

Defined Contribution Plans Advisory Committee (DCPAC) Meeting GoToWebinar

Thursday, 6/24/2021 1:00 - 3:00 PM ET

- I. Welcome
- **II. Public Comment**
- **III. Meeting Minutes**

Adoption of the Minutes from the April 15, 2021 Meeting DCPAC Minutes 04-15-2021 - Page 2

IV. Investments

Final 6-24-21 PP DC Investments slide deck - Page 10

- Performance Reports
- DC Investment Belief Statements

Draft clean version VRS DC Investment Beliefs_9-21-21 - Page 14 Draft redlined VRS DC Investment Beliefs_9-21-21 - Page 18 VRS DC Investment Beliefs final 11-12-15 - Page 24

V. Administration

Administrative Reports & Communications

2021Q1 Administrative Summary - Page 27

- DC Plans Overview
- COV 457 and Cash Match Plan Update
- Hybrid Plan Update
- ORPHE Update

VI. Other Business

Discussion of New Ideas

VII. 2021 Meetings

- 2021 Meetings
 - i. September 2, 2021 at 1:00 p.m.

Annual investment review

- ii. December 2, 2021 at 1:00 p.m.
- ORPHE Annual Employer Update

September 30, 2021 (not a meeting of the DCPAC)

VIII. Adjournment

IX. Appendix

For informational purposes only. Will not be reviewed in detail during the meeting. Unbundled DC Plans April 30, 2021 Performance Report - Page 49
TIAA ORPHE April 30, 2021 Performance Report - Page 51
2021Q1 Administrative Summary [Appendix Slides] - Page 53
Q1 2021 ICMARC Quarterly Review - VRS Copy - Page 66
2020_ICMARC VRS Annual Strategy Document-FINAL2 - Page 146



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021

Page 1 of 8

MINUTES

An electronic meeting, held in accordance with §2.2-3708.2(A)(3) of the *Code of Virginia* and Chapter 56 of the 2020 Special Session I Acts of Assembly, the Defined Contribution Plans Advisory Committee (DCPAC) of the VRS Board of Trustees convened electronically on April 15, 2021, with the following members present:

Committee Members:

Hon. J. Brandon Bell, II, Chair Ravindra Deo Dr. Susan Gooden Shannon Irvin Rick Larson Brenda Madden David Winter

Members of the Board of Trustees:

Michael Disharoon William Garrett O'Kelly E. McWilliams, III

VRS staff members in attendance:

Trish Bishop, Steve Cerreto, Jeanne Chenault, Michael Cooper, Valerie Disanto, Josh Fox, Brian Goodman, Robert Irving, Ciara Lawson, Joyce Monroe, Rebecca Nicholas, Teresa Nguyen, Laura Pugliese, Kristy Scott, Michael Scott, Jillian Sherman, Jennifer Schreck, Ashley Spradley, Stacy Taylor, Peter Thompson, Rachel Webb, Daniel Whitlock, and Cindy Wilkinson.

Also in attendance were Frank Albanese, Financial Investment News; Adam Rosatelli, Senate Finance and Appropriations Committee Staff; and Latosha Johnson, Virginia Department of Planning and Budget Staff.

The meeting convened at 1:06 p.m.

Ms. Sherman served as facilitator and walked participants through the logistics of an electronic meeting. Ms. Sherman turned the meeting over to Mr. Bell to call the meeting to order.

Chairman Bell welcomed committee members, board members, VRS staff, representatives from other stakeholder groups and members of the public.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021

Page 2 of 8

Mr. Bell noted that given the current circumstances related to COVID-19, the DCPAC was unable to meet in person. However, the DCPAC held this meeting remotely in accordance with the *Code of Virginia* and Chapter 56 of the 2020 Special Session I Acts of Assembly as it relates to conducting business during the pandemic.

Mr. Bell took a roll call of each DCPAC member for attendance purposes*:

Mr. Deo – Present

Ms. Irvin – Present

Mr. Larson – Present

Ms. Madden – Present

Mr. Winter - Present

Mr. Bell – Present

PUBLIC COMMENT

In accordance with Chapter 56 of the 2020 Special Session I Acts of Assembly, the Committee opened the floor for public comment. Mr. Bell noted that no members of the public registered to comment at the electronic meeting.

APPROVAL OF MINUTES

Upon a motion by Mr. Bell, with a second by Mr. Winter, the minutes of the November 19, 2020 meeting were approved.

Mr. Bell asked for each Committee member to vote on the motion*:

Mr. Deo – Aye

Ms. Irvin – Aye

Mr. Larson – Aye

Ms. Madden – Aye

Mr. Winter - Aye

Mr. Bell – Aye

^{*}Due to technical difficulties, Dr. Susan Gooden was not present at this time.

^{*}Due to technical difficulties, Dr. Susan Gooden was not present at this time.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021 Page 3 of 8

ADMINISTRATIVE REPORTS AND COMMUNICATIONS UPDATE

Rebecca Nicholas, DC Plans Operations Supervisor, provided an update on the VRS Defined Contribution Plans for the fourth quarter, ending December 31, 2020.

DC Plans and Hybrid Plan Update

Ms. Nicholas shared the total assets under management across all DC plans, as well as an overview of unique participant counts for the unbundled plans and recent plan adoptions. Ms. Nicholas provided an update on total assets and accounts in the VRS Defined Contribution Plans through December 31, 2020. She also presented an overview of the number of unique participants in the unbundled DC Plans. Ms. Nicholas noted new plan coverage requests for the fourth quarter of 2020. She also provided an overview of plan adoptions over the past 10 years and noted there were fewer plan adoptions in 2020, which could be attributed to the pandemic.

Ms. Nicholas shared with the Committee some initiatives with ICMA-RC that included the new Financial Planning Services website that recently launched as well as communication initiatives to promote the new service to all VRS members and participants.

Ms. Bishop provided additional insight into the name change and rebranding initiative from ICMA-RC to MissionSquare Retirement. Ms. Bishop also shared efforts underway to update VRS communication and print resources to align with the name change and rebranding. Staff noted the name change transition is targeted for completion by September 2021.

Ms. Nicholas provided an update of Coronavirus-Related Distributions (CRDs) through December 31, 2020. She specifically noted the number of CRDs taken by active participants as well as the percentage of distributions processed that were under \$5,000 and withdrawn from the COV 457 Plan.

Ms. Nicholas provided an update on total assets and accounts in the COV 457 and Virginia Cash Match plans through December 31, 2020, as well as an overview of cash flow from the COV 457 and Virginia Cash Match plans. Ms. Nicholas also shared recent initiatives with ICMA-RC that target participants in the COV 457, including hybrid plan members eligible to participate, that consist of a new splash screen feature and enhancements to the contribution screen that promote additional savings within annual plan limits and maximizing contributions to eligible plans.

Ms. Nicholas provided a review of total assets and accounts in the Hybrid Retirement Plan for the fourth quarter of 2020. She also presented an overview of the cash flow from the defined contribution component of the Hybrid Retirement Plan, including contributions, withdrawals and net cash flow. Ms. Nicholas updated the Committee on the Hybrid 457 voluntary participation and contribution election



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021 Page 4 of 8

rates for the fourth quarter of 2020. She also updated the Committee on the Hybrid 457 voluntary participation, contribution election rates, auto-escalation status, and Hybrid 403(b) participation for the fourth quarter of 2020.

Ms. Nicholas provided an overview of the DC Plans goal to improve asset allocation for the fourth quarter 2020. She shared with the Committee a number of communication items related to this initiative, particularly in response to the COVID-19 pandemic and market volatility.

In addition, Ms. Nicholas shared with the Committee recent study findings by the Public Retirement Research Lab, noting the asset allocation behaviors of members and participants in the supplemental plan and hybrid retirement plan as well as the alignment of such behaviors with industry peers across both public and private sector defined contribution plans. Ms. Nicholas also provided an overview of plan assets by fund, number of investments held by participants, and self-directed brokerage account usage.

Mr. Winter commented that with more than 80% of plan participants allocated to a single investment fund such as a target date portfolio fund, the presumption can be that participants are well diversified given the pre-mixed portfolios are already diversified across various asset classes.

Ms. Bishop noted that the data is helpful in monitoring participants invested in single fund options that were available prior to the inclusion of target date portfolios. Ms. Bishop shared that prior to target date portfolios, many participants were allocated to a single investment such as the stable value fund, which may warrant outreach by the plan sponsor on the importance of diversification. She noted that participants with a single investment in a target date fund does not necessarily call for additional outreach.

ORPHE Update

Ms. Nicholas provided an overview by provider of total ORPHE assets, participants and average balances for the fourth quarter of 2020. She also gave an update on ORPHE provider selections and provider initiatives for the fourth quarter of 2020.

Pensions & Investments 2021 Eddy Awards

Ms. Nicholas shared with the Committee that VRS and TIAA won the Pensions & Investments 2021 Eddy Award in March for the ORPHE 2020 plan changes initiative. She noted that VRS also won an Eddy Award for Financial Wellness.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021

Page 5 of 8

Legislative Update

Ms. Nicholas provided a legislative update regarding a technical bill that allows for the use of more general language for required minimum distributions to begin at the date established by the Internal Revenue Code.

Mr. Bell thanked Ms. Nicholas for her presentation.

Following Ms. Nicholas' report, the Committee took a five-minute recess.

The meeting reconvened upon the following roll call vote:

Mr. Deo – Present

Dr. Gooden – Present

Ms. Irvin - Present

Mr. Larson – Present

Ms. Madden – Present

Mr. Winter – Present

Mr. Bell - Present

DC PLANS INVESTMENTS UPDATE

Laura Pugliese, Portfolio Manager, Defined Contribution Plans, provided an overview of the February 28, 2021 performance reports.

PERFORMANCE REPORTS

Unbundled Plans

Ms. Pugliese provided an overview of the performance on the unbundled DC Plans platform as of February 28, 2021. She informed the Committee that funds were performing as expected in the unbundled DC Plans platform and also noted the positive returns in the equity markets over the past year given the current environment.

Ms. Pugliese highlighted the fact that funds allocated to the target date portfolios comprise approximately 42% of total assets in the unbundled DC Plans as of February 28, 2021. She noted that the impact to the overall asset allocation across various funds in the unbundled DC Plans could be attributed to the introduction of the hybrid retirement plan in 2014.

Ms. Pugliese provided an update to the Pending Account VRSIP (PENDVRSIP) for the VRSIP fund on the unbundled DC Plans investment menu, effective April 1, 2021.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021 Page 6 of 8

Ms. Pugliese shared that Wells Fargo recently reached an agreement with two private equity firms (GTCR LLC and Reverence Capital Partners, L.P.) to acquire Wells Fargo Asset Management. The transaction includes VRS' stable value investment manager, Galliard Capital Management. Galliard is a subsidiary of Wells Fargo.

Bundled Plans

Ms. Pugliese shared with the Committee that the TIAA ORPHE performance report as of February 28, 2021, reflects the new investment menu effective January 2020 and is based solely on investments offered in the TIAA RC contract.

Callan 2021 DC Trends Survey Highlights

Ms. Pugliese provided an overview of highlights from the Callan 2021 DC Trends survey results, which represented 93 large DC plan sponsor respondents that span a range of industries across corporate, tax-exempt, and government organizations, as well as other plan characteristics.

Mr. Bell noted the percentage of government plans that offered a 401(k) plan, which Ms. Pugliese advised was available to government plans in the past and have since been grandfathered.

Ms. Pugliese shared some of the key findings from the annual survey that included DC trends in governance, plan design, and investments, noting where VRS had previously implemented or pursued action on several key initiatives and best practices highlighted in the survey.

