Continuation with MA following initial trial.
- Asset retention for MA users versus non-MA users.
- Contribution rates and increases for MA users versus non-users.

Performance

- General comparison between MA users and non-users by age group.
- MA users: look at inputs, personalization, and performance (as compared to a default) from a prudent person perspective.
- Performance would need to be net of fees.

Engagement/Personalization

- Inputs available/requested as part of onboarding into the MA service.
 - % of MA users that provide data by input.
- Standard engagement data (calls, emails, etc.) for A/MA users.

Qualitative

- Direct outreach from VRS staff to a sampling of MA users.
 - Prepared questions with open-ended responses.
- Voya also conducts participant surveys, which will also be reviewed.

Allocation

- Equity overlay across age brackets for MA users.
- MA users: look at inputs, personalization, and allocation from a prudent person perspective.

Fee Benchmarking

 Outreach to peer plans to provide comparison data for MA fees.

- Advice includes participants that have used the Advice tool online and chose to implement the recommendations provided.
- Managed Accounts includes participants that have enrolled in Managed Accounts.
- Some data may already be included in the Reach & Impact Report. Will review with Voya. If not included, these will need to be separate reports.

Managed Accounts – User Interactions

- Welcome Kit listing personalizations made.
- Quarterly Retirement Updates showing progress toward retirement and personalizations being used.
- Custom targeted communication campaigns developed with VRS.
- Confirmations from any allocation changes from VRA.
- VRA Call Center provides access to Advisors (Chartered Retirement Planning Counselor and CFP®).
- Voya participant surveys.
- VRS outreach.
- Re-enrollment can be an option.

Virginia Retirement System



DC Plans Advisory Committee Annual Investment Review

September 12, 2024

Virginia Retirement System DC Plans Advisory Committee Investment Department – Annual Review 2024

Overview

The Defined Contribution Plans Advisory Committee (DCPAC) is an advisory committee with the purpose of reviewing matters relating to or affecting the plan administration, plan design, and investments of the various defined contribution (DC) plans established pursuant to the Code of Virginia and to make recommendations to the Board regarding those matters. The DCPAC's recommendations are not binding on the Board and the DCPAC has no authority over staff or administrative and investment decisions.

The Committee Charter outlines several responsibilities to be performed by the DCPAC. Investment responsibilities include:

- Reviewing national trends and identifying best practices.
- Assisting staff with identifying potential asset classes and investment strategies and recommending changes to the Board as needed.
- Performing an annual comprehensive review of the investment program for each plan
 with an emphasis on longer periods, such as three and five years but shorter-term trends
 are also considered if they are significant. The DCPAC may provide recommendations to
 the Board regarding any investment options that should be considered for addition or
 deletion as well as informing the Board of any significant performance issues as
 appropriate.
- Periodically, reviewing the Investment Policy Statements for the VRS DC plans, the VRS
 Defined Contribution Plans Investment Belief Statements and recommending any
 changes to the Board.

The purpose of this annual review is to provide the DCPAC with investment information needed to perform its annual comprehensive review of the investment program for each plan. Please refer to subsequent sections of this package for performance information that covers the periods ending June 30, 2024.

As of June 30, 2024, DC plan assets for those investments overseen by investment staff totaled \$8.6 billion (unbundled plans: ~\$8.2 billion; bundled TIAA ORPHE ~\$446.3 million). Each program offered the following number of investment options*:

- Unbundled DC Plans: Eleven* investment options and a self-directed brokerage option.
- ORPHE TIAA: Ten* investment options and a self-directed brokerage option.

*Target date portfolio series are counted as one investment option. If each target date portfolio is counted separately there are a total of twenty core investment options within the unbundled DC plans and nineteen core investment options within the bundled TIAA ORPHE.

Unbundled DC Plan Structure

An unbundled DC plan structure provides investment staff with maximum flexibility to add or delete investment options as appropriate in an efficient manner. This fully open architecture approach enables investment staff to contract directly with investment managers. The unbundling of investment contracts from plan recordkeeping / administration contracts is a best practice within the DC industry and is in line with VRS Defined Contribution Plans Investment Belief Statements.

Most DC plans administered by VRS operate in a fully unbundled plan structure. The exception is the Optional Retirement Plan for Higher Education (ORPHE) where one of the two plan program providers operate under a bundled plan structure.

No investment manager changes were made to the unbundled DC plans investment platform this past fiscal year. Detailed information about the unbundled DC plans investments is included in subsequent sections of this package.

Bundled DC Plan Structure

A bundled DC plan structure does not provide investment staff with as much flexibility to add or delete investment options as appropriate in an efficient manner and is not the preferable structure. Constraints within a bundled plan construct may limit the scope of available investment options and may limit access to more attractive options within asset classes.

TIAA, one of the providers for the ORPHE, is structured in a bundled manner where investment option offerings are included as part of the provider's recordkeeping / administration contract. TIAA has become more flexible over the years in working with plan sponsors such as VRS to increase its investment fund opportunity set.

No investment manager changes were made to the bundled TIAA investment platform this past fiscal year. Detailed information about the bundled TIAA investment offerings is included in subsequent sections of this package.

Recordkeeping Transition

Investment staff has an integral role in ensuring the transition from MissionSquare to Voya is successful. Project tasks include investment manager interface and trading, investment reporting and investment communication materials. It should be noted administration staff requested that investment staff make no changes or improvements to the DC investment program during this time-period. Thus, investment staff's projects are placed on hold for a time.

Investment Policy Statements

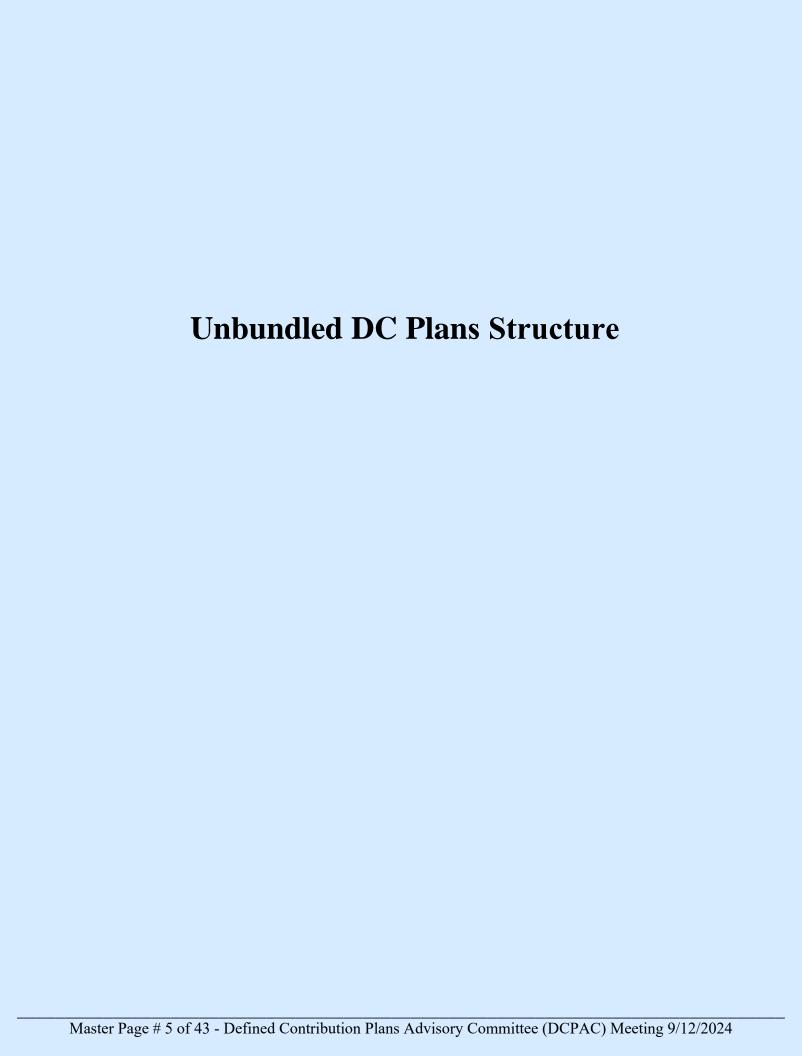
Periodically, staff reviews the investment policy statements (unbundled structure and bundled structure) for potential changes to the documents. Staff anticipates providing the Committee with suggested edits at an upcoming Committee meeting.

VRS Defined Contribution Plans Investment Belief Statements

Periodically, staff reviews the VRS Defined Contribution Plans Investment Belief Statements for potential changes to the document. Staff anticipates providing the Committee with suggested edits at an upcoming Committee meeting.

Other

During this past annual reporting period staff discussed various DC trends and best practices and provided the Committee with Vanguard's How America Saves 2023 Report, CEM's annual Defined Contribution Plans Survey results and Callan's 2024 DC Trends Survey.



				Returns			3 Year St	atistics			5 Year Stat	istics	
		Fund					Sharpe		Information				Information
		Expense			- > .	Deviation	Ratio	Error	Ratio	Deviation	Ratio	Error	Ratio
Fund	Type	Ratio	1 Year	3 Years*	5 Years*								
		%	%		%	%		%		%		%	
Money Market Fund	Capital	0.08	5.70	3.37	2.38	n/a	n/a			n/a	n/a	n/a	n/a
FTSE 3 Month Treasury Bill Index	Preservation		5.64	3.17	2.22	n/a	n/a	n/a		n/a	n/a	n/a	
Excess Return			0.06	0.20	0.16								
Stable Value Fund ¹	Capital	0.24	3.18	2.24	2.21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Custom Benchmark ²	Preservation		4.90	3.57	2.50	n/a	n/a	n/a		n/a	n/a	n/a	
Excess Return	(Book Value)		-1.72	-1.33	-0.29								
eVestment Alliance Median: Stable Value Universe ³			2.96	2.35	2.29								
Bond Fund	Passive	0.03	2.66	-2.98	-0.19	7.42	-0.84		n/a	6.22	-0.40	0.14	n/a
Bloomberg U.S. Aggregate Bond Index			2.63	-3.02	-0.23	7.43	-0.85			6.23	-0.41		
Excess Return			0.03	0.04	0.04								
MSTAR Ave: IntermediateTerm Bond			2.99	-3.13	-0.29								
Inflation-Protected Bond Fund	Passive	0.03	2.78	-1.29	2.14	7.21	-0.63		n/a	6.27	-0.02	0.18	n/a
Bloomberg U.S. TIPS Index			2.71	-1.33	2.07	7.21	-0.64			6.25	-0.04		
Excess Return			0.07	0.04	0.07								
MSTAR Ave: Inflation-Protected Bond			2.66	-0.82	2.18								
High-Yield Bond Fund	Active	0.39	9.78	1.47	3.87	7.70	-0.23		-0.09	8.81	0.18		0.13
ICE BofA U.S. HY BB-B Constrained Index Excess Return			10.08	1.62	3.66	8.47	-0.20			9.07	0.15		
			-0.30	-0.15	0.21								
MSTAR Ave: High-Yield Bond			9.76	1.36	3.16	17.00				10.00			
Stock Fund S&P 500 Index	Passive	0.01	24.55 24.56	10.01 10.01	15.06 15.05	17.86 17.86	0.38 0.38		n/a		0.71 0.71	0.02	n/a
Excess Return			-0.01	0.00	0.01	17.86	0.38			18.08	0.71		
MSTAR Ave: Large Blend			21.19	7.63	12.57								
Small/Mid-Cap Stock Fund	Passive	0.02	10.57	-0.20	8.38	20.91	-0.17	0.03	n/a	22.70	0.27	0.06	n/a
Russell 2500 Index	rassive	0.02	10.57	-0.20 -0.29	8.31	20.91	-0.17 -0.17		II/a	22.70	0.27	0.00	II/a
Excess Return			0.10	0.09	0.07	20.51	-0.17			22.7	0.27		
MSTAR Ave: Mid-Cap Blend			13.15	3.54	9.32								
International Stock Fund	Passive	0.06	11.17	0.32	5.79	17.09	-0.17	2.26	n/a	17.87	0.20	1.89	n/a
MSCI ACWI ex-U.S. IMI Index (linked to MSCI World ex-U.S. Index		0.00	11.57	0.19	5.62		0				0.20		.,,
July 2012 - July 2016)						16.39	-0.19			17.50	0.19		
Excess Return			-0.40	0.13	0.17								
MSTAR Ave: Foreign Large Blend			10.53	1.28	5.72								
Global Real Estate Fund	Passive	0.08	5.48	-3.87	0.18	19.85	-0.35	1.07	n/a	20.58	-0.10	0.68	n/a
FTSE EPRA/NAREIT Developed Index			4.54	-4.77	-0.69	19.78	-0.40			20.63	-0.14]
Excess Return			0.94	0.90	0.87								
MSTAR Ave: Global Real Estate			4.94	-5.35	-0.37								

^{*}Annualized.