Ms. Pugliese advised that the Callan 2021 DC Trends Survey was included in the meeting materials Appendix for the Committee to review.

VRS Defined Contribution Plans Investment Belief Statements

Ms. Pugliese provided the Committee with a copy of the VRS Defined Contribution Plans Investment Belief Statements. She requested the Committee and staff review the statements and provide her with suggested edits prior to the Committee's June 24, 2021 meeting. Ms. Pugliese mentioned she will consolidate all edits and facilitate the discussion about suggested changes to the document during the meeting on June 24th. She stated agreed upon edits will subsequently be brought to the Board for their consideration. Mr. Bell thanked Ms. Pugliese for her presentation.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021 Page 7 of 8

OTHER BUSINESS

DCPAC Appointments

Ms. Bishop informed the Committee of the request for reappointment of Shannon Irvin, Rick Larson, and David Winter, each to a two-year term ending June 20, 2023. Their current term expires June 20, 2021.

Ms. Bishop also informed the Committee of the resignation of Kathy Seay from the DCPAC, effective April 1, 2021, due to her retirement. Ms. Seay's Committee term expires on June 20, 2022. A recommendation has not yet been received to fill Ms. Seay's unexpired term but will be brought to the Committee at a future date. Ms. Bishop also noted the seat formerly held by Mr. Carlson remains vacant.

RBA: Request for Board Action Regarding Reappointment of DCPAC Members

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

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

Mr. Bell asked for each Committee member to vote on the motion, with a second by Ms. Madden.

Mr. Bell took a roll call vote on the motion:

Mr. Deo – Aye

Dr. Gooden - Aye

Ms. Irvin - Aye

Mr. Larson – Aye

Ms. Madden – Aye

Mr. Winter – Aye

Mr. Bell – Aye

Discussion of New Ideas

Staff advised that Ms. Irvin had suggested outreach to employees in advance of salary increases included in the Appropriation Act.



Defined Contribution Plans Advisory Committee Meeting Minutes April 15, 2021 Page 8 of 8

UPCOMING DEFINED CONTRIBUTION PLANS ADVISORY COMMITTEE MEETINGS

Mr. Bell confirmed the following DCPAC meeting dates for 2021:

The next meeting of the DCPAC will take place on June 24, 2021, from 1:00 p.m. to 4:00 p.m., with remaining meetings on September 2nd and December 2nd.

The ORPHE Annual Employer Update is scheduled for September 2021. This is not a DCPAC Committee meeting, however members may attend if interested.

ADJOURNMENT

Mr. Bell made a motion to adjourn the meeting, with a second by Mr. Deo.

Mr. Bell took a roll call vote on the motion:

Mr. Deo – Aye Dr. Gooden - Aye Ms. Irvin – Aye

Mr. Larson – Aye Ms. Madden – Aye Mr. Winter – Aye

Mr. Bell – Aye

There being no further business, Mr. Bell adjourned the meeting at 3:04 p.m.

J. Brandon Bell, Chair Defined Contribution Plans Advisory Committee



DC Plans Investments
June 24, 2021



Performance Table



Defined Contribution Plans Investment Performance

Period Ending April 30, 2021

Unbundled DC Plan Structure

	1 year	3 years	5 years	10 years
Target Date Portfolios				
Met or exceeded benchmark	10	9	9	8
Total number of options	10	9	9	8
Individual Investment Options				
Met or exceeded benchmark	10	10	10	10
Total number of options	10	10	10	10

TIAA ORPHE Bundled DC Plan Structure

	1 year	3 years	5 years	10 years
Investment Options				
Met or exceeded benchmark	17	16	16	14
Total number of options	17	16	16	14

Master Page # 11 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021

Performance Table (continued)



Notes to the Performance Table

Total number of investment options reported for a given period can change because longer-term performance is not available for newer options. Passively managed investment options are expected to trail their benchmarks by the fund expense ratios. Actively managed investment options are expected to outperform their benchmarks net of fund expense ratios. Capital preservation funds (money market & stable value) are expected to generate returns at or above zero and were assessed relative to that benchmark. The TIAA Real Estate Account is only counted on a calendar quarter basis because custom benchmark returns are calculated on a calendar quarterly basis due to private real estate holdings. The TIAA Traditional Annuity is not included in the table due to the nature of a fixed annuity.

VRS DC Investment Belief Statements



- September 21, 2021: Next VRS Board of Trustees meeting
- September 2, 2021: DCPAC roll call vote regarding the DC Investment Belief Statements
 - A Request for Board Action will be provided to the DCPAC
- Additional edits discussed during the DCPAC's June 24, 2021 meeting will be incorporated into the final document provided to the Committee on September 2, 2021
 - The VRS Public Relations Department will reformat the DC Investment Belief Statements to reflect the VRS brand, before posting it to the VRS website, along with other investment documents.

VRS Defined Contribution Plans Investment Belief Statements

Approved by the Board of Trustees: September 21, 2021

DRAFT	
DIXAI' I	

I. Introduction

The Virginia Retirement System (VRS) strives to be consistent with 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 DC Investment Beliefs to guide the strategic management of the VRS DC Plans investment program. These DC Investment Beliefs represent a high-level framework for making decisions that require balancing multiple, often competing, factors and issues. In addition, the DC 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 DC Investment Belief Statements to guide its decisions and provide an anchor to the stated goals and objectives.

Goals and Objectives

A defined contribution plan is an individual account program whereby participants exercise discretion over assets in their accounts. Each participant has his or her own 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 stream of retirement income 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.

- b. Governing documents such as the Charter for DC Plans Advisory Committee, DC Investment Policy Statements, Master Trusts and Plan Documents delineate various roles and responsibilities among the Board, the Committee, VRS Investment 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 that do not have the time, desire, or expertise to manage a diversified portfolio.
- 4. To the best 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 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 option offerings must be wide-ranging to accommodate participants' varying investment knowledge and/or interest in managing their investments and address the difference between participants who are early on or in the midst of their careers and those who are nearing or in retirement.

- a. Individuals must recognize their specific programs require a long-term, multi-decade planning/investment horizon.
- b. Investment horizons are unique to each individual participant and may extend beyond the accumulation phase into the retirement (decumulation) phase.
- c. Administrative and investment aspects of the overall program need to be unbundled/disaggregated to allow for maximum design flexibility.
- d. VRS will make a concerted effort to reach out to employees who are eligible but not participating in the VRS DC plans to provide an awareness of the benefits available through the plans.
- 8. To provide investment flexibility to individual participants, a self-directed brokerage window can be an effective feature of the VRS DC Plans.
- 9. Managing the decumulation of retirement assets is critical. VRS will explore viable solutions to assist participants in managing this area.
- 10. Participant investment education is valuable to participants and necessary for a successful program.
 - a. Minimum education should cover certain key topics including:
 - i. Identifying key retirement planning risks (see Belief Statement 11).
 - ii. Understanding the accumulation phase vs. 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 explore making available various investment advice and financial planning solutions/products.
- 11. The VRS should seek to inform DC plan participants about key retirement planning risks.
 - a. <u>Shortfall risk</u> the probability or potential that an individual may not meet his/her long-term retirement savings goal.
 - b. <u>Longevity risk</u> the potential that an individual may outlive his/her retirement assets.

c. <u>Drawdown risk</u> – the impact that short-term declines in a portfolio values can have on long-term success.	ve
	4

VRS Defined Contribution Plans Investment Belief Statements

Approved by the Board of Trustees: September 21, 2021 November 12, 2015

1. Introduction

The Virginia Retirement System (VRS) strives to be consistent with 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, of Trustees developed these a set of twelve Defined Contribution (DC) Plans Investment Beliefs intended to help guide the strategic management of the VRS DC Plans investment program. These DC Investment Beliefs represent a high-level framework for making decisions that often require balancing multiple, often competing, factors and issues. In addition, the DC Investment Beliefs provide context for VRS actions and reflect VRS values, with a focus on VRS maintaining its the long-term commitment to provide benefits to its participants.

2. II.VRS DC Investment Belief Statements

With the assistance of an outside expert, tThe Board developed the following twelve-DC Investment Belief Statements to guide its the Board in future decisions and provide an anchor to the Board's stated goals and objectives.

Goals and Objectives

A defined contribution plan is an individual account program whereby participants exercise discretion over assets in their accounts. Each participant has his or her own 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 stream of retirement income 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

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Font: Italic

Formatted: Font: (Default) Times New Roman, 12 pt, Bold

Formatted: Normal, Indent: Left: 0.25", No bullets or numbering

Formatted: Indent: Left: 0.25"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Indent at: 1"

1

appointed a Defined Contribution Plans Advisory Committee to provide the Board with objective DC plan design and investment advice.

- <u>b.</u> Governing documents such as the Charter for DC Plans Advisory Committee, DC Investment Policy Statements, Master Trusts and Plan Documents delineate various roles and responsibilities among the Board, the Committee, VRS Investment 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 that do not have the time, desire, or expertise to manage a diversified portfolio.
- 4. To the best 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.
- 1)5. VRS DC Plans should will monitor and evaluate continue to seek investment DC plans program industry best practices and incorporate them where feasible to seek to enhance plan outcomes as demonstrated by establishing, monitoring, and reporting on key quantitative and qualitative qualitative and quantitative -measures of the DC investment program.
- 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.
 - Given VRS' large-scale 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.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Indent at: 1"

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Indent: Left: 1.25", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Normal, Indent: Left: 1", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.96" + Lodent at: 1.21"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.96" + Indent at: 1.21"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.96" + Indent at: 1.21"

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.96" + Indent at: 1.21"

2

7. Investment option offerings must be wide-ranging to accommodate participants' varying Formatted: Font: (Default) Times New Roman, 12 pt investment knowledge and/or interest in managing their investments and address the Formatted: List Paragraph, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left difference between participants who are early on or in the midst of their careers and those Aligned at: 0.25" + Indent at: 0.5" who are nearing or in retirement. a. Individuals must recognize their specific programs require a long-term, multi-Formatted: Font: (Default) Times New Roman, 12 pt Formatted: Numbered + Level: 2 + Numbering Style: a, b, decade planning/investment horizon. c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + b. Investment horizons are unique to each individual participant and may extend Formatted: Font: (Default) Times New Roman, 12 pt beyond the accumulation phase into the retirement (decumulation) phase. Formatted: Numbered + Level: 2 + Numbering Style: a, b, . + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Indent at: 1", Tab stops: Not at 1.75 c. Administrative and investment aspects of the overall program need to be Formatted: Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + unbundled/disaggregated to allow for maximum design flexibility. Indent at: 1", Tab stops: Not at 1.75" d. VRS will make a concerted effort to reach out to employees who are eligible but Formatted: Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + not participating in the VRS DC plans to provide an awareness of the benefits Indent at: 1" available through the plans. 8.9) To provide investment flexibility to individual participants, a self-directed brokerage window can be an effective feature of the VRS DC Plans. 9. Managing the decumulation of retirement assets is critical. VRS will explore viable solutions to assist participants in managing this area. 10. Participant investment education is valuable to participants and necessary for a successful program. Formatted: Indent: Left: 0.5", First line: 0" A. Minimum education should cover certain key topics including. a. Identifying key retirement planning risks (see Belief Statement 11). b. Understanding the accumulation phase vs. decumulation phase. c. Analyzing the costs associated with various investment options. d. Considering the impact of non-plan (outside) assets. e. Considering other potential sources of retirement income. Formatted: Indent: Left: 1" 3

	al Formatted: Indent: Left: 0.75", First line: 0"
B. VRS should also explore making available various investment advice and financial planning solutions/products.	Tornation maint. Ect. 8.78 , maxime.
2) Given the increasing role of the DC Plans in VRS' primary retirement plan offerings, appropriate governance of the DC Plans is critical.	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
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.	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
O) Governing documents such as the Charter for DC Plans Advisory Committee, DC Investment Policy Statements, Master Trusts and Plan Documents delineate various role and responsibilities among the Board, the Committee, VRS Investment Staff and other interested parties.	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
2)2Controlling and managing costs is critical to a successful DC plan investment program. 2)2. Investment options should provide competitive net-of-cost risk-adjusted returns;	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
The DC Plans' costs should be transparent to the individual participant;	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
)2. Given VRS' large-scale in the institutional marketplace, it is beneficial for the individual participant to access VRS' expertise and capabilities;	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
Unbundling of DC administration and investment activities should lead to improved cosmanagement.	Formatted: Numbered + Level: 1 + Numbering Style: 1 3, + Start at: 2 + Alignment: Left + Aligned at: 0.25" Indent at: 0.5"
	Formatted: Font: (Default) Times New Roman, 12 pt
	Formatted: Normal, No bullets or numbering
11. The VRS should seek to inform DC plan participants about key retirement planning risks.	Formatted: Indent: Left: 0", Hanging: 0.5", No bullet numbering
a. Shortfall risk – the probability or potential that an individual may not	Formatted: Normal, Indent: Left: 1", No bullets or numbering
meet his/her long-term retirement savings goals, ;	Formatted: Font: (Default) Times New Roman, 12 pt
b : b . Longevity risk – the potential that an individual may outlive his/her retirement assets. \dot{z}	Formatted: Indent: Left: 1.25", No bullets or number

can have on long-term success.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Normal, Indent: Left: 1", No bullets or numbering

5) To the best extent possible, the Board should continue to explore and implement capabilities, controls, and procedures that are transferrable from VRS' DB activities to VRS' DC Plans, particularly with respect to investments.

Formatted: Indent: Left: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left Aligned at: 0.25" + Indent at: 0.5"

- 6) The VRS DC Plans are responsible for offering a reasonable range of diversified portfolios to serve as the Plans' default investment option as well as to participants that do not have the time, desire, or expertise to manage a diversified portfolio.
- 7) The VRS DC Plans investment offerings must be wide-ranging to accommodate participants' varying investment knowledge and/or interest in managing their investments and address the difference between participants who are early on or in the midst of their careers and those who are nearing or in retirement.
 - a) Individuals must recognize their specific programs require a long-term, multi-decade planning/investment horizon;
 - b) Investment horizons are unique to each individual participant and may extend beyond the accumulation phase into the retirement (decumulation) phase; and
 - e) Administrative and investment aspects of the overall program need to be unbundled/disaggregated to allow for maximum design flexibility.
 - 8) A minimum level of participant investment education is necessary for a successful—program.

Education should cover certain key topics:

- a) Key retirement planning risks (see Belief Statement 4);
- b) Accumulation phase vs. decumulation phase;
- e) How to analyze the costs associated with various investment options;
- d) Consideration of non-plan (outside) assets.
- To provide investment flexibility to individual participants, a self-directed brokerage window can be an effective feature of the VRS DC Plans.
- 10) Well-structured alternative investments can enhance an individual participant's portfolio risk/reward profile. VRS DC Plans should examine methods for providing

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5", Tab stops: Not at 1.75"

Formatted: Indent: Left: 1.5", No bullets or numbering

qualifying alternative investment options into its menu of pre-mixed diversified investment options, where feasible. 11) Managing the decumulation of retirement assets is critical. The VRS DC Plans will continue to explore viable solutions in this area. 12) Investment education can be a valuable resource to individual participants. In this context, VRS DC plan decision makers should explore making available various investment advice and financial planning solutions/products.	
11) Managing the decumulation of retirement assets is critical. The VRS DC Plans will continue to explore viable solutions in this area. 12) Investment education can be a valuable resource to individual participants. In this context, VRS DC plan decision makers should explore making available various	
12) Investment education can be a valuable resource to individual participants. In this context, VRS DC plan decision-makers should explore making available various	— investment options, where feasible.
12) Investment education can be a valuable resource to individual participants. In this context, VRS DC plan decision-makers should explore making available various	11) Managing the decumulation of retirement assets is critical. The VRS DC Plans will
context, VRS DC plan decision-makers should explore making available various	
context, VRS DC plan decision-makers should explore making available various	12) Investment education can be a valuable resource to individual participants. In this

VRS Defined Contribution Plans Investment Belief Statements

Approved by the Board of Trustees: November 12, 2015

1. Introduction

The VRS Board of Trustees developed a set of twelve Defined Contribution (DC) Plans Investment Beliefs intended to help guide the strategic management of the VRS DC Plans investment program. These DC Investment Beliefs represent a high-level framework for making decisions that often require balancing multiple, often competing, factors and issues. In addition, the DC Investment Beliefs provide context for VRS actions and reflect VRS values, with a focus on VRS maintaining its long-term commitment to provide benefits to its participants.

2. VRS DC Investment Belief Statements

With the assistance of an outside expert, the Board developed the following twelve DC Investment Belief Statements to guide the Board in future decisions and provide an anchor to the Board's stated goals and objectives.

- The DC Plans should continue to seek investment program best practices by establishing, monitoring, and reporting on key quantitative and qualitative measures of the DC investment program.
- 2) Given the increasing 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.
 - b) Governing documents such as the Charter for DC Plans Advisory Committee, DC Investment Policy Statements, Master Trusts and Plan Documents delineate various roles and responsibilities among the Board, the Committee, VRS Investment Staff and other interested parties.
- 3) 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 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.
- 4) The VRS should seek to inform DC plan participants about key retirement planning risks.
 - a) <u>Shortfall risk</u> the probability or potential that an individual may not meet his/her long-term retirement savings goals;
 - b) <u>Longevity risk</u> the potential that an individual may outlive his/her retirement assets;
 - c) <u>Drawdown risk</u> the impact that short-term declines in portfolio values can have on long-term success.
- 5) To the best extent possible, the Board should continue to explore and implement capabilities, controls, and procedures that are transferrable from VRS' DB activities to VRS' DC Plans, particularly with respect to investments.
- 6) The VRS DC Plans are responsible for offering a reasonable range of diversified portfolios to serve as the Plans' default investment option as well as to participants that do not have the time, desire, or expertise to manage a diversified portfolio.
- 7) The VRS DC Plans investment offerings must be wide-ranging to accommodate participants' varying investment knowledge and/or interest in managing their investments and address the difference between participants who are early on or in the midst of their careers and those who are nearing or in retirement.
 - a) Individuals must recognize their specific programs require a long-term, multi-decade planning/investment horizon;
 - b) Investment horizons are unique to each individual participant and may extend beyond the accumulation phase into the retirement (decumulation) phase; and

- c) Administrative and investment aspects of the overall program need to be unbundled/disaggregated to allow for maximum design flexibility.
- 8) A minimum level of participant investment education is necessary for a successful program.

Education should cover certain key topics:

- a) Key retirement planning risks (see Belief Statement 4);
- b) Accumulation phase vs. decumulation phase;
- c) How to analyze the costs associated with various investment options;
- d) Consideration of non-plan (outside) assets.
- 9) To provide investment flexibility to individual participants, a self-directed brokerage window can be an effective feature of the VRS DC Plans.
- 10) Well-structured alternative investments can enhance an individual participant's portfolio risk/reward profile. VRS DC Plans should examine methods for providing qualifying alternative investment options into its menu of pre-mixed diversified investment options, where feasible.
- 11) Managing the decumulation of retirement assets is critical. The VRS DC Plans will continue to explore viable solutions in this area.
- 12) Investment education can be a valuable resource to individual participants. In this context, VRS DC plan decision-makers should explore making available various investment advice and financial planning solutions/products.



VRS Defined Contribution Plans

1st Quarter 2021
(January - March)
Administrative Summary
June 24, 2021



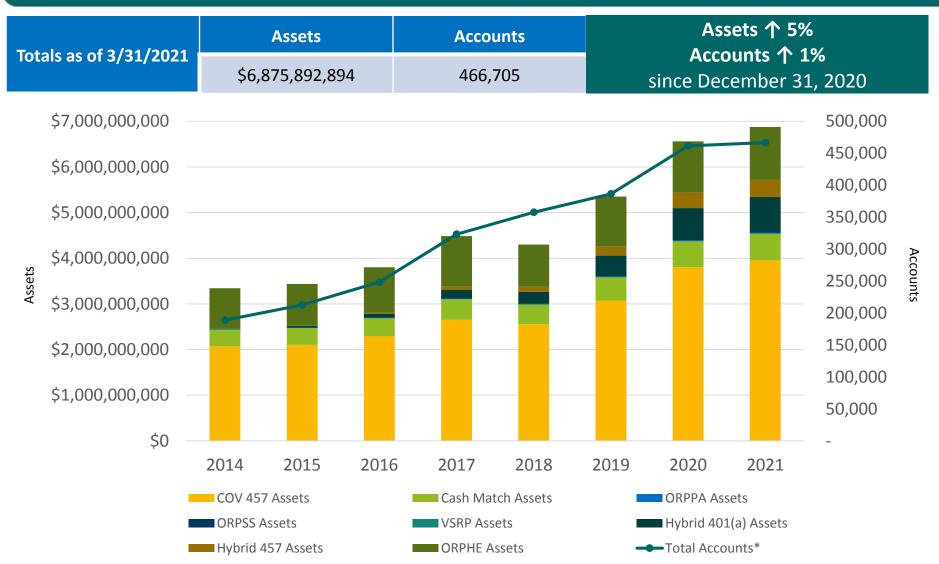
Agenda



Topic	Slide Number(s)
Total Assets & Accounts	3-4
Unbundled Plans Overview	5-7
COV 457 & Cash Match Plans	8-10
Hybrid Retirement Plan	11-12
Focus: Annual Review & Benchmarking	13-19
ORPHE	20
Moving Forward	21

Total Assets and Accounts Over Time

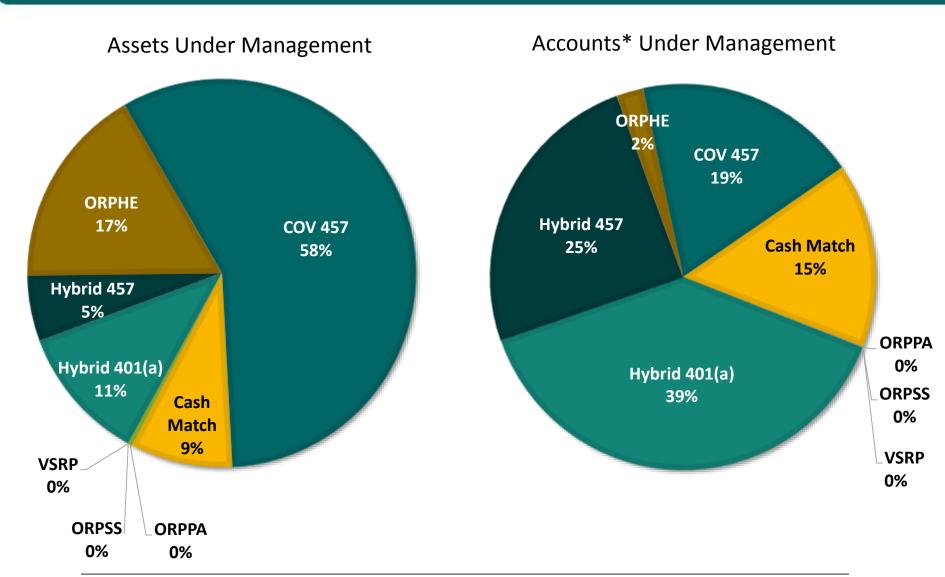




Note: <u>Data reflects totals as of calendar year end and includes ORPHE selected providers and MissionSquare participant, beneficiary, forfeiture & reserve accounts.</u> 2021 **Maistest Progre** #N29 of 318902 Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021 *Does not indicate unique participants.