¹ Stable value funds typically track the general movements of interest rates with a lag. It is expected that when interest rates are falling stable value yields do not fall as quickly and when when interest rates are rising stable value yields do not rise as quickly.

² Effective August 2016, the benchmark represents a hypothetical return generated by the monthly yields of actively traded U.S. Treasuries based on [50% 2-year maturity + 50% 3-year maturity] plus an annualized spread of 0.25% and is representative of the Fund's expected return profile, given how the Fund is managed and book value accounting treatment.

³ eVestment Alliance universe returns are gross of investment management fees and net of wrap fees. The Stable Value Fund returns are net of all fees.

Unbundled DC Plans

Data for period ending June 30, 2024

			Returns			3 Year Statistics				5 Year Statistics			
Fund	Type	Fund Expense Ratio	1 Year	3 Years*	5 Years*		Sharpe Ratio	Tracking Error	Information Ratio	Standard Deviation	Sharpe Ratio		Information Ratio
	- 7	%	%	%	%	%		%		%		%	
Retirement Portfolio	Passive	0.06	8.37	0.17	4.32	10.47	-0.30	0.35	n/a	9.65	0.21	0.29	n/a
Custom Benchmark ⁴			8.44	0.21	4.31	10.39	-0.30			9.60	0.21		
Excess Return			-0.07	-0.04	0.01								
Target Date 2025 Portfolio	Passive	0.06	8.78	0.43	5.01	11.28	-0.25	0.39	n/a	10.98	0.25	0.33	n/a
Custom Benchmark ⁴			8.85	0.45	4.99	11.17	-0.25			10.92	0.25		
Excess Return			-0.07	-0.02	0.02								
Target Date 2030 Portfolio	Passive	0.06	10.72	1.42	6.27	12.72			n/a				n/a
Custom Benchmark ⁴			10.83	1.44	6.24	12.60	-0.15			12.63	0.31		
Excess Return			-0.11	-0.02	0.03								
Target Date 2035 Portfolio	Passive	0.06	12.61	2.34	7.45	14.02			n/a	14.28			n/a
Custom Benchmark ⁴			12.74	2.34	7.42	13.87	-0.07			14.22	0.36		
Excess Return			-0.13	0.00	0.03				,	15.01			,
Target Date 2040 Portfolio	Passive	0.06	14.47	3.21	8.55	15.28		0.68	n/a	15.81			n/a
Custom Benchmark ⁴			14.59	3.19	8.50	15.10	-0.01			15.72	0.39		
Excess Return		0.00	-0.12	0.02	0.05	10.07	0.05		,	17.00	0.40	0.05	,
Target Date 2045 Portfolio	Passive	0.06	16.23 16.35	4.01 3.97	9.52 9.45	16.37		0.77	n/a				n/a
Custom Benchmark ⁴ Excess Return					0.07	16.17	0.04			16.92	0.42		
Target Date 2050 Portfolio	Passive	0.06	-0.12 17.48	0.04 4.55	10.10	16.93	0.07	0.82	n/a	17.61	0.44	0.70	n/a
Custom Benchmark ⁴	Passive	0.06	17. 48 17.61	4.55 4.49	10.10				n/a				n/a
Excess Return			-0.13	0.06	0.08	16.71	0.07			17.51	0.44		
Target Date 2055 Portfolio	Passive	0.06	18.00	4.75	10.28	17.05	0.09	0.84	n/a	17.71	0.45	0.71	n/a
Custom Benchmark ⁴	1 433170	0.00	18.14	4.70	10.20	16.84			11/4	17.63			11/4
Excess Return			-0.14	0.05	0.08	10.04	0.00			17.03	0.43		
Target Date 2060 Portfolio	Passive	0.06	18.01	4.76	10.27	17.05	0.09	0.84	n/a	17.72	0.45	0.71	n/a
Custom Benchmark ⁴		1.00	18.16	4.70	10.21	16.84			.,,,,	17.63			,
Excess Return			-0.15	0.06	0.06	1	1.00						
Target Date 2065 Portfolio	Passive	0.06	18.02	4.76	N/A	17.05	0.09	0.84	n/a	n/a	n/a	n/a	n/a
Custom Benchmark ⁴			18.16	4.70	N/A	16.85				n/a			
Excess Return			-0.14	0.06	N/A	1	1.00		l	1.,	,,,,		

*Annualized.

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.

Underperformance for an actively managed fund.

Excess performance for an actively managed fund

Below benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the the nature of book value accounting treatment for stable value funds as it relates to interest rates.

Data provided by BlackRock, Galliard, MissionSquare and Zephyr StyleADVISOR.

⁴ The Custom Benchmark is calculated using blended returns of third party indices that proportionally reflect the respective weightings of the Fund's asset classes. Weightings are adjusted quarterly to reflect the Fund's changing asset allocations over time. As of May 11, 2022 the indices used to calculate the Custom Benchmark are the: Russell 1000 Index, Russell 2000 Index, MSCI ACWI ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Intermediate Credit Bond Index, Bloomberg U.S. Securitiezed MBS, ABS and CMBS Index, Bloomberg U.S. Treasury Inflation Protected Securities Index, FTSE EPRA NAREIT Developed Index and the Bloomberg Commodity Total Return Index.

Unbundled DC Plans - Fund Annual Operating Expenses Information as of June 30, 2024

Investment Option ¹	Investment Manager	Туре	Investment Management Costs	•	Embedded	State Street Cost to Strike Net NAV	Total Annual Expense Ratio	Expense Ratio YOY Change
Money Market Fund	BlackRock	Capital Preservation	0.080000%		0.000600%	n/a	0.08%	0.00%
Stable Value Fund	Galliard	Capital Preservation (Book Value)	0.066000%	0.170000%	n/a	n/a	0.24%	+0.01%
Bond Fund	BlackRock	Passive	0.030000%	n/a	0.003600%	n/a	0.03%	0.00%
Inflation-Protected Bond Fund	BlackRock	Passive	0.020000%	n/a	0.007100%	n/a	0.03%	0.00%
High-Yield Bond Fund	JPMorgan	Active	0.380000%	n/a	0.010000%	0.004663%	0.39%	0.00%
Stock Fund	BlackRock	Passive	0.007500%	n/a	0.000900%	0.004393%	0.01%	0.00%
Small/Mid-Cap Stock Fund	BlackRock	Passive	0.012500%	n/a	0.003400%	0.004313%	0.02%	0.00%
International Stock Fund	BlackRock	Passive	0.040000%	n/a	0.019900%	0.004399%	0.06%	0.00%
Global Real Estate Fund	BlackRock	Passive	0.070000%	n/a	0.008700%	0.004257%		0.00%
Retirement Portfolio	BlackRock	Passive	0.050000%	n/a	0.005300%	n/a	0.06%	0.00%
Target Date 2025 Portfolio	BlackRock	Passive	0.050000%	n/a	0.005600%	n/a	0.06%	0.00%
Target Date 2030 Portfolio	BlackRock	Passive	0.050000%		0.006100%	n/a	0.06%	0.00%
Target Date 2035 Portfolio	BlackRock	Passive	0.050000%		0.006800%	n/a	0.06%	0.00%
Target Date 2040 Portfolio	BlackRock	Passive	0.050000%	n/a	0.007500%	n/a	0.06%	0.00%
Target Date 2045 Portfolio	BlackRock	Passive	0.050000%	n/a	0.008200%	n/a	0.06%	0.00%
Target Date 2050 Portfolio	BlackRock	Passive	0.050000%	n/a	0.008600%	n/a	0.06%	0.00%
Target Date 2055 Portfolio	BlackRock	Passive	0.050000%		0.009000%	n/a		0.00%
Target Date 2060 Portfolio	BlackRock	Passive	0.050000%	n/a	0.009700%	n/a	0.06%	0.00%
Target Date 2065 Portfolio	BlackRock	Passive	0.050000%	n/a	0.010000%	n/a	0.06%	0.00%
VRSIP	VRS	Active	n/a	n/a	n/a	n/a	0.63%	+0.04%

¹ There are no short-term trading redemption costs associated with any of the investment options.

² Includes custody, audit and other specific investment option related administrative costs.

Unbundled DC Plans Annual Calendar Year End Return Data

Fund	2023	2022	2021	2020	2019
	%	%	%	%	%
Money Market Fund	5.39	1.88	0.15	0.66	2.40
FTSE 3 Month Treasury Bill Index ¹	5.26	1.50	0.05	0.58	2.30
Stable Value Fund	2.86	1.48	1.59	2.20	2.51
Custom Benchmark	4.70	3.27	0.61	0.66	2.21
eVestment Alliance Stable Value Universe ²	2.79	1.91	1.71	2.14	2.50
Bond Fund	5.67	-13.05	-1.61	7.61	8.74
Bloomberg U.S. Aggregate Bond Index	5.53	-13.01	-1.54	7.51	8.72
MSTAR Ave: IntermediateTerm Bond	5.49	-13.32	-1.48	7.52	8.06
Inflation-Protected Bond Fund	3.98	-11.94	5.92	11.19	8.48
Bloomberg U.S. TIPS Index	3.90	-11.85	5.96	10.99	8.43
MSTAR Ave: Inflation-Protected Bond	2.87	-8.98	5.61	10.01	7.92
High-Yield Bond Fund	11.13	-9.56	7.45	4.75	14.77
ICE BofA U.S. HY BB-B Constrained Index	12.58	-10.58	4.60	6.28	15.10
MSTAR Ave: High-Yield Bond	11.82	-10.09	4.77	4.91	12.62
Stock Fund	26.29	-18.11	28.73	18.47	31.54
S&P 500 Index	26.29	-18.11	28.71	18.40	31.49
MSTAR Ave: Large Blend	22.14	-16.96	26.07	15.83	28.78
Small/Mid-Cap Stock Fund	17.61	-18.34	18.24	20.02	27.80
Russell 2500 Index	17.42	-18.37	18.18	19.99	27.77
MSTAR Ave: Mid-Cap Blend	15.91	-14.01	23.40	12.39	26.21
International Stock Fund	15.52	-16.27	8.62	11.46	21.94
MSCI ACWI ex-U.S. IMI Index	15.62	-16.58	8.53	11.12	21.63
MSTAR Ave: Foreign Large Blend	16.31	-15.84	9.72	9.30	21.59
Global Real Estate Fund	10.69	-24.30	26.99	-8.42	22.91
FTSE EPRA/NAREIT Developed Index	9.67	-25.09	26.09	-9.04	21.91
MSTAR Ave: Global Real Estate	10.22	-25.15	22.90	-5.43	23.45
VRSIP	10.23	-5.25	18.63	10.32	15.31
VRS Custom Benchmark	13.40	-11.23	13.59	10.24	15.43
Retirement Portfolio	11.15	-14.63	6.95	11.97	15.65
Custom Benchmark	11.11	-14.54	7.04	11.80	15.61
Target Date 2025 Portfolio	12.02	-15.24	8.99	12.19	18.60
Custom Benchmark	11.94	-15.17	9.07	12.03	18.54
Target Date 2030 Portfolio	14.26	-15.97	11.43	12.88	20.78
Custom Benchmark	14.23	-15.92	11.51	12.71	20.70
Target Date 2035 Portfolio	16.31	-16.67	13.80	13.57	22.85
Custom Benchmark	16.29	-16.67	13.85	13.42	22.74
Target Date 2040 Portfolio	18.33	-17.36	15.96	14.14	24.73
Custom Benchmark	18.29	-17.38	15.99	13.98	24.60
Target Date 2045 Portfolio	20.16	-17.90	17.72	14.83	26.04
Custom Benchmark	20.12	-17.96	17.71	14.64	25.93
Target Date 2050 Portfolio	21.27	-18.21	18.67	15.20	26.62
Custom Benchmark	21.23	-18.30	18.61	15.07	26.49
Target Date 2055 Portfolio	21.58	-18.28	18.83	15.32	26.67
Custom Benchmark	21.56	-18.38	18.81	15.18	26.56
Target Date 2060 Portfolio	21.59	-18.29	18.82	15.31	26.66
Custom Benchmark	21.57	-18.39	18.80	15.18	26,56
Target Date 2065 Portfolio	21.64	-18.31	18.78	15.14	N/A
Custom Benchmark	21.59	-18.40	18.79	15.18	N/A

¹ Prior to December 2020 it was the Bloomberg U.S. 3-Month Treasury Bill Index.