Total Assets and Accounts Under Management by Plan as of 3/31/2021





Master Page # 30 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021 *Does not indicate unique participants.

Unbundled Plans ICMA-RC Name Change





- Effective June 17th, ICMA-RC began using the name MissionSquare Retirement across all mediums
- Forms, publications and other materials are all being updated
- Phase out of ICMA-RC name will be completed in September 2021

Unbundled Plans Financial Planning Services with MissionSquare



Financial planning website went live on April 15, 2021 www.varetire.org/make-a-plan

- Slow rollout across various mediums including VRS publications and websites
- Between launch and June 11, 2021
 - 28 Consultations, 3 financial plans
 - Ages ranged between 27 and 77
 - Median age was 53
 - Salaries ranged between \$22K and \$275K
 - Median salary was \$76K

Topics covered included:

- Budgeting, financing a home
- Portfolio review
- Social Security
- Retirement income planning
- Pre-tax versus Roth 457 contributions





Unbundled Plans COVID-19 Response Campaign



2021 Communicator Award of Distinction

- Academy of Interactive and Visual Arts (AVIA)
- Marketing
 Effectiveness category
- Website updates and enhancements
- Virtual one-on-one counseling sessions with improved scheduling tools







Website with alerts & Defined Contribution Plans Retirement Specialist website tool banner ad

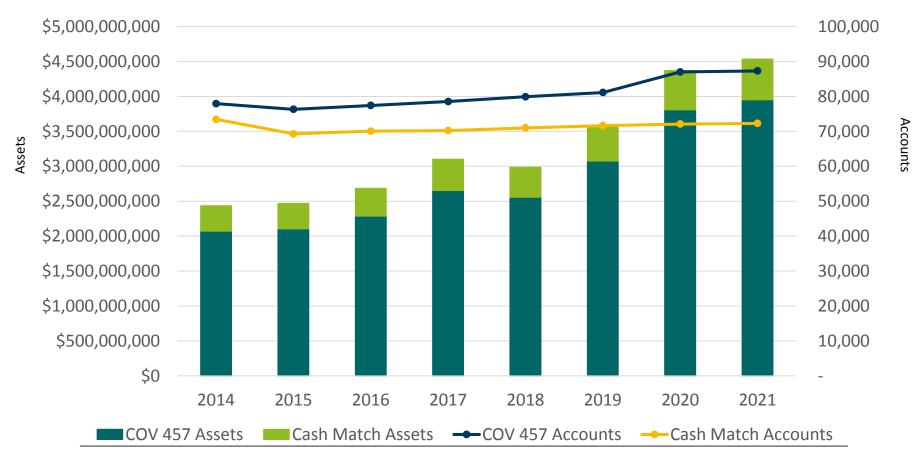


COV 457/Cash Match Plan Assets and Accounts



Totals as of 3/31/2021	Assets	Accounts
COV 457	\$3,952,209,830	87,324
Cash Match	\$584,585,229	72,292

Assets ↑ 4% since December 31, 2020



COV 457/Cash Match Plan Initiatives



Be a savings superhero

The Commonwealth of Virginia 457 Deferred Compensation Plan makes it easy to be a savings superhero. Increase your contribution now and choose SmartStep to automatically increase your contribution each year, with less impact to your paycheck.



Select One:

I'm ready to increase my contribution to help improve my future savings outlook.

Save more now

I want to increase my contributions by a set amount each year automatically.

Choose a SmartStep month and amount

I am not interested in saving more for my future at this time.

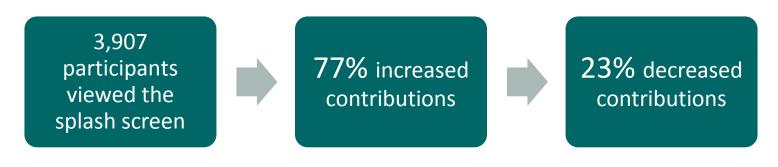
Wait to save

COV 457/Cash Match Plan Initiatives

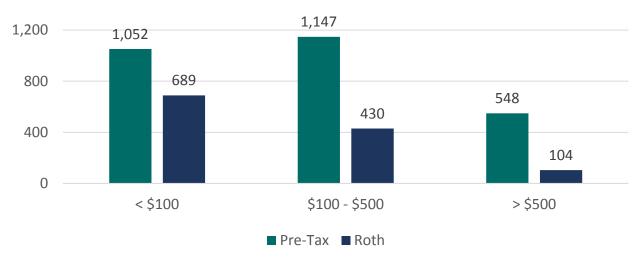


Action taken by members* who saw the COV 457 Splash Screen

Since Launch of Latest Campaign: February 26, 2021



Deferral Amounts Elected



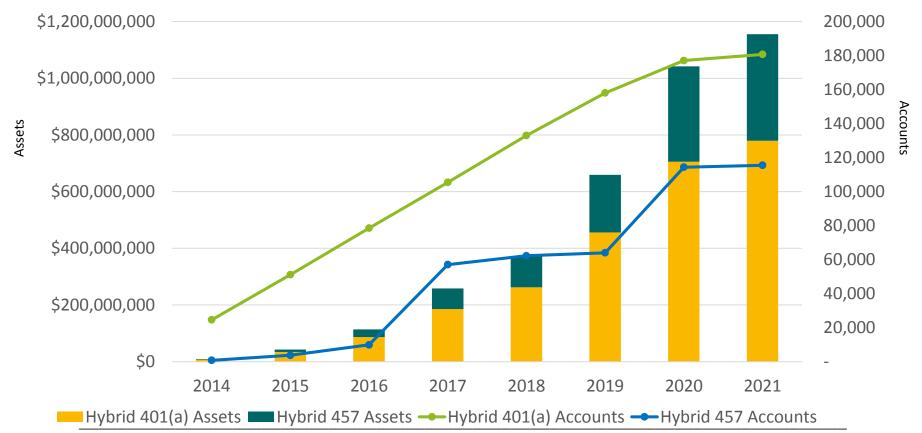
^{*}The North Specific S

Hybrid Retirement Plan Assets and Accounts (DC only)



Totals as of 3/31/2021	Assets	Accounts
Hybrid 401(a)	\$779,262,354	180,718
Hybrid 457	\$376,473,893	115,479

Assets 11%
Accounts 2%
since December 31, 2020



Note: Data refleMastera Pase#Earofal & Par engined neighbis hat such Square Advisoran Committer & Great Pase #Earofal & Sar engined neighbis hat such 31, 2021.

Hybrid Retirement Plan Participation Highlights



Overall participation in Hybrid Voluntary Contributions – 74%

Active Election Participation – 32%

Of members making voluntary contributions

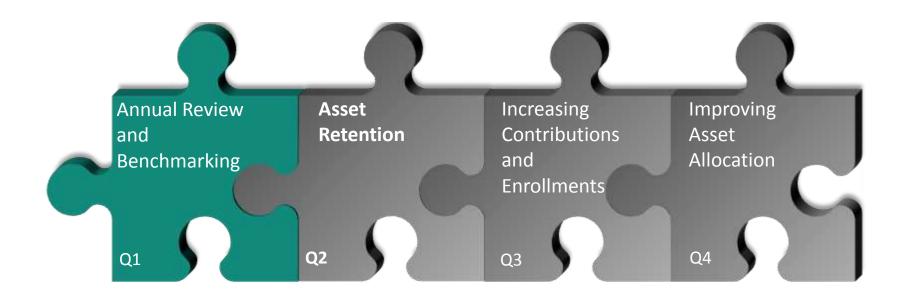
36% are maximizing at 4% 58% are at 1% or less

Note: Data reflects totals as of calendar year end and includes MissionSquare participant, beneficiary &

forfeiture accounts. 2021 data is through March 31, 2021 Master Page # 38 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021

Annual Review and Benchmarking





Annual MissionSquare Relationship Meeting



Meetings conducted on April 21 & April 28

Agenda included:

- By the Numbers
- Overall relationship and 2020 Accomplishments
 - Review of SS&C Partnership (on track for March 2022)
 - Review of name change to MissionSquare Retirement (completion by September 2021)
 - Various technology enhancements
 - COV 457 Plan Splash Screen and contribution screen enhancements
 - Online distributions
 - Website updates and enhancements
- Future Initiatives

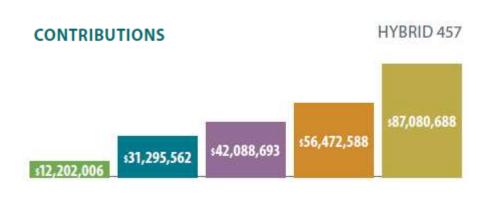
All performance standards met for 2020

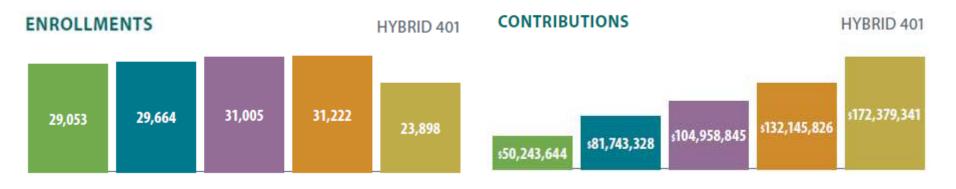
Annual Review: Hybrid Retirement Plan By the Numbers





- **54% increase** in contributions to the Hybrid 457, primarily due to auto escalation, effective 1/1/2020
- 23% decrease in the number of new enrollments in the Hybrid 401(a), likely due to decreased hiring in 2020

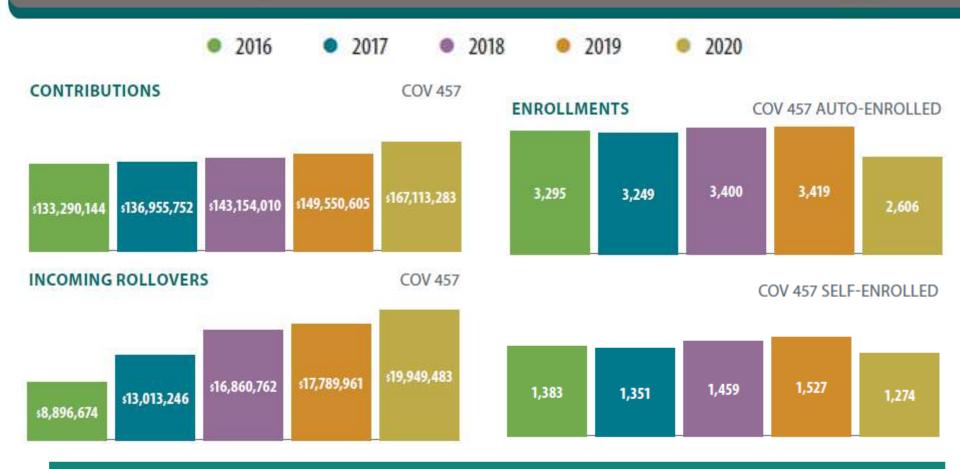




Source: Missistas basin befind from the thought of the properties of the properties

Annual Review: COV 457 Plan By the Numbers





- **12% increase** in contributions to the COV 457 Plan and a **12% increase** in incoming rollovers into the COV 457 Plan
- Decreases in enrollments in the COV 457 Plan, also likely due to decreased hiring. This is evident in the **24% decrease** in new enrollments due to auto-enroll into the plan.

Annual Review: Future Initiatives



Put Your Raise to Work Campaign

- Designed to allow employers flexibility to customize a pay raise campaign for their employees
- Multiple versions for employers with and without the COV 457 Plan
- Includes flyer and HTML email encouraging employees to increase their retirement savings when they receive a pay increase

COV 457 Participation Initiative

- Direct mail postcard to eligible participants that are not currently participating
- Employer toolkit and email communications
- Targeted communications to auto-enrollees still at initial deferral level

Benchmarking: Public Retirement Research Lab (PRRL)



Joint venture between National Association of Government Defined Contribution Administrators (NAGDCA) and Employee Benefit Research Institute (EBRI)

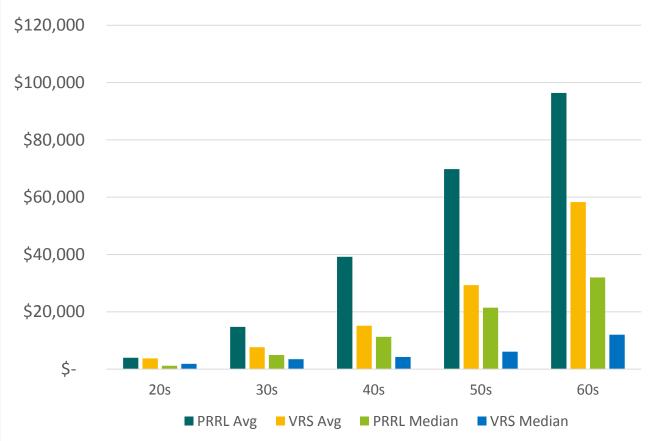
- Research produced by the PRRL is based on analysis of data contained in the PRRL Database, the first-ever comprehensive database specific to public sector defined contribution plans
- Will replace NAGDCA Benchmarking Survey, which VRS previously participated in, and serve as a benchmarking tool for participating plans through partnership with NAGDCA
 - Delivery of new benchmarking tool has been delayed and expected this year
 - Requires little effort from participating plans as data is passed directly from the individual recordkeepers



Benchmarking: Public Retirement Research Lab (PRRL)







PRRL Source: THE STATE OF PUBLIC SECTOR DC PLANS:A FIRST LOOK AT THE PRRL DATABASE; published 2/25/21 VRS figures include all non-beneficiary unbundled plans

PRRL database contains 2019 year-end data for 213 government 457(b), 401(a), 403(b), 401(k), and IRAs.

Nearly 2.3 million government employees

\$113 billion in assets

Both VRS and PRRL datasets exclude a potentially large portion of government employees' retirement: a pension benefit.

VRS data does not include balances in employer-sponsored plans.

Savings may be limited for the 128,000 active hybrid members represented in this data due to the statutory contribution rates.

Administrative Summary ORPHE



ORPHE Totals*								
	12/31/2020	3/31/2021	% Change					
Assets	\$1,122,929,680	\$1,158,931,857	3%					
Participants	10,564	10,506	-1%					
Average Balance	\$106,298	\$110,311	4%					





DCP	
	3/31/2021
Assets	\$143,822,191
Participants	2,257
Average Balance	\$63,723

TIAA**	
	3/31/2021
Assets	\$1,015,109,667
Participants	8,249
Average Balance	\$123,059

^{*}Excludes deselected providers. Fidelity became a deselected provider effective 1/1/2020.

^{**}Includes assets in GRA/RA and RC contracts.

Moving Forward



To streamline the Administrative Update, a performance dashboard will be provided for each of the following plans:

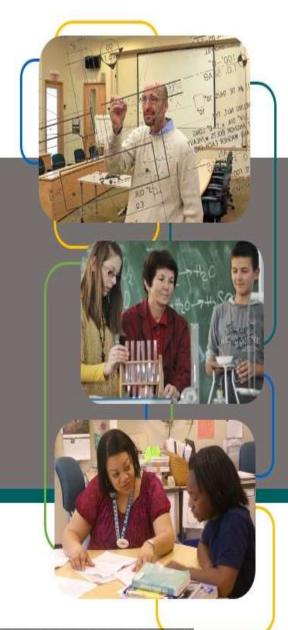
- COV 457 and Cash Match Plan
- Hybrid retirement Plan -Defined Contribution Component
- ORPHE

Dashboards will vary based on the characteristics of the plans but may include:

- Cash flow
- Contributions
- Annual deferral rates
- Distributions
- Participation rates
- Top investment holdings



Thank You!



Total

Below are the totals for the period ending April 30, 2021. Returns greater than one year are annualized.

Investment Options	1 Month	3 Months	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs / Since	Fund Expense Ratio ²	Inception Date	Market Value	% of Market	% of Participants Selecting an Option ²⁸
Do-It-For-Me: Target Date Portfolios ^{3,4}	%	%	%	%	%	%	%	%		\$	%	•
Retirement Portfolio	2.34	3.04	2.71	18.14	9.06	7.75	6.03	0.08	8/1/05	431,344,070	7.1	5.8
Custom Benchmark	2.32	3.04	2.70	18.03	9.00	7.68	5.99	0.00	G/ 1/00	101,011,010		0.0
Target Date 2025 Portfolio	2.73	4.32	3.98	23.40	9.88	9.31	7.09	0.08	7/5/06	329,709,860	5.4	6.5
Custom Benchmark	2.71	4.32	3.98	23.27	9.80	9.19	7.03					
Target Date 2030 Portfolio	3.18	5.77	5.43	29.10	10.91	10.47	7.76	0.08	8/1/05	314,729,276	5.2	8.0
Custom Benchmark	3.16	5.78 7.20	5.43 6.86	28.93	10.82 11.91	10.32 11.59	7.67 8.39	0.08	7/5/06	317,223,14924	5.2	9.2
Target Date 2035 Portfolio Custom Benchmark	3.61 3.59	7.20 7.19	6.83	34.78 34.57	11.79	11.40	6.39 8.28	0.00	115/06	317,223,149	5.2	9.2
Target Date 2040 Portfolio	3.99	8.49	8.14	40.13	12.77	12.57	8.92	0.08	8/1/05	270,753,904	4.4	9.2
Custom Benchmark	3.97	8.47	8.10	39.86	12.64	12.35	8.80					
Target Date 2045 Portfolio	4.31	9.54	9.18	44.44	13.47	13.28	9.35	0.08	7/5/06	253,959,237	4.2	10.4
Custom Benchmark	4.28	9.51	9.13	44.11	13.31	13.03	9.20	0.00	9/30/07	050 440 000	4.4	40.0
Target Date 2050 Portfolio Custom Benchmark	4.47 4.45	10.11 10.06	9.74 9.67	46.64 46.31	13.84 13.68	13.59 13.35	9.57 9.43	0.08	9/30/07	252,443,226	4.1	12.0
Target Date 2055 Portfolio	4.45 4.50	10.06	9.83	46.95	13.92	13.63	9.43 9.72	0.08	5/19/10	298,820,990	4.9	16.2
Custom Benchmark	4.48	10.17	9.78	46.71	13.76	13.40	9.56	0.00	0, 10, 10	200,020,000		
Target Date 2060 Portfolio	4.50	10.19	9.81	46.89	13.91	13.62	10.44	0.08	11/17/14	126,567,057	2.1	11.8
Custom Benchmark	4.48	10.17	9.78	46.70	13.76	13.40	10.29	0.00	11/1//14	120,001,001		11.0
Target Date 2065 Portfolio	4.50	10.17	9.78	46.64	n/a	n/a	21.38	0.08	9/23/19	5,663,265	0.1	1.3
Custom Benchmark	4.48	10.17	9.77	46.69	n/a	n/a	21.47	0.00	3/23/13	0,000,200	U. 1	1.0
Help-Me-Do-It: Individual Options	7.70	10.17	0.11	40.00	11/4	TI/G	21.77					
Money Market Fund ^{5,6}	0.01	0.04	0.06	0.26	1.55	1.38	0.72	0.08	44/4/00	05 025 262	4.6	2.4
FTSE 3 Month Treasury Bill Index	0.00	0.01	0.02	0.13	1.41	1.15	0.60	0.08	11/1/99	95,835,362	1.6	2.1
Yield as of 04/30/21: 0.16% ⁷	0.00	0.01	0.02	0.13	1.41	1.15	0.00					
Stable Value Fund ^{8,9}	0.15	0.44	0.58	2.01	2.27	2.10	2.00	0.24	2/1/95	020 204 740	10.4	7.8
Custom Benchmark ¹⁰	0.04	0.12	0.15	0.43	1.66	1.69	1.45	0.24	2/1/95	636,304,746	10.4	7.8
	0.04	0.12	0.15	0.43	1.00	1.09	1.45					
Yield as of 04/30/21: 1.70% ¹¹		4.00		0.04								
Bond Fund ¹²	0.80	-1.93	-2.63	-0.21	5.24	3.23	3.45	0.03	11/1/99	178,015,378	2.9	3.8
Bloomberg Barclays U.S. Aggregate Bond Index Inflation-Protected Bond Fund ¹³	0.79	<u>-1.91</u>	<u>-2.61</u>	-0.27	5.19	3.19	3.39	0.00	7/20/02	F0.044.000	0.0	4.5
Bloomberg Barclays U.S. TIPS Index	1.42 1.40	- 0.41	-0.06	6.28	6.30	4.21 4.08	3.42 3.33	0.03	7/30/02	52,941,223	0.9	1.5
High-Yield Bond Fund ¹⁴	1.40	-0.42 3.06	-0.09 3.83	6.09 20.54	6.19 7.22	7.32	<u> </u>	0.40	5/31/04	49,686,341	0.8	1.9
ICE BofA U.S. High-Yield BB-B Constrained Index	1.06	1.26	1.36	17.42	6.90	6.94	6.24	0.40	5/31/04	49,000,341	0.6	1.9
Stock Fund ¹⁵	5.35	13.00	11.86	46.04	18.73	17.46	14.21	0.01	11/1/99	4 FOO F77 CO4	25.0	10.8
S&P 500 Index						17.42	14.17	0.01	11/1/99	1,522,577,624	25.0	10.0
	5.34 3.98	12.98 12.62	11.84 15.36	45.98 72.10	18.67 16.79	16.56	12.34	0.00	44/4/00	404 000 000	7.0	<u> </u>
Small/Mid-Cap Stock Fund ¹⁶								0.02	11/1/99	481,090,822	7.9	6.1
Russell 2500 Index ¹⁷	4.00	12.60	15.36	71.95	16.76	16.50	12.25					
International Stock Fund ¹⁸	3.21	6.93	7.13	45.61	7.40	10.22	5.75	0.06	11/1/99	226,680,766	3.7	5.0
MSCI ACWI ex-U.S. IMI Index ¹⁹	3.17	6.88	7.06	44.94	7.08	9.73	5.43					
Global Real Estate Fund ²⁰	6.47	13.83	12.96	34.85	7.40	6.18	7.73	0.09	10/1/02	106,621,217	1.8	3.2
FTSE EPRA/NAREIT Developed Index ²¹	6.42	13.50	12.59	33.84	6.57	5.18	7.07					
VRSIP ²²	3.19	4.69	4.69	28.32	9.52	9.83	8.32	0.60	7/1/08	46,934,250 ²⁵	0.8	0.5
VRS Custom Benchmark ²³	1.62	3.96	3.96	27.49	9.26	9.62	7.94					
VRSIP and benchmark returns are reported with a one r	month lag. [Retur	n information	shown is	as of Mar	ch 31, 2021	1.] [Market	value as of Mar	ch 31, 2021 w	/as \$46,414 <u>,</u> 27	1.]		
Do-lt-Myself: Self-Directed Brokerage Account										_		_
TD Ameritrade	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	95,910,186	1.6	0.2

\$6,093,811,949²⁶

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 Target Date Portfolios invest in units of BlackRock's LifePath Index Funds O. The LifePath Index Funds O invest in the master LifePath Index Funds F. The inception dates shown reflect the inception dates of the master LifePath Funds F.