Data provided by BlackRock, Galliard, BofNY Mellon, MissionSquare, eVestment, and Morningstar.

² eVestment Alliance universe returns are gross of investment management fees and net of wrap fees. The Stable Value Fund returns are net of all fees.

Below are the totals for the period ending June 30, 2024. Returns greater than one year are annualized.

Retirement Options Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2030 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio Custom Benchmark	1 Month % 1.22 1.28 1.24 1.30 1.34 1.42 1.43 1.53 1.51 1.63	1.01 0.98 1.03 1.01 1.23 1.20 1.46 1.43	% 3.54 3.48 3.77 3.73 5.01 4.96 6.25	8.37 8.44 8.78 8.85	3 Yrs % 0.17 0.21 0.43 0.45	5 Yrs % 4.32 4.31 5.01	### Minimal	% 0.06	Date 8/1/05	Market Value 384,996,912	Value ²⁵ %	Option ²⁶ %
Retirement Portfolio Custom Benchmark Target Date 2025 Portfolio Custom Benchmark Target Date 2030 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.22 1.28 1.24 1.30 1.34 1.42 1.43 1.53 1.51 1.63	1.01 0.98 1.03 1.01 1.23 1.20 1.46 1.43	3.54 3.48 3.77 3.73 5.01 4.96	8.37 8.44 8.78 8.85 10.72	0.17 0.21 0.43 0.45	4.32 4.31	4.28		8/1/05	384,996.912		
Custom Benchmark Target Date 2025 Portfolio Custom Benchmark Target Date 2030 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.28 1.24 1.30 1.34 1.42 1.43 1.53 1.51 1.63	0.98 1.03 1.01 1.23 1.20 1.46 1.43	3.48 3.77 3.73 5.01 4.96	8.44 8.78 8.85 10.72	0.21 0.43 0.45	4.31		0.00	C			
Custom Benchmark Target Date 2030 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.24 1.30 1.34 1.42 1.43 1.53 1.51 1.63	1.03 1.01 1.23 1.20 1.46 1.43	3.77 3.73 5.01 4.96	8.78 8.85 10.72	0.43 0.45					,,- · -		
Target Date 2030 Portfolio Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.34 1.42 1.43 1.53 1.51 1.63	1.23 1.20 1.46 1.43	5.01 4.96	10.72			5.04	0.06	7/5/06	385,078,063	4.7	5.3
Custom Benchmark Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.42 1.43 1.53 1.51 1.63	1.20 1.46 1.43	4.96			4.99	4.99			· ·		
Target Date 2035 Portfolio Custom Benchmark Target Date 2040 Portfolio	1.43 1.53 1.51 1.63	1.46 1.43			1.42	6.27	5.89	0.06	8/1/05	479,849,660	5.9	7.6
Custom Benchmark Target Date 2040 Portfolio	1.53 1.51 1.63	1.43		10.83	1.44	6.24	5.82	0.00	7/5/00	E00 C40 0C4 ²²		- 0.0
Target Date 2040 Portfolio	1.51 1.63			12.61	2.34	7.45	6.68	0.06	7/5/06	528,618,364 ²²	6.4	9.0
	1.63	1.68	6.20 7.45	12.74 14.47	2.34 3.21	7.42 8.55	6.60 7.40	0.06	8/1/05	477,522,406	5.8	9.2
		1.65	7. 43 7.41	14.59	3.19	8.50	7.29	0.00	G/ 1/00	,022,.00	0.0	U.2
Target Date 2045 Portfolio	1.58	1.89	8.58	16.23	4.01	9.52	7.97	0.06	7/5/06	482,192,912	5.9	10.5
Custom Benchmark	1.73	1.86	8.53	16.35	3.97	9.45	7.85					
Target Date 2050 Portfolio	1.64	2.06	9.43	17.48	4.55	10.10	8.28	0.06	9/30/07	497,744,545	6.1	12.0
Custom Benchmark Target Date 2055 Portfolio	1.79	2.04 2.17	9.38	17.61 18.00	4.49 4.75	10.02	8.15 8.35	0.06	5/19/10	587,852,445	7.2	15.4
_	1.67 1.83	2.17	9.84 9.79	18.14	4.75 4.70	10.28 10.20	8.23	0.00	3/19/10	307,032,443	1.2	15.4
Custom Benchmark	1.67	2.14	9.85	18.01	4.76	10.20	8.77	0.06	11/17/14	220 250 022	4.1	13.5
Target Date 2060 Portfolio	1.84	2.17	9.80	18.16	4.76 4.70	10.27	8.63	0.06	11/1//14	339,259,932	4.1	13.5
Custom Benchmark								0.00	0/00/40			
Target Date 2065 Portfolio	1.67	2.18	9.86	18.02	4.76	n/a	10.52	0.06	9/23/19	69,440,740	0.9	6.6
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	n/a	10.50					
lelp-Me-Do-It: Individual Options	0.40	4.00	0.00	5 7 0	0.07	0.00	4.70					
Money Market Fund ^{5,6}	0.46	1.39	2.80	5.70	3.37	2.38	1.70	0.08	11/1/99	142,524,696	1.7	1.7
FTSE 3 Month Treasury Bill Index	0.45	1.37	2.76	5.64	3.17	2.22	1.53					
Yield as of 06/30/24: 5.53% ⁷			4.00	0.40	201	0.04	2.22					
Stable Value Fund ^{8,9}	0.25	0.82	1.63	3.18	2.24	2.21	2.02	0.24	2/1/95	607,426,321	7.4	5.2
Custom Benchmark ¹⁰	0.40	1.22	2.38	4.90	3.57	2.50	2.20					
Yield as of 06/30/24: 3.36% ¹¹												
Bond Fund ¹²	0.95	0.13	-0.61	2.66	-2.98	-0.19	1.40	0.03	11/1/99	155,708,770	1.9	2.6
Bloomberg U.S. Aggregate Bond Index	0.95	0.07	-0.71	2.63	-3.02	-0.23	1.35					
Inflation-Protected Bond Fund ¹³	0.78	0.87	0.89	2.78	-1.29	2.14	2.00	0.03	7/30/02	51,765,661	0.6	1.2
Bloomberg U.S. TIPS Index	0.78	0.79	0.70	2.71	-1.33	2.07	1.91					
High-Yield Bond Fund ¹⁴	0.87	1.38	2.66	9.78	1.47	3.87	4.52	0.39	5/31/04	54,563,453	0.7	1.5
ICE BofA U.S. High-Yield BB-B Constrained Index	1.02	1.21	2.52	10.08	1.62	3.66	4.23					
Stock Fund ¹⁵	3.59	4.28	15.29	24.55	10.01	15.06	12.89	0.01	11/1/99	1,995,754,406	24.3	8.4
S&P 500 Index	3.59	4.28	15.29	24.56	10.01	15.05	12.86					
Small/Mid-Cap Stock Fund ¹⁶	-1.49	-4.26	2.37	10.57	-0.20	8.38	8.08	0.02	11/1/99	451,376,496	5.5	4.6
Russell 2500 Index	-1.50	-4.27	2.35	10.47	-0.29	8.31	7.99					
International Stock Fund ¹⁷	-0.73	0.96	5.41	11.17	0.32	5.79	4.08	0.06	11/1/99	226,602,370	2.8	3.7
MSCI ACWI ex-U.S. IMI Index ¹⁸	-0.23	0.92	5.28	11.57	0.19	5.62	3.85			, ,		
Global Real Estate Fund ¹⁹	0.30	-2.13	-3.12	5.48	-3.87	0.18	2.92	0.08	10/1/02	88,378,568	1.1	2.3
FTSE EPRA/NAREIT Developed Index	0.34	-2.43	-3.70	4.54	-4.77	-0.69	2.04		·	,,	•	
VRSIP ²⁰	1.72	2.47	4.18	11.93	6.14	9.28	7.70	0.63	7/1/08	67,918,598 ²³	0.8	0.4
VRS Custom Benchmark ²¹	2.37	3.03	5.18	13.09	3.84	7.62	6.75	0.03	77 1700	01,310,030	0.0	U. 4
VRSIP and benchmark returns are reported with a one month	lag. [Return	information s	hown is a	s of May 3	1st, 2024.]	[Market va	alue as of May 31	st, 2024 was	\$ \$66,616,043.]			
Do-It-Myself: Self-Directed Brokerage Account												
Schwab PCRA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	128,916,165	1.6	0.2
Total										\$8,203,491,483 ²⁴		

- 1 If the fund was not in existence for 10 years, fund and corresponding benchmark returns shown represent performance from the since inception date.
- 2 Fund investment advisers may voluntarily agree to waive expenses. Expense waivers may be terminated at any time.
- 3 Effective February 2023, the Target Date Portfolios invest in units of BlackRock's LifePath Index Funds N. The LifePath Index Funds N invest in the master Lifepath Index Funds F. The inception dates shown reflect that of the master LifePath Index Funds F. Prior to February 2023, the Target Date Portfolios invested in BlackRock's LifePath Index Funds O which also invested in the master LifePath Index Funds F. All performance returns are linked.
- 4 Benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the Portfolios' asset classes. Weightings are adjusted quarterly to reflect the Portfolios' asset allocation shifts over time. Indices currently used to calculate the custom benchmarks are: Russell 1000 Index, Russell 2000 Index, MSCI ACWI ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Long Government Bond Index, Bloomberg U.S. Intermediate Government Bond Index, Bloomberg U.S. Securitized: MBS, ABS, and CMBS Index, Bloomberg U.S. TIPS Index, FTSE EPRA/NAREIT Developed Index and the Bloomberg Commodity Index Total Return.
- 5 The Money Market Fund invests in units of BlackRock's Short-Term Investment Fund W. The inception data shown reflects the VRS Defined Contribution Plan's investment strategy inception date. Returns of the Fund from July 2012 through July 2016 represent performance of other BlackRock funds. Performance returns are linked.
- 6 An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment it is possible to lose money by investing in the Fund.
- 7 The current yield more closely reflects the earnings of the Fund than the total net return information. There is no quarantee that the Fund will earn the current yield in the future.
- 8 The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 9 Direct transfers from the Stable Value Fund to the Money Market Fund (considered a "competing fund") are not permitted. Before transferring to the Money Market Fund, participants must first transfer to a "non-competing" fund for 90 days.