 The inception dates for most LifePath Funds O were 12/9/11. The 2055 Fund's O inception data was 12/12/11, the 2060 Fund's O inception date was 1/2/15, and the 2065 Fund's O inception date was 9/23/2019. Returns prior to Funds' O inception dates are those of the Funds F with deductions taken for Funds O 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 Index, Bloomberg Barclays U.S. Aggregate Bond Index, Bloomberg Barclays 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. Returns prior to July 2012 represent performance by the previous investment manager, State Street Global Advisors. All 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.
- 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 ICMA-RC 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. Performance returns are linked to the previous investment manager. Returns prior to July 2012 represent performance by State Street Global Advisors.
- 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 was July 20, 2012. Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M's investment management fees.
- 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. Performance reflects the investment manager's returns for the aforementioned Fund with deductions taken for investment management fees negotiated by VRS and fund administrative expenses.
- 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. Performance returns are linked to the previous investment manager. Returns prior to July 2012 represent performance by State Street Global Advisors.
- 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 strategy inception date. Performance returns are linked to the previous investment manager. Returns prior to July 2012 represent performance by State Street Global Advisors.
- 17 Effective July 2012, the performance benchmark is the Russell 2500 Index. Prior to July 2012, the performance benchmark was the Russell Small Cap Completeness Index. The benchmark returns are linked.
- 18 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. Returns prior to July 2012 represent performance by the previous manager, State Street Global Advisors. All performance returns are linked.
- 19 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 and prior to July 2012 it was the MSCI EAFE Index. The benchmark returns are linked.
- 20 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. The Fund transitioned from a U.S. domestic REIT fund to a global real estate fund during July 2012. Performance returns are linked to the previous investment manager. Returns prior to July 2012 represent performance by State Street Global Advisors.
- 21 Effective July 2012, the performance benchmark is the FTSE EPRA/NAREIT Developed Index. Prior to July 2012, the performance benchmark was the Dow Jones U.S. Select REIT Index. The benchmark returns are linked.
- 22 The inception date shown reflects the date the VRS Investment Portfolio (VRSIP) was unitized.
- 23 The VRS Custom Benchmark is a blend of the asset class benchmarks at policy weights.
- 24 Includes Pending Account VRSIP amount of \$523,183.
- 25 Includes Preliminary Investment Portfolio Account PIP amount of \$0.
- 26 Includes \$4,408,159 held in the administrative Special Accounts.
- 27 May not equal 100% due to rounding.
- 28 The data reflects the percentage of participants who selected a particular investment option as of March 31, 2021. There were 458,456 participant accounts as of March 31, 2021 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 ICMA-RC 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 ICMA-RC. Benchmark returns are provided by BlackRock, Russell/Mellon Analytical Services, Galliard, and ICMA-RC. 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 partic

Defined Contribution Plans Advisory Committee Report

TIAA RC Contract Investment Performance

Below are the totals for the period ending April 30, 2021. 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 ¹⁹	% of Participants Selecting an Option ²⁰
Target Date Portfolios ^{3,4}	%	%	%	%	%	%	%	%		\$	%	%
BlackRock LifePath Index Retirement Fund O	2.34	3.04	2.71	18.14	9.06	7.75	6.03	0.08	8/1/05	29,052,006	9.0	9.7
Custom Benchmark	2.32	3.04	2.70	18.03	9.00	7.68	5.99					
BlackRock LifePath Index 2025 Fund O	2.73	4.32	3.98	23.40	9.88	9.31	7.09	0.08	7/5/06	21,110,681	6.5	7.0
Custom Benchmark	2.71	4.32	3.98	23.27	9.80	9.19	7.03					
BlackRock LifePath Index 2030 Fund O	3.18	5.77	5.43	29.10	10.91	10.47	7.76	0.08	8/1/05	28,891,049	9.0	8.7
Custom Benchmark BlackRock LifePath Index 2035 Fund O	3.16	5.78	5.43	28.93	10.82	10.32	7.67	0.08	7/5/06	22.565.549	7.0	9.0
Custom Benchmark	3.61	7.20	6.86	34.78	11.91	11.59	8.39	0.06	7/5/06	22,565,549	7.0	9.0
BlackRock LifePath Index 2040 Fund O	3.59 3.99	7.19 8.49	6.83 8.14	34.57 40.13	11.79 12.77	11.40 12.57	8.28 8.92	0.08	8/1/05	24,767,306	7.7	9.5
Custom Benchmark	3.99 3.97	6.49 8.47	8.10	39.86	12.77	12.37	8.80	0.00	0/1/03	24,707,300	1.1	9.5
BlackRock LifePath Index 2045 Fund O	4.31	9.54	9.18	44.44	13.47	13.28	9.35	0.08	7/5/06	21,316,103	6.6	10.1
Custom Benchmark	4.28	9.51	9.13	44.11	13.31	13.03	9.20			,,		
BlackRock LifePath Index 2050 Fund O	4.47	10.11	9.74	46.64	13.84	13.59	9.57	0.08	9/30/07	12,043,039	3.7	7.9
Custom Benchmark	4.45	10.06	9.67	46.31	13.68	13.35	9.43					
BlackRock LifePath Index 2055 Fund O	4.50	10.21	9.83	46.95	13.92	13.63	9.72	0.08	5/19/10	5,162,449	1.6	5.2
Custom Benchmark	4.48	10.17	9.78	46.71	13.76	13.40	9.56					
BlackRock LifePath Index 2060 Fund O	4.50	10.19	9.81	46.89	13.91	13.62	10.44	0.08	11/17/14	1,032,076	0.3	2.0
Custom Benchmark	4.48	10.17	9.78	46.70	13.76	13.40	10.29			, ,		
BlackRock LifePath Index 2065 Fund O	4.50	10.17	9.78	46.64	n/a	n/a	21.38	0.08	9/23/19	796,196	0.3	0.5
Custom Benchmark	4.48	10.17	9.77	46.69	n/a	n/a	21.47	0.00	0/20/10	100,100	0.0	0.0
Individual Options	1.10	10.17	0.11	10.00	TI, G	TI/ G	2					
·	0.01	0.04	0.06	0.26	1.55	1.37	0.79	0.00	7/4/00	E 04E 000	4.0	0.0
BlackRock Short-Term Investment Fund W 5								0.08	7/1/03	5,915,602	1.8	8.2
FTSE 3 Month Treasury Bill Index	0.00	0.01	0.02	0.13	1.41	1.15	0.60					
Yield as of 04/30/21: 0.16% ⁶												
BlackRock U.S. Debt Index Fund M ⁷	0.80	-1.93	-2.63	-0.21	5.24	3.23	3.45	0.03	6/6/96	8,913,835	2.8	19.4
Bloomberg Barclays U.S. Aggregate Bond Index	0.79	-1.91	-2.61	-0.27	5.19	3.19	3.39					
BlackRock U.S. TIPS Fund M ⁸	1.42	-0.41	-0.06	6.28	6.30	4.21	3.42	0.03	7/30/02	4,813,257	1.5	13.0
Bloomberg Barclays U.S. TIPS Index	1.40	-0.42	-0.09	6.09	6.19	4.08	3.33					
BlackRock Equity Index Fund J ⁹	5.35	13.00	11.86	46.04	18.73	17.46	14.22	0.01	3/5/97	33,306,692	10.3	25.2
S&P 500 Index	5.34	12.98	11.84	45.98	18.67	17.42	14.17					
BlackRock Russell 2500 Index Fund M ¹⁰	3.98	12.62	15.35	72.08	16.78	16.55	12.41	0.04	9/30/08	9,046,383	2.8	4.0
Russell 2500 Index	4.00	12.60	15.36	71.95	16.76	16.50	12.32					
BlackRock MSCI ACWI ex-U.S. IMI Index Fund M 11	3.21	6.92	7.11	45.54	7.35	10.37	5.14	0.11	2/28/11	17,740,814	5.5	19.4
MSCI ACWI ex-U.S. IMI Index	3.17	6.88	7.06	44.94	7.08	9.95	4.94					
BlackRock MSCI ACWI IMI Index Non-Lendable Fund M 12	4.32	10.00	9.79	48.58	13.53	14.29	11.05	0.05	4/12/13	42,976,439	13.3	34.4
	4.34	9.89	9.70	48.11	13.15	13.82	10.66	0.00	4712710	42,010,400	10.0	0 4.4
MSCI ACWI IMI Index TIAA Real Estate Account 13	1.27	2.94	3.53		3.84	4.06		0.70	40/0/05	0.400.000		07.0
				3.26			6.97	0.78	10/2/95	8,199,098	2.5	27.8
Custom Composite Benchmark ¹⁴	n/a	n/a	n/a	n/a	n/a	n/a	n/a					
TIAA Traditional Annuity RC ^{15,16,17,18}	0.28	0.87	1.21	3.89	4.00	4.07	4.22	0.45	8/1/05	20,719,521	6.4	29.4
Self-Directed Brokerage Account												
TIAA - Self-Directed Account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4,578,827	1.4	0.7
Total										\$322,946,922		

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 O invest in the master LifePath Index Funds F. The inception dates shown reflect the inception date of the master LifePath Funds F. The inception dates for most LifePath Funds O were 12/9/11. The 2055 Fund's O inception date was 12/12/11. the 2060 Fund's O inception date was 12/12/11. the 2060 Fund's O inception date was 1/2/15 and the 2065 Fund's O inception date was 12/12/11.
- 4 Benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the Funds' asset classes. Weightings are adjusted quarterly to reflect the Funds' 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 Index, Bloomberg Barclays U.S. Aggregate Bond Index. Bloomberg Barclays 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 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 1/30/13. Returns prior to Fund M's inception date are those of Fund F with deductions taken for Fund M'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 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 Barclays 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 April was 3.00%.
- 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. The 46 basis points (0.45%) approximates the expense provision in the formula for determining TIAA Traditional Annuity returns inclusive of administrative and investment expenses. This expense provision is not quaranteed, it is subject to change.
- 19 May not equal 100% due to rounding
- 20 The data reflects the percentage of participants who selected a particular investment option as of March 31, 2021. There were 5,142 (RC contract) participants as of March 31, 2021.

Performance returns shown reflect all fund management fees and other investment related expenses, but do not reflect the TIAA annual administrative fee of \$66 (deducted at \$16.50 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.



VRS Defined Contribution Plans

1st Quarter 2021 (January - March)
Administrative Summary
Appendix Supplement
June 24, 2021



Agenda

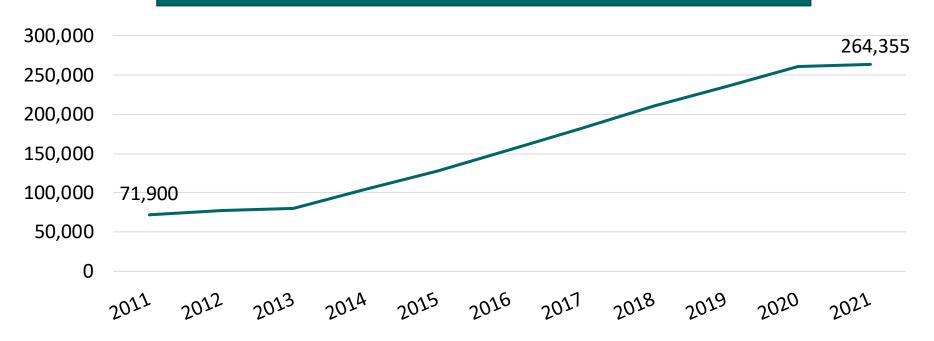


Topic	Slide Number(s)
Unbundled Plans Overview	3-4
COV 457 & Cash Match Plans	5-6
Hybrid Retirement Plan	7-9
Focus: Annual Review & Benchmarking	10
ORPHE	11-12

Unbundled Plans - Unique Participants as of 3/31/2021



Significant growth continues in the unbundled plans, primarily due to new hires into the Hybrid Retirement Plan.



Plans Included:

- COV 457 Plan
- VA Cash Match Plan
- Hybrid 401(a) Cash Match Plan
- Hybrid 457 Deferred Compensation Plan
- ORP for Political Appointees
- ORP for School Superintendents
- VA Supplemental Retirement Plan
- ORP for Higher Education (DCP option ONLY)



Unbundled Plans – Plan Adoptions



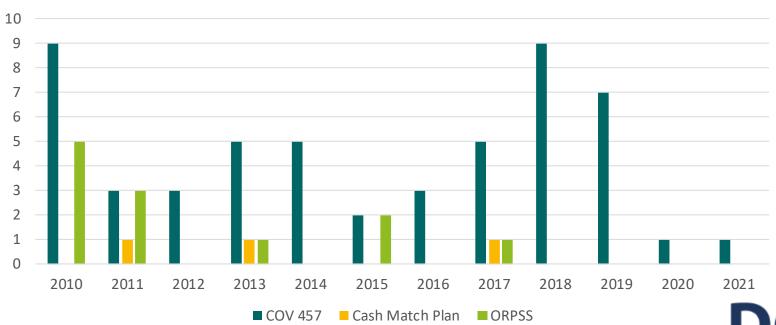
Adoption Agreements

•New River Valley Regional Commission (COV 457) - 07/01/2021

New VRS Employers

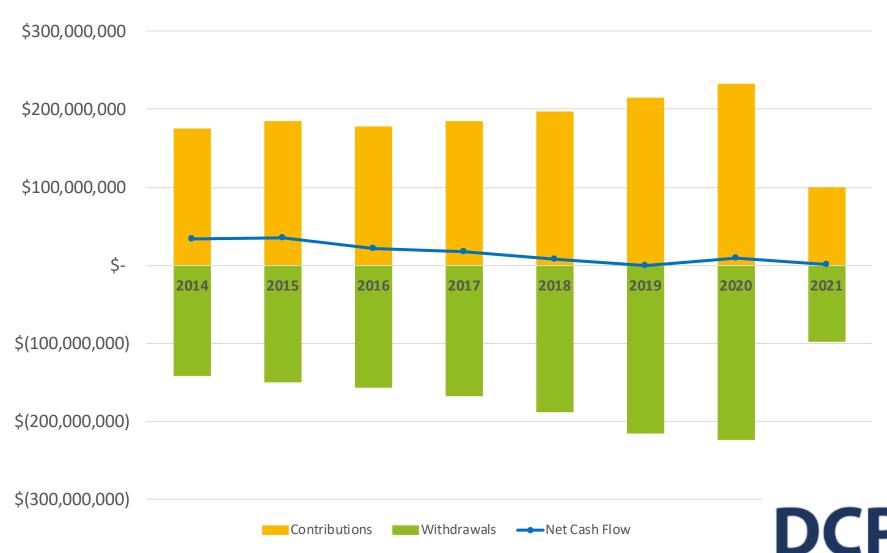
- Secretary of Labor -07/01/2021
- Town of Farmville 07/01/2021
- Virginia Passenger Rail Authority (Retroactive 07/01/2020)

Adoption Totals Over Time



COV 457/Cash Match Plan Cash Flow

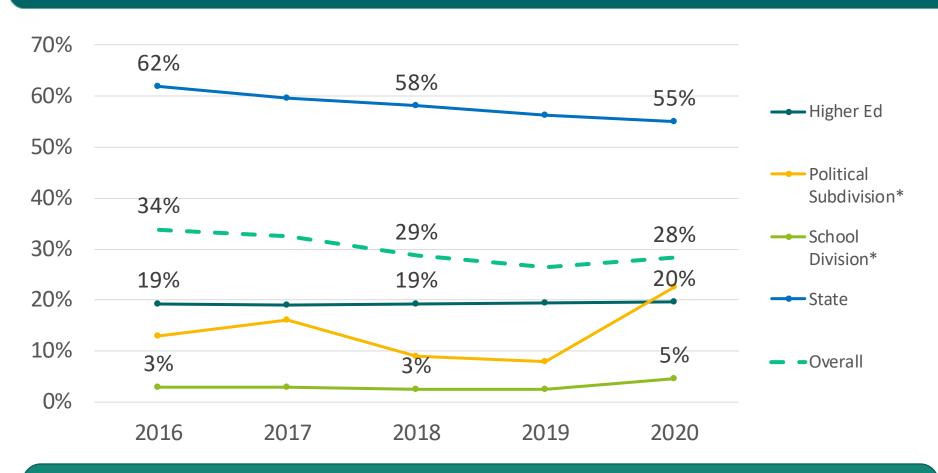




Note: Data reflects totals as of calendar year end and includes Mission Square participant & beneficiary as counts.) 2021 data is through 2021 Wirginia Retirement System March 31, 2021.

COV 457 Participation Rate Over Time

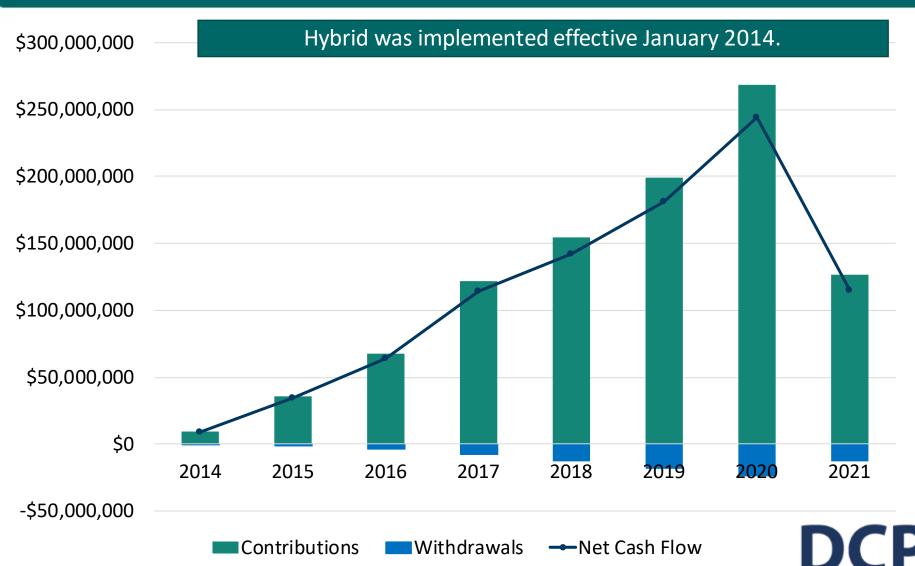




*The City of Virginia Beach and Virginia Beach City Schools adopted the plan in June 2018 and transitioned assets from their legacy plan in January 2020, increasing both the political subdivision and school division participation rates.

Hybrid Retirement Plan Cash Flow (DC only)



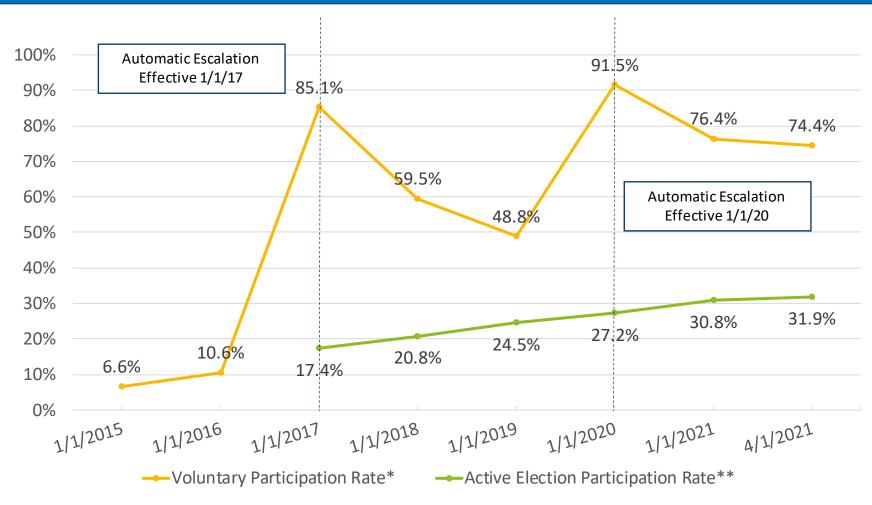


Note: Data reflects total pas of calendary ser end and includes Mission Planse Advisory Committee (BCPAC) Meeting 6/24/2021 Virginia Retirement System

Hybrid 457 Plan – Voluntary Participation Rate*



As of 4/1/2021, 74% of hybrid plan members (95,297 out of 128,017) have a voluntary contribution percentage with MissionSquare. 32% made an Active Election**.

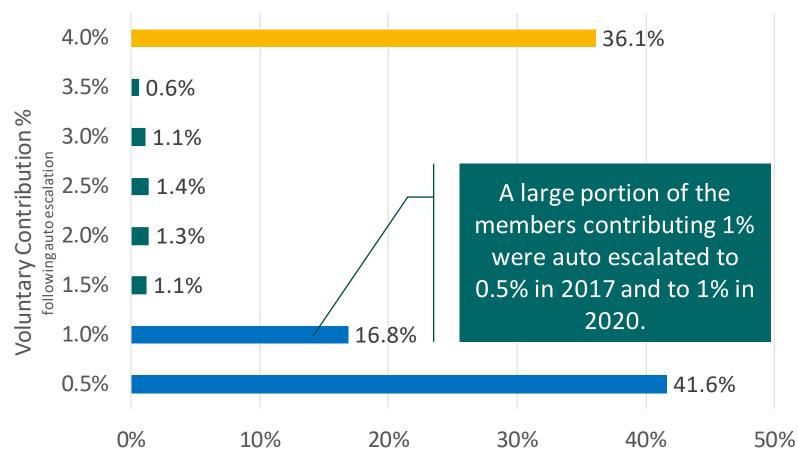


^{*}Except the Waster Page #100 of 1801/Defreed Contribution Plans Advisory Committee (DCFACV) Meeting 6/24/2021g Q1 2021.
**Includes members who had a self-selected voluntary election on file prior to the automatic escalation that occurred on 12/16/2019.

Hybrid 457 Plan - Voluntary Contribution Elections



Active members with a voluntary contribution election on file as of March 15, 2021.



Benchmarking: Public Retirement Research Lab (PRRL)



Other PRRL findings:

Annual contributions for participants in their 30s:
Average \$2,356
Median \$1,068

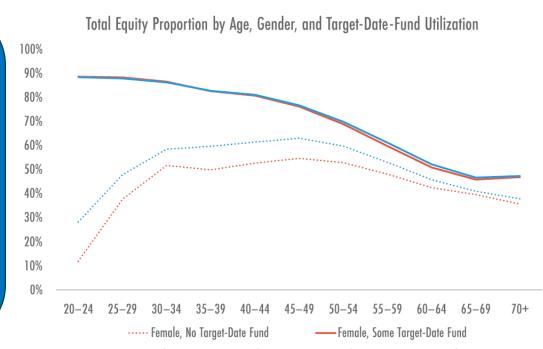


Annual contributions for participants in their 60s:
Average \$4,228
Median \$1,453

Source: THE STATE OF PUBLIC SECTOR DC PLANS: A FIRST LOOK AT THE PRRL DATABASE: published 2/25/21

For those utilizing target-date funds in at least some capacity, there is little difference in equity proportion between genders.