 Optional Retirement Plan for Higher Education (ORPHE) participants who want to make a direct exchange to another ORPHE provider, must first exchange to a "non-competing" fund on the MissionSquare Retirement investment platform for 90 days.
- 10 Effective August 2016, the benchmark represents a hypothetical return generated by the monthly yields of actively traded U.S. Treasuries based on [50% 2- year maturity + 50% 3- year maturity] plus an annualized spread of 0.25% and is representative of the Fund's expected return profile, given how the Fund is managed and book value accounting treatment. Prior to August 2016 the custom benchmark was based on the monthly yield of actively traded U.S Treasuries with a 3-year maturity plus an annualized spread of 0.50%. The benchmark returns are linked.
- 11 The current yield more closely reflects the earnings of the Fund than the total net return information. There is no guarantee that the Fund will earn the current yield in the future.
- 12 The Bond Fund invests in units of BlackRock's U.S. Debt Index Fund M. The U.S. Debt Index Fund M invests in the master Fund F. The inception date shown reflects the VRS Defined Contribution Plans strategy inception date.
- 13 The Inflation-Protected Bond Fund invests in units of BlackRock's U.S. Treasury-Inflation Protected Securities Fund M. The U.S. Treasury Inflation-Protected Securities Fund M invests in the master Fund F. The inception date shown reflects the inception date of the master Fund F.
- 14 The High-Yield Bond Fund invests in units of JPMorgan's Corporate High-Yield Fund-Investment Class. The inception date shown reflects the date the current investment team at JPMorgan commenced management responsibility of the Fund.
- 15 The Stock Fund invests in units of BlackRock's Equity Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 16 The Small/Mid-Cap Stock Fund invests in units of BlackRock's Russell 2500 Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy date.
- 17 The International Stock Fund invests in units of BlackRock's MSCI ACWI ex-U.S. IMI Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plan's investment strategy inception date. Returns from July 2012 through July 2016 represent performance of another BlackRock Fund. Performance returns are linked.
- 18 Effective August 2016, the performance benchmark is the MSCI ACWI ex.-U.S. IMI Index. It was the MSCI World ex-U.S. Index from July 2012 through July 2016. The benchmark returns are linked.
- 19 The Global Real Estate Fund invests in units of BlackRock's Developed Real Estate Index Fund F. Performance represents BlackRock's returns for the master Fund F with deductions taken for investment management fees negotiated by VRS and fund administrative expenses. The inception date shown reflects the VRS Defined Contribution Plans investment strategy inception date.
- 20 The inception date shown reflects the date the VRS Investment Portfolio (VRSIP) was unitized.
- 21 The VRS Custom Benchmark is a blend of the asset class benchmarks at policy weights
- 22 Includes Pending Account VRSIP amount of \$0.
- 23 Includes Preliminary Investment Portfolio Account PIP amount of \$749,726.
- 24 Includes \$8,604,622 held in the administrative Special Accounts.
- 25 May not equal 100% due to rounding.
- 26 The data reflects the percentage of participants who selected a particular investment option as of June 30, 2024. There were 619,485 participant accounts as of June 30, 2024 across all unbundled DC plans.

All fund performance returns shown reflect all fund management fees and expenses, but do not reflect the Plan administrative fee charged by MissionSquare Retirement which would further reduce the returns shown.

All calculations assume reinvestment of dividends and capital gains. All returns are calculated in U.S. dollars. Performance returns are provided by BlackRock, Galliard Capital Management, JPMorgan, Bank of New York

Mellon, and MissionSquare Retirement. Benchmark returns are provided by BlackRock, Russell/Mellon Analytical Services, Galliard, and MissionSquare Retirement. Although data is gathered from sources believed to be reliable, we cannot guarantee completeness or accuracy.

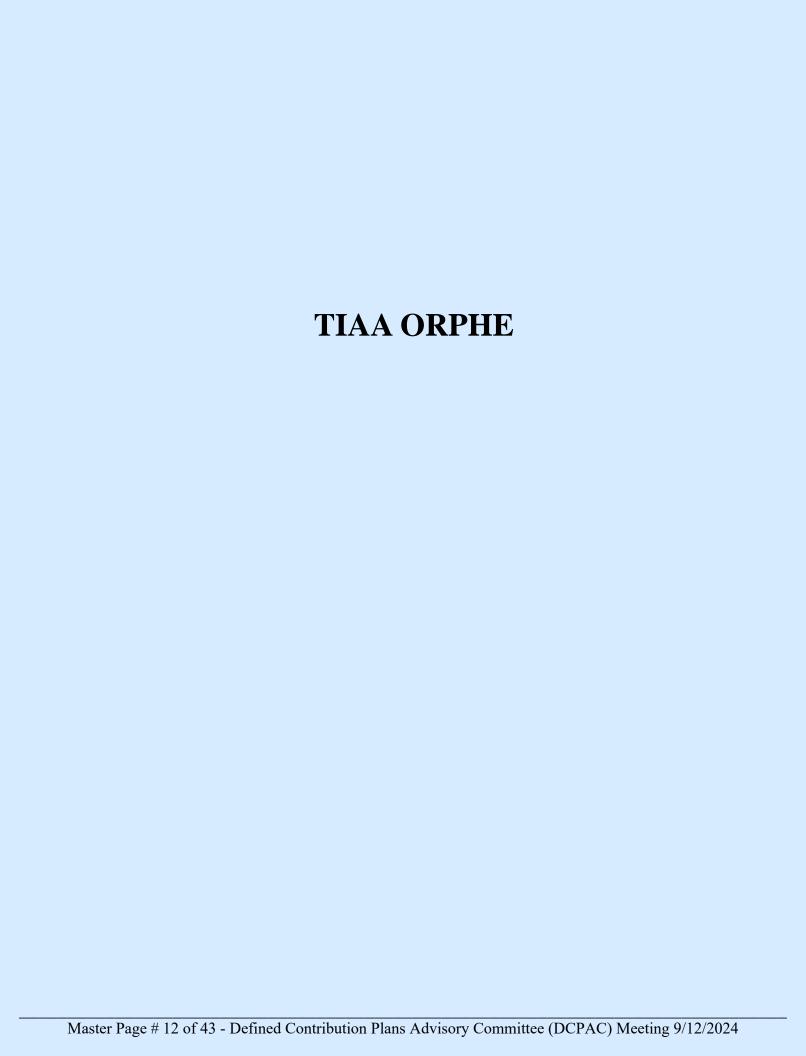
Plan Administrative Fee: An annual record keeping and communication services fee of \$30.50 is deducted from participant accounts on a monthly basis (approximately \$2.54 per month). Only one annual fee of \$30.50 is deducted from participant accounts for those participants participants participants participants participants participants.

Below benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the nature of book value accounting treatment for stable value funds as it relates to interest rates.

Underperformance for an actively managed fund.

Excess performance for an actively managed fund.

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.



Bundled ORP for Higher Education - TIAA RC Contract^{1,2}

Data for period ending June 30, 2024

				Returns			3 Year Sta	atistics			5 Year Stat	tistics	
Fund	Туре	Fund Expense Ratio	1 Year	3 Years*	5 Years*		Sharpe Ratio	Tracking Error	Information Ratio	Standard Deviation (%)			Information Ratio
		%	%	%	%	%		%		%		%	
BlackRock Equity Index Fund J S&P 500 Index	Passive	0.01	24.56 24.56	10.01 10.01	15.07 15.05	17.86 17.86			n/a	18.08 18.08		0.02	n/a
Excess Return MSTAR Ave: Large Blend			0.00 21.19	0.00 7.63	0.02 12.57								
BlackRock Russell 2500 Index Fund M Russell 2500 Index Excess Return	Passive	0.02	10.57 10.47 0.10	-0.20 -0.29 0.09	8.39 8.31 0.08	20.91 20.91		0.03	n/a	22.70 22.71		0.06	n/a
MSTAR Ave: Mid-Cap Blend			13.15	3.54	9.32								
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M MSCI ACWI ex-U.S. IMI Index Excess Return	Passive	0.11	11.12 11.57 -0.45	0.28 0.19 0.09	5.74 5.62 0.12	17.10 16.39			n/a	17.87 17.50			n/a
MSTAR Ave: Foreign Large Blend			10.53	1.28	5.72								
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M MSCI ACWI IMI Index Excess Return MSTAR Ave: World Stock	Passive	0.05	18.44 18.40 0.04 14.34	4.93 4.70 0.23 3.41	10.59 10.36 0.23 8.79	17.07 16.87		0.88	n/a	17.83 17.75			n/a
TIAA Real Estate Account Custom Benchmark ³ Excess Return	Active	1.02	-11.28 -5.26 -6.02	-0.26 1.57 -1.83	1.35 2.55 -1.20	8.41 6.48		3.94	-0.46	6.75 5.46	-		-0.36

^{*}Annualized.

Excess over benchmark return by 10 bps or more for index funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing. Below benchmark return by 10 bps or more for index funds Reasonable expectations due to impact of typical sources of tracking including fair value pricing.

Underperformance for an actively managed fund.

Data provided by TIAA, BlackRock, VRS and Zephyr StyleADVISOR.

¹ Refer to the unbunded DC plans for information regarding BlackRock's LifePath Index Funds N, Short-Term Investment Fund W, U.S. Debt Index Fund M and U.S. TIPs Fund M. Although the unbundled DC plans use white lable fund names and TIAA does not these funds are the same exact funds.

² The TIAA Traditional Annuity is not included in this exercise due to the fact there is no performance benchmark associated with TIAA's fixed annuity product offering.

³ Effective January 2014, the Custom Benchmark is 70% NCREIF Open End Diversified Core Equity (ODCE) Net Index, 20% Bloomberg 3-Month Treasury Bill Index and 10% Dow Jones U.S. Select REIT Index.TIAA's investment management team does not manage its real estate account to a published index benchmark. The Custom Benchmark represents a reasonable proxy of how TIAA allocates among real property, short-term investments and REITS over time. VRS anticipates that the TIAA Real Estate Account's returns may vary greatly from those of the custom benchmark.

Bundled ORP for Higher Education - TIAA RC Contract Fund Annual Operating Expenses^{1,2,3} Information as of June 30, 2024

Investment Option	Investment Manager		Management	Record-Keeping & Plan Administration Costs			•	Expense Ratio YOY Change
TIAA Real Estate Account	TIAA	Active (variable annuity)	0.380000%	0.295000%	0.060000%	0.280000%	1.02%	+0.15%
BlackRock Equity Index Fund J	BlackRock	Passive	0.010000%	n/a	n/a	0.001000%	0.01%	-0.01%
BlackRock Russell 2500 Index Fund J	BlackRock	Passive	0.012500%	n/a	n/a	0.010000%	0.02%	0.00%
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M	BlackRock	Passive	0.090000%	n/a	n/a	0.020000%	0.11%	0.00%
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M	BlackRock	Passive	0.040000%	n/a	n/a	0.010000%	0.05%	0.00%

¹ There are no short-term trading redemption costs associated with any of the investment options.

² Refer to the unbunded DC plans for information regarding BlackRock's LifePath Index Funds N, Short-Term Investment Fund W, U.S. Debt Index Fund M and U.S. TIPs Fund M. The unbundled DC plans use white label fund names for the aforementioned funds. However, TIAA does not have the capability to use white label fund names.

³ Effective July 2022, TIAA no longer provides an estimated expense ratio for its TIAA Traditional Annuity product.

Bundled ORP for Higher Education - TIAA RC Contract ¹ **Annual Calendar Year End Return Data**

Fund	2023	2022	2021	2020	2019
	%	%	%	%	%
TIAA Traditional Annuity RC	4.79	4.17	3.55	4.00	4.01
TIAA Real Estate Account	-13.62	8.19	17.87	-0.84	5.51
Custom Index	-6.72	2.09	18.86	-0.39	5.76
BlackRock Equity Index Fund J	26.29	-18.11	28.72	18.47	n/a
S&P 500 Index	26.29	-18.11	28.71	18.40	n/a
MSTAR Ave: Large Blend	22.14	-16.96	26.07	15.83	n/a
BlackRock Russell 2500 Index Fund M	17.61	-18.35	18.22	20.01	n/a
Russell 2500 Index	17.42	-18.37	18.18	19.99	n/a
MSTAR Ave: Mid-Cap Blend	15.91	-14.01	23.40	12.39	n/a
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M	15.47	-16.31	8.57	11.39	n/a
MSCI ACWI ex-U.S. IMI Index	15.62	-16.58	8.53	11.12	n/a
MSTAR Ave: Foreign Large Blend	16.31	-15.84	9.72	9.30	n/a
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M	21.72	-18.05	18.27	16.50	n/a
MSCI ACWI IMI Index	21.58	-18.40	18.22	16.25	n/a
MSTAR Ave: World Stock	17.81	-16.67	17.72	12.96	n/a

Data provided by TIAA, BlackRock and Morningstar.

¹ Refer to the unbundled DC plans for information regarding BlackRock's LifePath Index Funds N, Short-Term Investment Fund W, U.S. Debt Index Fund M and U.S. TIPS Fund M. Although the unbundled DC plans use white label names and TIAA does not, these are the exact same funds

Defined Contribution Plans Advisory Committee Report

TIAA RC Contract Investment Performance

Below are the totals for the period ending June 30, 2024. Returns greater than one year are annualized.

							10 Yrs / Since	Fund Expense			% of Market	% of Participants Selecting an
Investment Options	1 Month	3 Months	YTD	1 Yr	3 Yrs	5 Yrs	Inception ¹	Ratio ²	Inception Date	Market Value	Value 19	Option 20
Target Date Portfolios ^{3,4}	%	%	%	%	%	%	%	%		\$	%	
BlackRock LifePath Index Retirement Fund N	1.22	1.01	3.54	8.37	0.18	4.34	4.30	0.06	8/1/05	23,887,213	5.4	6.9
Custom Benchmark	1.28	0.98	3.48	8.44	0.21	4.31	4.26					
BlackRock LifePath Index 2025 Fund N	1.24	1.03	3.77	8.78	0.45	5.03	5.06	0.06	7/5/06	21,275,065	4.8	6.3
Custom Benchmark	1.30	1.01	3.73	8.85	0.45	4.99	4.99			, ,		
BlackRock LifePath Index 2030 Fund N	1.34	1.23	5.01	10.72	1.43	6.28	5.90	0.06	8/1/05	35,824,919	8.0	8.4
Custom Benchmark	1.42	1.20	4.96	10.83	1.44	6.24	5.82					
BlackRock LifePath Index 2035 Fund N	1.43	1.46	6.25	12.61	2.35	7.47	6.70	0.06	7/5/06	31,006,667	7.0	8.9
Custom Benchmark	1.53	1.43	6.20	12.74	2.34	7.42	6.60		0/4/0=			
BlackRock LifePath Index 2040 Fund N	1.51	1.68	7.45	14.47	3.22	8.57	7.41	0.06	8/1/05	35,577,637	8.0	9.9
Custom Benchmark	1.63	1.65	7.41	14.59	3.19	8.50	7.29	0.00	7/5/00	20 000 207		40.0
BlackRock LifePath Index 2045 Fund N Custom Benchmark	1.58	1.89	8.58	16.23	4.03	9.54	7.99	0.06	7/5/06	30,899,387	6.9	10.3
BlackRock LifePath Index 2050 Fund N	1.73 1.64	1.86 2.06	8.53 9.43	16.35 17.48	3.97 4.56	9.45 10.12	7.85 8.30	0.06	9/30/07	19,797,470	4.4	8.4
Custom Benchmark	1.79	2.06	9. 43 9.38	17.46	4.36 4.49	10.12	8.15	0.00	3/30/07	19,797,470	4.4	0.4
BlackRock LifePath Index 2055 Fund N	1.67	2.17	9.30	18.00	4.49 4.77	10.02	8.37	0.06	5/19/10	10,962,921	2.5	7.1
Custom Benchmark	1.83	2.17	9.79	18.14	4.77 4.70	10.29	8.23	0.00	0/10/10	10,002,021	2.0	
	1.67	2.17	9.85	18.01	4.77	10.29	8.77	0.00	11/17/14	2 220 547	0.7	2.0
BlackRock LifePath Index 2060 Fund N								0.06	11/1//14	3,239,517	0.7	3.8
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	10.21	8.63					
BlackRock LifePath Index 2065 Fund N	1.67	2.18	9.86	18.02	4.77	n/a	10.53	0.06	9/23/19	7,326,819	1.6	2.5
Custom Benchmark	1.84	2.15	9.80	18.16	4.70	n/a	10.50					
Individual Options												
BlackRock Short-Term Investment Fund W 5	0.46	1.39	2.80	5.70	3.37	2.38	1.74	0.08	7/1/03	6,629,208	1.5	7.4
FTSE 3 Month Treasury Bill Index	0.45	1.37	2.76	5.64	3.17	2.22	1.53			-,,		
Yield as of 06/30/24: 5.53% ⁶	0.10	1.01	2.70	0.01	0.11		1.00					
BlackRock U.S. Debt Index Fund M ⁷	0.95	0.13	-0.61	2.66	-2.98	-0.19	1.40	0.03	6/6/96	11,180,656	2.5	16.9
Bloomberg U.S. Aggregate Bond Index	0.95		-0.71	2.63	-3.02	-0.23	1.35	0.03	0/0/90	11,100,000	2.5	10.5
BlackRock U.S. TIPS Fund M ⁸		0.07 0.87	0.89	2.03 2.78	-3.02 - 1.29	-0.23 2.14		0.03	7/30/02	E 667 600	1.3	11.8
Bloomberg U.S. TIPS Index	0.78						2.00	0.03	7/30/02	5,667,620	1.3	11.0
· ·	0.78 3.59	0.79 4.28	0.70 15.29	2.71 24.56	-1.33 10.01	2.07 15.07	1.91 12.89	0.04	0/5/05		40.4	
BlackRock Equity Index Fund J 9								0.01	3/5/97	59,559,963	13.4	24.4
S&P 500 Index	3.59	4.28	15.29	24.56	10.01	15.05	12.86					
BlackRock Russell 2500 Index Fund J ¹⁰	-1.49	-4.26	2.37	10.57	-0.20	8.39	8.09	0.02	9/30/08	9,218,724	2.1	4.8
Russell 2500 Index	-1.50	-4.27	2.35	10.47	-0.29	8.31	7.99					
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M 11	-0.73	0.95	5.39	11.12	0.28	5.74	4.10	0.11	2/28/11	18,071,163	4.1	16.5
MSCI ACWI ex-U.S. IMI Index	-0.23	0.92	5.28	11.57	0.19	5.62	3.92					
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M 12	1.66	2.37	10.41	18.44	4.93	10.59	8.50	0.05	4/12/13	62,122,565	13.9	29.9
MSCI ACWI IMI Index	1.85	2.38	10.28	18.40	4.70	10.36	8.17					
TIAA Real Estate Account ¹³	-0.66	-1.76	-4.36	-11.28	-0.26	1.35	3.83	1.02	10/2/95	11,298,745	2.5	25.3
Custom Composite Benchmark ¹⁴	0.20	-0.18	-1.75	-5.26	1.57	2.55	4.82			,,-		
TIAA Traditional Annuity RC ^{15,16,17,18}	0.37	1.12	2.31	4.81	4.35	4.17	4.20	21	8/1/05	36,170,392	8.1	27.4
Self-Directed Brokerage Account									0,00	23,,002		
TIAA - Self-Directed Account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6,540,642	1.5	0.9
Total		-			-		-	-	-	\$446.257.293	-	

Total \$446,257,293

Footnotes >

- 1 If the fund was not in existence for 10 years, fund and corresponding benchmark returns shown represent performance from the since inception date.
- 2 Fund investment advisers may voluntarily agree to waive expenses. Expense waivers may be terminated at any time.
- 3 The BlackRock LifePath Index Funds N invest in the master LifePath Funds F. The inception dates shown reflect the inception date of the master LifePath Funds F. The inception dates for most LifePath Funds N were 8/15/17. The 2065 Fund's N inception date was 11/15/19. Returns prior to Funds' N inception dates are those of Funds F with deductions taken for Funds N investment management fees.
- 4 Benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the Portfolios' asset classes. Weightings are adjusted quarterly to reflect the Portfolios' asset allocation shifts over time. Indices currently used to calculate the custom benchmarks are: Russell 1000 Index, Russell 2000 Index, MSCI ACWI Ex-U.S. IMI Net Dividend Return Index, Bloomberg U.S. Long Credit Bond Index, Bloomberg U.S. Long Government Bond Index, Bloomberg U.S. Intermediate Government Bond Index, Bloomberg U.S. Securitized: MBS, ABS, and CMBS Index, Bloomberg U.S. TIPS Index, FTSE EPRA/NAREIT Developed Index and the Bloomberg Commodity Index Total Return.
- 5 An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment it is possible to lose money by investing in the Fund.
- 6 The current yield more closely reflects the earnings of the Fund than the total net return information.
- 7 The BlackRock U.S. Debt Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 7/20/12. Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M's investment management fees.
- 8 The BlackRock U.S. Treasury Inflation-Protected Securities Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 7/20/12.

 Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M' investment management fees.
- 9 The BlackRock Equity Index Fund J invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund J was 3/20/17. Returns prior to Fund J's inception date are those of Fund F with deductions taken for Fund J's investment management fees.
- 10 The BlackRock Russell 2500 Fund J invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund J was 10/15/21. Returns prior to Fund J's inception date are those of Fund F with deductions taken for Fund J's investment management fees.
- 11 The BlackRock MSCI ACWI ex-U.S. IMI Index Fund M invests in the master Fund F. The inception date shown reflects the inception of the master Fund F. The inception date of Fund M was 12/31/12. Returns prior to Fund M's investment management fees.
- 12 The BlackRock MSCI ACWI IMI Index Non-Lendable Fund M invests in the master Fund F. Inception dates for the master Fund F and Fund M are both 4/12/13.
- 13 Transfers out of the TIAA Real Estate Account (REA) are limited to one per quarter. Currently, these transfers do not require a minimum transaction amount; however, in the future TIAA reserves the right, in its sole discretion, to impose minimum transaction levels, which levels will generally be at least \$1,000 (except for systematic transfers, which must be at least \$100) or your entire accumulation, if less. Participants may not make a lump-sum transfer into the REA if their aggregated balances across all contracts is greater than \$150,000. Systematic transfers and recurring contributions are not subject to this limitation.
- 14 Effective January 2014, the Custom Composite Index is 70% NCREIF Open End Diversified Core Equity (ODCE) Net Index, 20% Bloomberg 3-Month Treasury Bill Index, and 10% Dow Jones U.S. Select REIT Index. Prior periods include other representative indices. TIAA's investment management team does not manage its real estate portfolio to a specific published index benchmark. The Custom Composite Index represents a reasonable proxy of how TIAA allocates assets among real property, short-term investments, and REITs over time. The Virginia Retirement System anticipates that Fund returns may vary greatly from those of the Custom Composite Index. Benchmark returns are not available for months that do not end on a calendar quarter due to the fact that NCREIF ODCE Index returns are only published each calendar quarter.
- 15 Upon separation from service or retirement participants can convert their TIAA Traditional accumulation dollars amount to a lifetime income option or withdraw funds through a fixed period annuity ranging from five to 30 years or a Transfer Payout Annuity, which enables participants to move funds out of the TIAA Traditional Annuity in 7 annual installments for the Retirement Choice (RC) contract.
- Each installment includes a portion of principal and interest, based on the rate in effect when transfer or withdrawal funds are made. However, there are two exceptions to the payout installment. First, if the
- TIAA Traditional account balance is less than \$5,000, participants can transfer the total amount at any time following termination of employment, but only once during the life of the contract. Second, TIAA Traditional can be withdrawn or transferred to another company up to the full balance within 120 days following termination of employment, subject to 2.5% surrender charge. After the 120-day period, participants can withdraw funds only through a fixed period annuity ranging from five to 30 years or the Transfer Payout Annuity.
- 16 The TIAA Traditional Annuity RC contract has minimum guaranteed rate during the accumulation phase of 1% to 3%. The current minimum rate for the RC contract is 1%. Further, the TIAA Traditional Annuity RC contract applies to premiums deposited during the applicable calendar year and is guaranteed for 10 years, at which point the minimum rate for these premiums will be reset.
- 17 TIAA's annual credited rate on new money for the RC contract for the month of June was 5.75%.
- 18 The TIAA Traditional Annuity is not an investment for purposes of federal securities laws; it is a guaranteed insurance contract. Therefore, unlike a variable annuity or mutual fund, the TIAA Traditional Annuity does not include an identifiable expense ratio. Each premium allocated to the TIAA Traditional Annuity buys a definite amount of lifetime income for participants based on the rate schedule in effect at the ime the premium is paid. In addition, the TIAA Traditional Annuity provides a guarantee of principle, a guaranteed minimum rate of interest and the potential for additional amounts of interest when declared by TIAA's Board of Trustees. Additional amounts, when declared, remain in effect for the "declaration year" that begins each March for the accumulating annuites and January for lifetime payout annuities. Additional amounts are not guaranteed for future years.
- 19 May not equal 100% due to rounding
- 20 The data reflects the percentage of participants who selected a particular investment option as of June 30, 2024. There were 5,389 (RC contract) participants as of June 30,2024.
- 21 Effective July 2022, TIAA no longer provides an estimated expense ratio for its TIAA Traditional Annuity product.

Performance returns shown reflect all fund management fees and other investment related expenses, but do not reflect the TIAA annual administrative fee of \$28 (deducted at \$7.00 per quarter) which would further reduce the returns shown. Performance returns do not reflect redemption fees and/or surrender charges, if applicable.

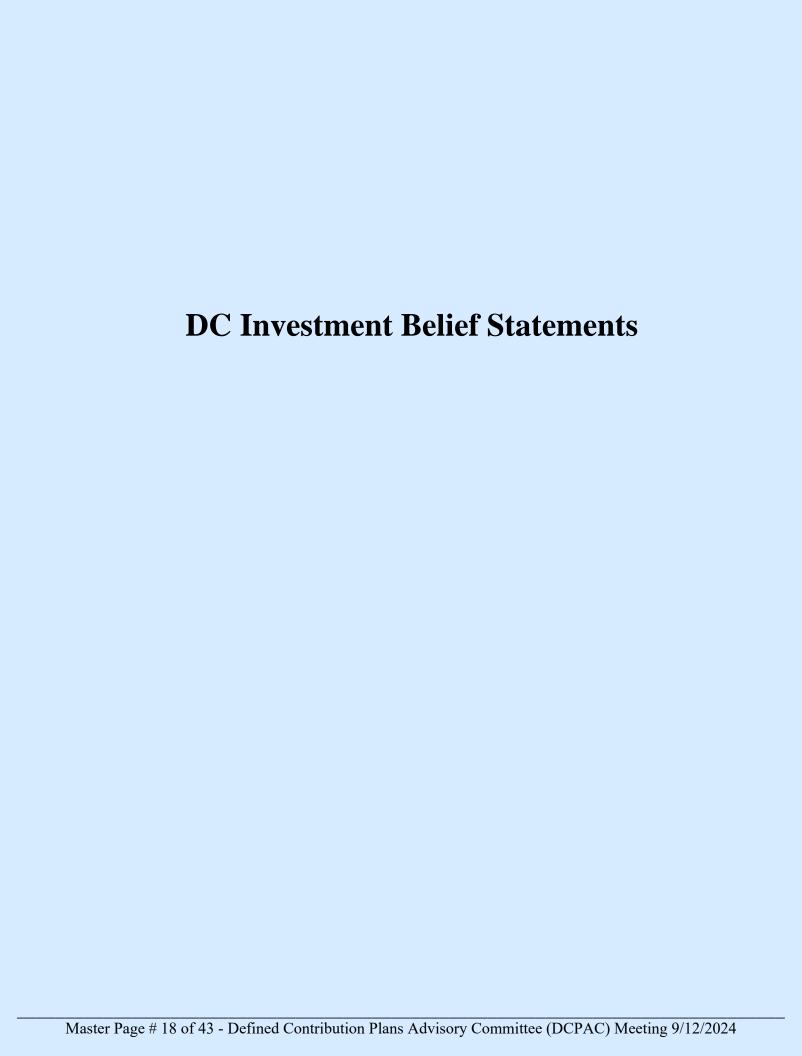
All calculations assume reinvestment of dividends and capital gains. All returns are calculated in U.S dollars. Fund and benchmark returns are provided by TIAA and BlackRock. Although data is gathered from sources to be reliable, the Virginia Retirement System cannot guarantee completeness or accuracy.

Below benchmark return by 10 bps or more for index funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds

Underperformance for an actively managed fund.

Excess performance for an actively managed fund

Excess over benchmark return by 10 bps or more for index funds and capital preservation funds. Reasonable expectations due to impact of typical sources of tracking including fair value pricing for index funds and the interest rate environment for capital preservation funds.





VRS Defined Contribution Plans Investment Belief Statements

APPROVED BY THE BOARD OF TRUSTEES: SEPTEMBER 21, 2021

I. Introduction

The Virginia Retirement System (VRS) fulfills the fiduciary obligations outlined in the *Code of Virginia*, which require the VRS Board of Trustees (Board) to discharge its duties with respect to the defined contribution (DC) plans solely in the interest of the beneficiaries thereof and affords the Board the opportunity to contract with private corporations or institutions subject to the standards set forth in § 51.1-124.30 to provide investment products and services. The Board, therefore, developed these Defined Contribution Plans Investment Beliefs to guide the strategic management of the VRS DC Plans investment program. These statements represent a high-level framework for making decisions that require balancing multiple, often competing, factors and issues. In addition, the Defined Contribution Plans Investment Beliefs provide context for VRS actions and reflect VRS values, with a focus on maintaining the long-term commitment to provide benefits to participants.

II. VRS DC Investment Belief Statements

The Board developed the following Defined Contribution Plans Investment Belief Statements to guide decisions and provide an anchor to the stated goals and objectives.

Goals and Objectives

A defined contribution plan provides participants an individual account to exercise discretion over their retirement assets using investment options selected by VRS or selected by the participant through the brokerage window. Each participant has an individual risk tolerance, time horizon and investment objectives.

- 1. The primary objective of the VRS DC Plans is to provide participants with an array of investment choices across a range of asset classes, risk levels and investment strategies so participants have the opportunity to develop a retirement income stream that complements the VRS Defined Benefit (DB) Plan or other retirement income.
- 2. Given the vital role of the DC Plans in VRS' primary retirement plan offerings, appropriate governance of the DC Plans is critical.
 - a. The VRS Board of Trustees has overall fiduciary authority over the DC investment program. To assist the Board in fulfilling its duty the Board has appointed a Defined Contribution Plans Advisory Committee to provide the Board with objective DC plan design and investment advice.

(Continued)



- **b.** Governing documents such as the Charter for the DC Plans Advisory Committee, DC Investment Policy Statements, Master Trusts and Plan Documents delineate various roles and responsibilities of the Board, the Committee, VRS staff and other interested parties.
- **3.** VRS is responsible for offering a reasonable range of diversified portfolios to serve as the Plans' default investment option and for participants who do not have the time, desire, or expertise to design and manage a diversified portfolio.
- **4.** To the extent possible, VRS will explore and implement capabilities, controls and procedures that are transferrable from VRS' DB plan activities to VRS' DC plans activities, particularly with respect to investments.
 - **a.** Well-structured alternative investments can enhance an individual participant's portfolio risk/reward profile. VRS will examine methods for providing qualifying alternative investment options into its menu of pre-mixed diversified investment options, where feasible.
- 5. VRS will monitor and evaluate DC plans industry best practices and incorporate them where feasible to seek to enhance plan outcomes as demonstrated by qualitative and quantitative measures.
- **6.** Controlling and managing costs is critical to a successful DC plan investment program.
 - **a.** Investment options should provide competitive net-of-cost risk adjusted returns.
 - **b.** The DC Plans' costs should be transparent to the individual participant.
 - **c.** Given VRS' large-scale presence in the institutional marketplace, it is beneficial for the individual participant to access VRS' expertise and capabilities.
 - **d.** Unbundling of DC administration and investment activities should lead to improved cost management.
- 7. Investment offerings should present wide-ranging options to accommodate participants' varying investment knowledge and/or interest in managing their investments while addressing the differences among participants at varying career stages.
 - **a.** Individuals should be educated to recognize that their specific investment plans require a long-term, multi-decade planning/investment horizon.
 - **b.** Investment horizons are unique to the individual participant and may extend beyond the accumulation phase into the retirement (decumulation) phase.

(Continued)



- c. In keeping with industry best practice, the administrative and investment aspects of the individual's overall investment plan should be unbundled/disaggregated to allow for maximum design flexibility.
- **d.** VRS should continue efforts to contact eligible employees who are not participating in the VRS DC plans to build awareness of plan benefits.
- **8.** The self-directed brokerage window that VRS provides in the VRS DC Plans can serve as an effective investment tool for individual participants.
- **9.** VRS should continue to explore viable solutions to assist participants in managing the critically important task of decumulation of retirement assets.
- **10.** Participant investment education is a valuable resource to participants and can enhance a successful program.
 - **a.** Participant investment education should cover certain key topics consistent with industry best practices including:
 - i. Identifying principal retirement planning risks (see Belief Statement 11).
 - ii. Understanding the accumulation phase versus the decumulation phase.
 - **iii.** Analyzing the costs associated with various investment options.
 - iv. Considering the impact of non-plan (outside) assets.
 - **v.** Considering other potential sources of retirement income.
 - **b.** VRS should also consider making various investment advice and financial planning solutions/ products available to participants.
- **11.** VRS should seek to inform DC plan participants about fundamental retirement planning risks.
 - **a.** Shortfall risk The probability or potential that an individual may not meet his/her long-term retirement savings goal.
 - **b.** Longevity risk The potential that an individual may outlive his/her retirement assets.
 - **c.** *Drawdown risk* The impact that short-term declines in a portfolio can have on long-term values.

Unbundled DC Plan Structure Investment Policy Statement



VRS Investment Policy Statement

for an Unbundled Defined Contribution Plan Structure

APPROVED BY THE BOARD OF TRUSTEES: EFFECTIVE JANUARY 2, 2020*

The Virginia Retirement System (VRS) sponsors several primary and supplemental defined contribution (DC) plans. Most plans operate fully under an unbundled (open architecture) approach whereby the investment function is contracted separately from the recordkeeping, enrollment and marketing functions. The purposes of the plans are set forth in the Plan Documents and Master Trusts, which are accessible on the VRS website at <u>varetire.org</u>.

This Investment Policy Statement has been adopted by the VRS Board of Trustees (Board) to provide guidelines for the investment offerings under an unbundled plan construct. Plans using an unbundled structure approach include the Deferred Compensation Plan of the Commonwealth of Virginia, the Virginia Cash Match Plan, the Optional Retirement Plan of the Commonwealth of Virginia for Political Appointees, the Optional Retirement Plan of the Commonwealth of Virginia for Public School Superintendents, the Virginia Supplemental Retirement Plan, the defined contribution component of the Hybrid Retirement Plan and the Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education.

1. Investment Objectives

In a defined contribution investment program, each participant has his or her own risk tolerance, time horizon and investment objectives. Participants are responsible for their own investment decisions. To help meet these varying needs, the VRS unbundled DC plans seek to provide participants with an array of investment choices across a range of asset classes, risk levels, and investment strategies so they can construct and/or invest in portfolios that address their individual needs, and do so using investment vehicles and structures that provide competitive risk-adjusted returns at a reasonable cost.

The Board recognizes that DC plan participants have varying levels of investment knowledge and/or interest in actively managing their investments. The following organizational framework has been designed to categorize the types of investment options available to VRS unbundled DC plan participants:

Do-It-For-Me Investors: These investors may have limited investment knowledge, confidence, or
interest in managing their investments. For whatever reason, they prefer a pre-packaged, diversified
investment option that has been designed to reasonably fit most people of their ages and retirement
planning horizons. To meet this need, a series of Target Date Portfolios is made available whose
investment policy, glide paths, and investment strategies are expected to meet the general needs of
the average DC plan participant, based on a periodic analysis of the demographic characteristics of
participants and the long-term investment opportunity set.

* Originally adopted February 16, 2012. Amended November 14, 2013, February 9, 2017, and January 2, 2020.

(Continued)

VRS Investment Policy Statement for an Unbundled Defined Contribution Plan Structure

- Help-Me-Do-It Investors: These investors have some knowledge of investments and want to be more
 involved in structuring their portfolios, but they would like the ability to pick from a menu of fund
 options that have been screened by VRS and for which investment fees and expenses have been
 negotiated to institutional price levels through VRS bargaining power. To meet this need, a menu of
 Core Investment Options is made available, each targeted to a different asset class or strategy. The
 core fund lineup will generally consist of funds representing the constituent asset classes included in
 the target date portfolios, but there may be funds included in the core lineup that are not included in
 the target date portfolios, and vice versa.
- Do-It-Myself Investors: Some investors are very knowledgeable and/or desire to take a very active
 approach to their investments, and therefore may desire investment alternatives in addition to those
 offered as part of the Target Date Portfolios or Core Investment Options. To meet this need, a selfdirected brokerage account (SDBA) is made available to self-designated knowledgeable investors who
 are willing to accept all risks, costs, and operational rules and procedures related to participating in a
 SDBA.

2. Decision Making

The Board is responsible for the following:

- Selection of the default investment option. (Appendix 1)
- Within Target Date Portfolios, ensuring a robust process is used to establish the glide path's asset allocation and to determine which asset classes and strategies to include. (Appendix 1)
- Within the Core Investment Options, included asset classes. (Appendix 2)
- Whether to offer a Self-Directed Brokerage Account (SDBA). (Appendix 3)
- Whether individual investment advice will be provided and the terms on which it will be available to participants.

Beyond these guidelines, the Board delegates to the Chief Investment Officer (CIO) all other decisions related to VRS unbundled defined contribution investments. Changes that are contemplated are expected to be done with due consideration of administrative needs as to the operations, outreach, and communications, etc. The CIO or a designee will report regularly to the Defined Contribution Plans Advisory Committee (DCPAC) and Board on the status and investment results of the DC investment program. Included in such reporting will be performance benchmarks selected by the CIO to appropriately measure or compare the risk and investment objectives of the various investment options.

In carrying out its fiduciary duty to oversee DC investments, the Board will consider advice and recommendations provided by the DCPAC. The specific duties and responsibilities of the DCPAC are described in the DCPAC Charter.

Additionally, the Board developed a set of twelve Defined Contribution Plans Investment Belief Statements intended to help guide the strategic management of the VRS DC investment program.

(Continued)



3. Plan Level Policies

The CIO has full authority to hire and terminate investment managers and negotiate or renegotiate fees. The CIO shall develop policies and procedures for hiring, monitoring, and terminating investment managers and other investment related service providers. The CIO shall also develop procedures for appropriate mapping of plan assets and/or funds as situations arise. Mapping means the transfer of assets from a discontinued investment option or terminated investment manager to another investment option or investment manager under the DC plans. The CIO works with the Director to coordinate implementation relating to changes to the unbundled DC plans investment program and may consult with the DCPAC as needed.

The CIO is responsible for ensuring that adequate due diligence is being performed in the evaluation of potential and existing investments, and that all investment activity will be in compliance with applicable regulatory requirements.

4. Trading Restrictions and Redemption Fees

The Board and the investment managers may impose restrictions and/or fees that discourage investment trading that could have an adverse impact on the management of a fund, other plan participants, or clients of the fund's management.

5. Best Execution

Generally, all investment transactions executed on behalf of the plans should be made on the basis of best execution. VRS defines best execution as the process and price that results in the best overall performance impact, as judged by the portfolio manager, taking into account current market conditions. VRS will generally discourage the use of soft dollar arrangements, and where such arrangements are utilized, staff will review this usage for reasonableness.

6. Use of Consultants/Service Providers

The CIO has the authority to hire consultants, research providers, and other service providers providing that such expenditures are in alignment with the Board approved operating budget.

7. Code of Ethics

The investment staff will conduct its affairs in a manner that reflects the highest standards of ethical conduct. The staff is expected to comply with the <u>CFA Institute of Code of Ethics and Standards of Professional Conduct</u>.



Target Date Portfolios As of November 14, 2013 Appendix 1

A series of target date portfolios with investment policy glide paths and investment strategies that are expected to meet the general needs of the average DC plan participant in different age cohorts is offered through the plans. A glide path represents the changes made to the asset allocation mix over time as the target date approaches. There is a higher equity allocation in the longer dated portfolios because of the long-term investment time horizon. Over time, the equity allocation decreases as the investment time horizon decreases.

The Board expects target date portfolios to be broadly diversified. These portfolios may include exposure to various sub-segments of the broad asset classes as well as to alternative asset classes as determined by the target date provider using reasonable optimization techniques to measure the risk/reward trade off. Asset classes used within target date portfolios may include: large cap domestic equity, small/mid cap domestic equity, international equity, emerging market equity and debt, domestic core fixed income, high-yield bonds, inflation-protected securities, international/global fixed income, commodities, real estate and cash. A target date portfolio is not required to include each of these asset classes and may include other asset classes.

The target date portfolios' glide paths shall be based on sound investment theory and investment methodology as well as reasonable capital market assumptions. Plan demographics shall be taken into consideration when developing a custom glide path or selecting an off the shelf provider. Based on work done by a consultant together with VRS staff, advice from the DCPAC, and general investment philosophy of VRS, the Board expects to employ a glide path that is more on the conservative side of the target date portfolios available at the time of the study. The percentage allocation to equities in a more conservative glide path is comparatively lower than that of an aggressive glide path at retirement.

The target date portfolios serve as the unbundled DC plans default investment option.



Asset Classes: Core Funds As of November 14, 2013 Appendix 2

Core investment options shall represent the broad asset classes available in the capital markets to the extent they are practical and, when prudent, certain sub-asset classes. The core fund lineup will generally consist of funds representing the constituent asset classes included in the target date portfolios, but there may be funds included in the core lineup that are not included in the target date portfolios, and vice versa. From time to time additional asset classes may be added or existing asset classes may be deleted in order to maintain an array of investment options that address participants' changing needs or changes in the investment industry.

The Board delegates to the CIO decisions as to 1) whether a fund investment option shall utilize a passive or active investment strategy or a combination of both; 2) whether a fund should exhibit a large, mid, or small capitalization structure or a combination thereof; 3) whether a fund should exhibit a growth, value, blended style, or targeted volatility orientation; 4) whether a fund should have a single investment manager or use multiple investment managers or firms; and 5) whether a fund invests in a single asset class or more than one asset class.

The following asset class categories are considered for possible inclusion in the plans:

Capital Preservation

- Money Market
- Stable Value

Fixed Income

- Investment grade (short-term, intermediate, long-term)
- Inflation-Protected
- High-Yield
- International/Global

Global Public Equity

- U.S. Equity
- Non-U.S. Developed Equity
- Emerging Equity

Real Estate (public & private)

Asset Allocation

 VRS unitized investment portfolio (VRSIP) – includes all asset classes utilized in the VRS investment portfolio.



Self-Directed Brokerage Account As of November 14, 2013 Appendix 3

A Self-Directed Brokerage Account (SDBA) is available for self-designated knowledgeable investors who acknowledge and understand the SDBA's operational rules and procedures as well as the risks and costs associated with the investments allowed in the SDBA. Subject to limitations imposed by the SDBA provider, allowable SDBA investments include mutual funds, exchange traded funds (ETFs) and individual securities. Participants must complete the SDBA enrollment materials prior to investing in the SDBA.

The SDBA is made available through the plans' third party administrator and is not contracted for separately. The third party administrator may change the SDBA provider from time to time.

Bundled DC Plan Structure Investment Policy Statement



VRS Investment Policy Statement for a Bundled Defined Contribution Plan Structure

APPROVED BY THE BOARD OF TRUSTEES: EFFECTIVE JANUARY 2, 2020*

This Investment Policy Statement has been adopted by the VRS Board of Trustees (Board) to provide guidelines for the investment offerings provided to participants of the Optional Retirement Plan of the Commonwealth of Virginia for Employees of Institutions of Higher Education (ORPHE) when a bundled plan construct is utilized. The purpose of the plan is set forth in the Plan Document and Master Trust, which are accessible on the VRS website at waretire.org. Bundled plans use the same company for investments, recordkeeping, enrollment and marketing services. A bundled plan provider's investment platform may include the provider's proprietary investment options as well as non-proprietary options.

1. Investment Objectives

In a defined contribution (DC) investment program, each participant has his or her own risk tolerance, time horizon and investment objectives. Participants are responsible for their own investment decisions. To help meet these varying needs, the VRS ORPHE seeks to provide participants with an array of investment choices across a range of asset classes, risk levels, and investment strategies so they can construct and/or invest in portfolios that address their individual needs, and do so using investment vehicles and structures that provide competitive risk-adjusted returns at a reasonable cost within a bundled plan construct.

The Board recognizes that DC plan participants have varying levels of investment knowledge and/or interest in actively managing their investments, and therefore may desire investment alternatives in addition to those offered as part of a core investment lineup. To meet this need, a self-directed brokerage account (SDBA) is made available to self-designated knowledgeable investors who are willing to accept all risks, costs, and operational rules and procedures related to participating in a SDBA.

2. Decision Making

The Board is responsible for the following:

- Selection of the plan default investment option. (Appendix 1)
- Within the fund lineup, included asset classes. (Appendix 2)
- Whether to offer a Self-Directed Brokerage Account (SDBA). (Appendix 3)
- Whether individual investment advice will be provided and the terms on which it will be available to participants.

(Continued)

^{*} Originally adopted February 16, 2012. Amended November 14, 2013, February 9, 2017, and January 2, 2020.



VRS Investment Policy Statement for a Bundled Defined Contribution Plan Structure

Beyond these guidelines, the Board delegates to the Chief Investment Officer (CIO) all other investment decisions related to the ORPHE as it relates to the bundled plan structure. The CIO or a designee will report regularly to the Defined Contribution Plans Advisory Committee (DCPAC) and Board on the status and investment results of the investment program. Included in such reporting will be performance benchmarks selected by the CIO to appropriately measure or compare the risk and investment objectives of the various investment options.

In carrying out its fiduciary duty to oversee DC investments, the Board will consider advice and recommendations provided by the DCPAC. The specific duties and responsibilities of the DCPAC are described in the DCPAC Charter.

Additionally, the Board developed a set of twelve Defined Contribution Plans Investment Belief Statements intended to help guide the strategic management of the VRS DC investment program.

3. Plan Level Policies

The CIO shall work with the VRS Director and the DCPAC relative to hiring and terminating a bundled plan provider. The CIO has full authority to select or eliminate fund options within a bundled plan provider's investment program using reasonable processes and to negotiate or renegotiate investment fees. The CIO shall also develop procedures for appropriate mapping of bundled plan assets and/or funds as situations arise. Mapping means the transfer of assets from a discontinued investment option or terminated provider to another investment option or provider under the ORPHE. The CIO works with the Director to coordinate implementation relating to changes to the bundled plan investment program and may consult with the DCPAC as needed.

The CIO is responsible for ensuring that adequate due diligence is being performed in the evaluation of potential and existing investments, and that all investment activity will be in compliance with applicable regulatory requirements.

4. Trading Restrictions and Redemption Fees

The Board and the bundled plan provider(s) may impose restrictions and/or fees that discourage investment trading that could have an adverse impact on the management of a fund, other participants, or clients of the provider companies.

(Continued)



VRS Investment Policy Statement for a Bundled Defined Contribution Plan Structure

5. Best Execution

Taking into consideration the nature of a bundled DC plan structure, generally all investment transactions executed on behalf of the plan should be made on the basis of best execution. VRS defines best execution as the process and price that results in the best overall performance impact, as judged by the portfolio manager, taking into account current market conditions. VRS will generally discourage the use of soft dollar arrangements, and where such arrangements are utilized, staff will review this usage for reasonableness.

6. Use of Consultants/Service Providers

The CIO has the authority to hire consultants, research providers, and other service providers providing that such expenditures are in alignment with the Board approved operating budget.

7. Code of Ethics

The investment staff will conduct its affairs in a manner that reflects the highest standards of ethical conduct. The staff is expected to comply with the <u>CFA Institute of Code of Ethics and Standards of Professional Conduct</u>.



Default Investment Option Effective January 2, 2020 Appendix 1

TIAA-CREF Program: BlackRock LifePath Index Funds



Asset Classes: Investment Options Effective November 14, 2013 Appendix 2

Investment options shall represent the broad asset classes available in the capital markets to the extent they are practical and, when prudent, certain sub-asset classes. From time to time additional asset classes may be added, or existing asset classes may be deleted in order to maintain an array of investment options that address participants' changing needs or changes in the investment industry.

The Board notes that due to the nature of the bundled plan structure investment decisions are limited to investment options that are, or can be made, available on a provider's investment platform. It is possible that bundled plan constraints may limit the scope of investment options available to participants, limit access to more attractive options within the asset classes and limit the extent to which negotiations can be made relative to investment management and investment related fees.

The Board delegates to the CIO decisions as to 1) whether a fund investment option shall utilize a passive or active investment strategy or a combination of both; 2) whether a fund should exhibit a large, mid, or small capitalization structure or a combination thereof; 3) whether a fund should exhibit a growth, value, blended style, or targeted volatility orientation; 4) whether a fund should have a single investment manager or use multiple investment managers or firms and; 5) whether a fund invests in a single asset class or more than one asset class.

The following asset class categories are considered for possible inclusion in the plan:

Capital Preservation

- Money Market
- Stable Value
- Fixed Annuity

Fixed Income

- Investment grade (short-term, intermediate, long-term)
- Inflation-Protected
- High-Yield
- International/Global

Global Public Equity

- U.S. Equity
- Non-U.S. Developed Equity
- Emerging Equity

Real Estate (public & private)

Asset Allocation

- Target Date
- Risk Based
 (Continued)



Asset Classes: Investment Options Effective November 14, 2013 Appendix 2 (continued)

The Board expects asset allocation funds to be diversified portfolios. These portfolios may include exposure to various sub-segments of the broad asset classes as well as to alternative asset classes as determined by the provider company using reasonable optimization techniques to measure the risk/reward trade off. Asset classes used within asset allocation funds may include: large cap domestic equity, small/mid cap domestic equity, international equity, emerging market equity and debt, domestic core fixed income, high-yield bonds, inflation-protected securities, international/global fixed income, commodities, real estate and cash. An asset allocation fund is not required to include each of these asset classes and may include other asset classes. Glide paths for target date portfolios shall be based on sound investment theory and investment methodology as well as reasonable capital market assumptions. A glide path represents the changes made to the asset allocation mix over time as the target date approaches. There is a higher equity allocation in the longer dated portfolios because of the long-term investment time horizon. Over time, the equity allocation decreases as the investment time horizon decreases.



Self-Directed Brokerage Account Effective February 9, 2017 Appendix 3

A Self-Directed Brokerage Account (SDBA) is made available through the plan's bundled provider(s) and is not contracted for separately. A bundled plan provider may change its SDBA provider from time to time.

The SDBA is available for self-designated knowledgeable investors who acknowledge and understand the SDBA's operational rules and procedures as well as the risks and costs associated with the investments allowed in the SDBA. Subject to limitations imposed by the SDBA provider, allowable investments include mutual funds, exchange traded funds (ETFs) and individual securities. Participants must complete the SDBA enrollment materials prior to investing the SDBA.

Quarterly Review

VRS Defined Contribution Plans

April 1, 2024 – June 30, 2024



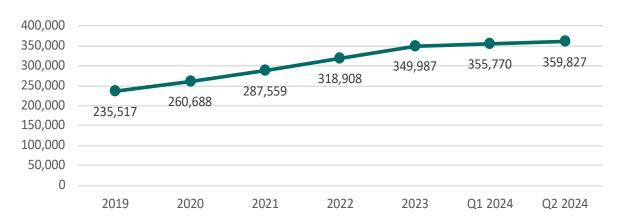


VRS Defined Contribution Plans¹

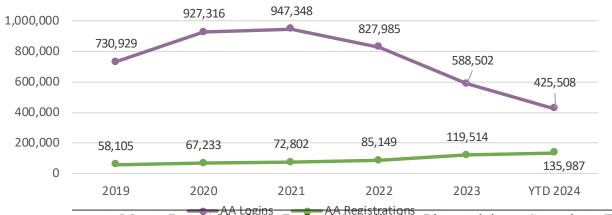
2nd Quarter 2024 – DC Plans Metrics

Total Assets²: \$8,194,886,861.03 Total Accounts²: 618,658

Unique Participants

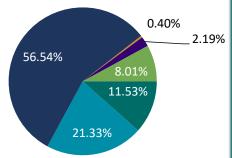


Account Access Registrations & Logins

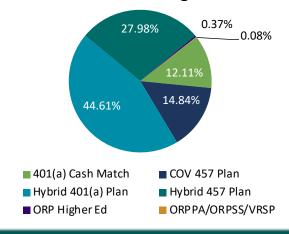


10. VRS Hybrid Plan Learning Channel





Accounts Under Management



Top 10 Visited Pages³

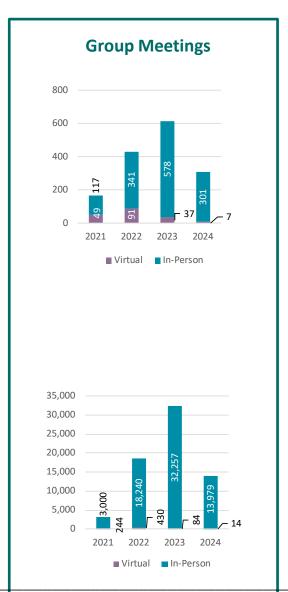
- 1. COV 457 Retirement Plan Landing Page
- 2. Hybrid Retirement Plan Landing Page
- 3. Hybrid 457 Voluntary Contributions
- 4. Hybrid Plan Group Life Insurance
- 5. COV 457 Overview
- 6. Virginia Cash Match Landing Page
- 7. Hybrid Plan Education
- 8. COV 457 Plan Info
- 9. COV 457 Contributions

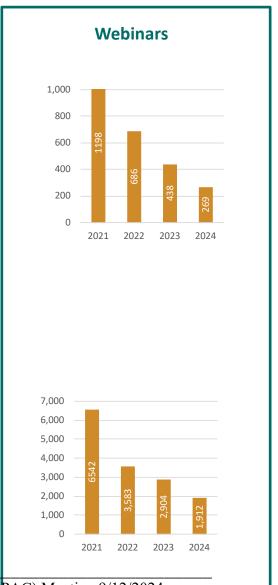
Master Page # 38 of 43 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 9/12/2024

2nd Quarter 2024 – DC Plans Participant Engagement

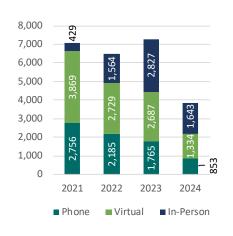
Call Center – Participant Services 32,521 calls received YTD in 2024 60,397 calls received in 2023 55,471 calls received in 2022 55,311 calls received in 2021 Current call trends: 1. Withdrawals 2. General inquiries 3. Internet assistance 4. Deferrals 5. Indicative data







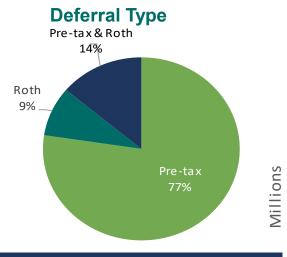
Individual Account Reviews



Participant Attendance

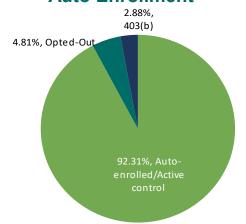
Master Page # 39 of 43 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 9/12/2024

2nd Quarter 2024 – COV 457 Plan, Virginia Cash Match Plan



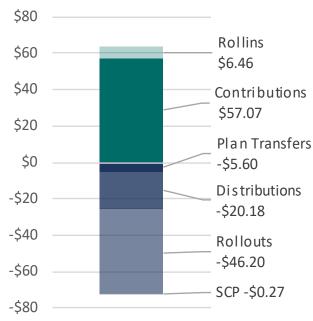
Average pre-tax deferral per pay = \$189.09 Average Roth deferral per pay = \$177.44

Auto Enrollment



4.81% Opt-Out rate for quarter 8.79% opt-out ratesing lineaption? of

Contributions/Distributions⁵



Participant Status Overview⁶

166,000 total accounts

56% Active 44% Separated

\$2,351m assets at-risk

Defined Contribution Plans Advisory Committee (DCPAC) Meeting 9/12/2024

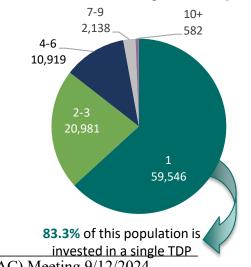
COV 457 Participation Rates

 State⁴ 33.54% 9.56% Non-state

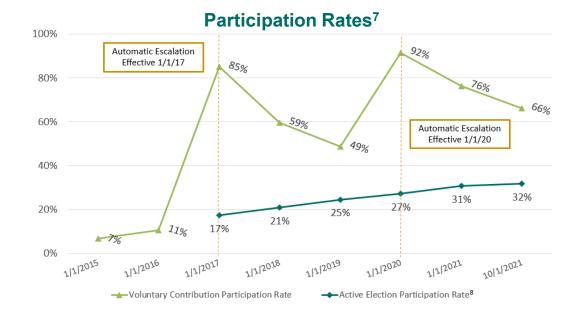
Top 10 Fund Holdings

1.	Stock	\$1,829,849,104
2.	Target Date Portfolios	\$1,578,507,598
3.	Stable Value	\$584,002,557
4.	Small/Mid-Cap Stock	\$411,757,162
5.	International Stock	\$206,907,900
6.	Bond	\$147,229,156
7.	Money Market	\$121,905,502
8.	Schwab PCRA	\$119,098,662
9.	Global Real Estate	\$80,257,138
10.	VRS Investment Portfolio	\$65,026,474

of Funds Held by Participants



2nd Quarter 2024 – Hybrid Retirement Plan – 401(a) & 457(b)

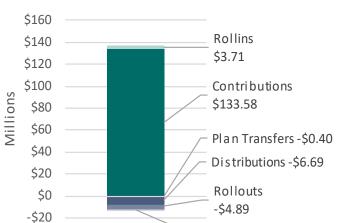




70% Active 30% Separated

\$514m assets at-risk

Contributions/Distributions



Voluntary
Elections

27.1%
4% Election

33.8%
Not making voluntary contributions

3.7%
1.5-3.5%
Election

24.8%
0.5% Election

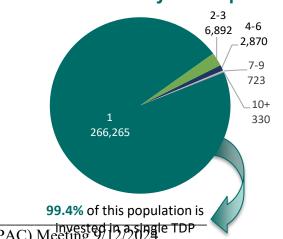
Top 10 Fund Holdings

1. Target Date Portfolios

2.	Stock	\$110,424,747
3.	Small/Mid-Cap Stock	\$25,153,888
4.	International Stock	\$15,366,597
5.	Stable Value	\$13,383,508
6.	Money Market	\$10,169,860
7.	Global Real Estate	\$5,512,048
8.	High-Yield Bond	\$5,315,724
9.	Schwab PCRA	\$5,295,181
10	Bond	\$4 641 356

\$2,501,352,553

of Funds Held by Participants



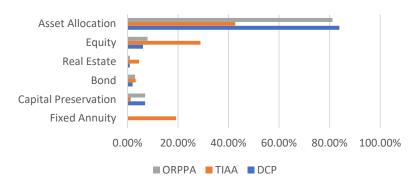
Master Page # 41 of 43 - Defined Contribution Plans Advisony Committee (DCPAC) Meeting 9/12/2024 TDP

2nd Quarter 2024 - ORPHE* and ORPPA

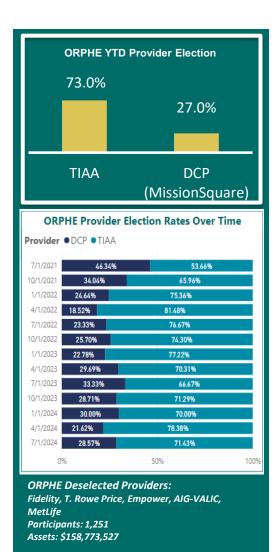




Participant Holdings by Plan and Assets



*Excludes opt-out higher ed institutions. ^Excludes deselected investments. Some currently selected funds on the TIAA platform may include assets across the RC, RA, and GRA contracts. †Includes both international and domestic equity.



2nd Quarter 2024 – DC Plans Metrics

Source Information/Additional Footnotes

All data unless noted otherwise was provided by MissionSquare Retirement and is as of 6/30/2024.

- 1. Includes DC plans record kept by MissionSquare Retirement.
- 2. Total assets and accounts include beneficiaries and excludes forfeiture and reserve accounts.
- 3. Web statistics provided by Google Analytics.
- 4. Includes employees at higher education institutions who are also eligible for a 403(b).
- 5. Cash Flow Definitions
 - Rollins Contributions into a participant's account from a retirement plan or IRA.
 - Contributions Payroll contributions from a participant's paycheck.
 - Plan Transfers Transfer of funds between VRS retirement plans.
 - Distributions Consists of auto enrollment refunds, required minimum distributions (RMDs)
 unforeseen emergency withdrawals and full, partial, installment and de minimis requests
 - Rollouts Withdrawal request sent to another retirement plan or IRA
 - SCP A request to transfer employee contribution funds from the plan to VRS to purchase service credit. Please note, SCP is not permitted from the H401 plan.
- 6. Active Participants do not have a termination date on file and may not have made a contribution during the quarter. Terminated Participants have a termination date on file.
- 7. Source: 10/1/21 Active Hybrid Member Demographics Report.
- 8. Active Election participation rate includes members who had a self-selected voluntary election on file prior to the automatic escalation that occurred on 12/16/19.
- 9. Chart shows current status of active participants set up as auto-enroll eligible after plan conversion, January 6, 2014; excludes: teagei#ateof participaets: Contribution Plans Advisory Committee (DCPAC) Meeting 9/12/2024