For those with no target-datefund allocation, males have a significantly larger total equity proportion than females.



Source: A DEEPER LOOK AT ASSET ALLOCATION: PLANSTRUCTURE AND DEMOGRAPHY THE VERY SEEF FRAME FUND SUBJECT 1989 COntribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021

Administrative Summary ORPHE



DCP			
	12/31/2020	3/31/2021	% Change
Assets	\$137,782,478	\$143,822,191	4%
Participants	2,276	2,257	-1%
Average Balance	\$60,537	\$63,723	5%

TIAA*			
	12/31/2020	3/31/2021	% Change
Assets	\$985,147,202	\$1,015,109,667	3%
Participants	8,288	8,249	0%
Average Balance	\$118,864	\$123,059	4%

Deselected Providers**							
	12/31/2020^	3/31/2021^	% Change				
Assets	\$155,935,340	\$160,305,647	3%				
Participants	3,635	3,594	-1%				

^{*}Includes assets in GRA/RA and RC contracts.

^{**}Fidelity became a deselected provider effective 1/1/2020. Also included are Empower, T. Rowe Price, AIG and Metlife.

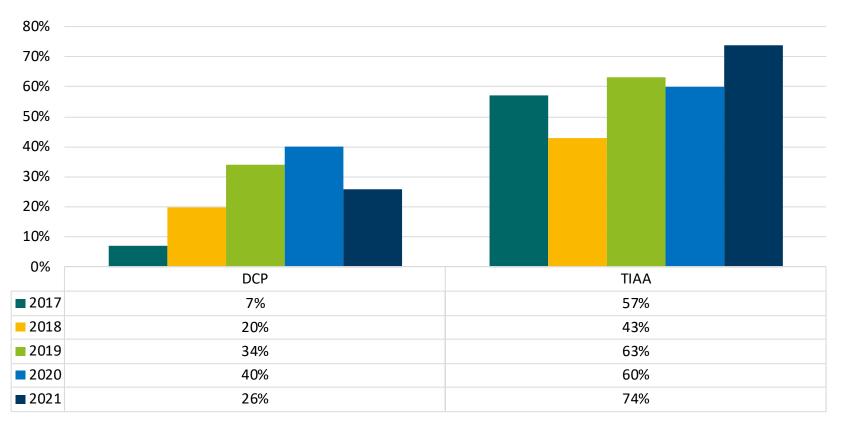
[^]Fidelity posted a Q3 2019 revenue credit in Dec. 2020, following the transition of assets away from Fidelity in Feb. 2020. As a result, the credit posted to 2,138 accounts that no longer had a balance with Fidelity. This has resulted in inflated participants accounts and assets with deselected providers. Assets were transferred to the correct provider in May 2021.

Administrative Summary ORPHE New Hire Provider Selections









removed as an option for new hires effective June 1, 2019.



Thank You!



VRS Defined Contribution Plans Quarterly Review



As of 1st Quarter 2021



Master Page # 66 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/202

VRS Defined Contribution Plans



DC Plan Assets and Accounts

Note: All data is as of 3/31/2021 unless otherwise stated.

Assets and Participants – Eight VRS Unbundled Defined Contribution Plans

Note: Includes Beneficiary Plans and Forfeiture Accounts



	March 31,	2019	March 31, 2020		2019	to 2020	March 31, 20	2020 to 2021		
	Assets	Accounts	Assets	Accounts	(%) Change in Assets	(%) Change in Accounts	Assets	Accounts	(%) Change in Assets	(%) Change in Accounts
457 Deferred Compensation ¹	\$2,794,441,366	80,337	\$2,894,643,618	87,394	3.59%	8.78%	\$3,952,209,830	87,324	36.54%	-0.08%
401(a) Cash Match	\$467,253,067	71,346	\$440,431,016	72,540	-5.74%	1.67%	\$584,585,229	72,292	32.73%	-0.34%
ORP Political Appointees	\$16,308,239	376	\$16,034,439	384	-1.68%	2.13%	\$23,986,387	382	49.59%	-0.52%
ORP School Superintendents	\$218,963	2	\$211,077	2	-3.60%	0.00%	\$259,885	2	23.12%	0.00%
Supplemental Retirement	\$137,960	2	\$120,573	2	-12.60%	0.00%	\$183,458	2	52.16%	0.00%
ORP Higher Education ²	\$1,705,504	139	\$99,369,516	2,430	5726.40%	1648.20%	\$143,822,191	2,257	44.73%	-7.12%
Hybrid 401 ³	\$322,795,898	137,501	\$404,514,218	163,057	25.32%	18.59%	\$779,262,354	180,718	92.64%	10.83%
Hybrid 457	\$137,565,650	64,090	\$186,045,475	116,416	35.24%	81.64%	\$376,473,893	115,479	102.36%	-0.80%
Total	\$3,740,426,647	353,793	4,041,369,932	442,225	8.05%	25.00%	\$5,860,783,228	458,456	45.02%	3.67%

¹ Includes reserve account

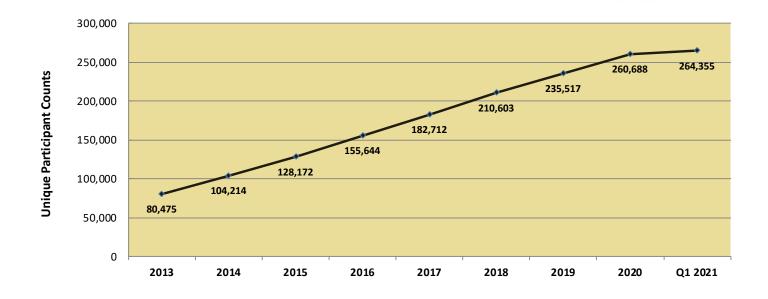
² Includes Welcome Account from Plan Transition = \$65.58

³ Includes 799 forfeiture accounts with balances = \$3,737,082.36

Unique Participant Count – All Plans

Note: Forfeiture Accounts Excluded





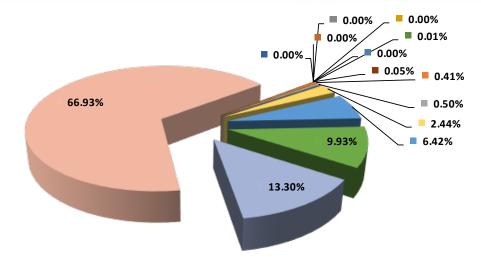
Period	Unique Participant Counts
2013	80,475
2014	104,214
2015	128,172
2016	155,644
2017	182,712
2018	210,603
2019	235,517
2020	260,688
Q1 2021	264,355

Assets and Accounts – All Plans

Note: Includes Forfeiture Accounts



- ORP Political Appointees Beneficiary Plan
- Hybrid 457 Beneficiary Plan
- Hybrid 401(a) Beneficiary Plan
- Supplemental Retirement
- ORP School Superintendents
- ORP Higher Education Beneficiary Plan
- 401(a) Cash Match Beneficiary Plan
- ORP Political Appointees
- 457 Deferred Compensation Beneficiary Plan
- ORP Higher Education
- Hybrid 457 Deferred Compensation Plan
- 401(a) Cash Match
- Hybrid 401(a)
- 457 Deferred Compensation*

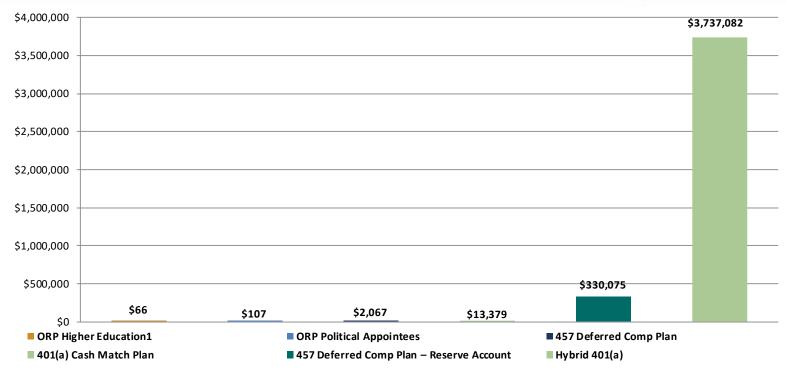


Plan Name	Balances - 3/31/2021	% of Plan Assets	Number of Accounts
ORP Political Appointees Beneficiary Plan	\$21,685.52	0.00%	1
Hybrid 457 Beneficiary Plan	\$26,905.85	0.00%	4
Hybrid 401(a) Beneficiary Plan	\$58,903.47	0.00%	10
Supplemental Retirement	\$183,458.38	0.00%	2
ORP School Superintendents	\$259,885.09	0.00%	2
ORP Higher Education Beneficiary Plan	\$768,142.51	0.01%	10
401(a) Cash Match Beneficiary Plan	\$2,781,604.04	0.05%	211
ORP Political Appointees	\$23,964,701.83	0.41%	381
457 Deferred Compensation Beneficiary Plan	\$29,381,232.57	0.50%	351
ORP Higher Education	\$143,054,048.19	2.44%	2,247
Hybrid 457 Deferred Compensation Plan	\$376,446,987.04	6.42%	115,475
401(a) Cash Match	\$581,803,624.48	9.93%	72,081
Hybrid 401(a)	\$779,203,450.92	13.30%	180,708
457 Deferred Compensation*	\$3,922,828,597.64	66.93%	86,973
Total All VRS Plans	\$5,860,783,227.53	100.00%	458,456

^{*} Includes reserve Mestert Preserve Teacourt Bara Refined Countribution Plans Advisory Committee (DCPAC) Meeting 6/24/2921s of 3/31/2021

Forfeiture & Reserve Accounts – Balances and Counts





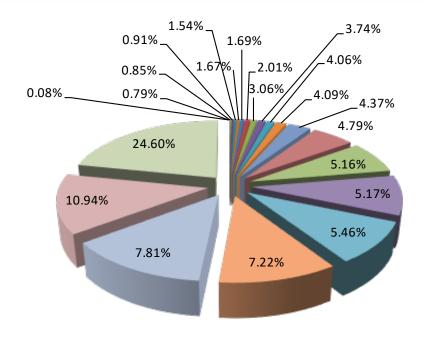
Plan	Balance – 3/31/2021	Number of Accounts
ORP Higher Education ¹	\$66	1
ORP Political Appointees	\$107	1
457 Deferred Comp Plan	\$2,067	1
401(a) Cash Match Plan	\$13,379	1
457 Deferred Comp Plan – Reserve Account	\$330,075	1
Hybrid 401(a)	\$3,737,082	799
Total	\$4,082,776	804

ORPHE balance is a result of the plan transition and does not represent forfeited assets.

Master Page # 71 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/29215 of 3/31/2021

Plan Assets by Fund – All Plans





- Target Date 2065 Portfolio ■ High-Yield Bond Fund
- TD Ameritrade
- Global Real Estate Fund
- Bond Fund
- Target Date 2050 Portfolio
- Target Date 2040 Portfolio
- Target Date 2030 Portfolio
- Target Date 2025 Portfolio
- Small/Mid-Cap Stock Fund
- Stock Fund

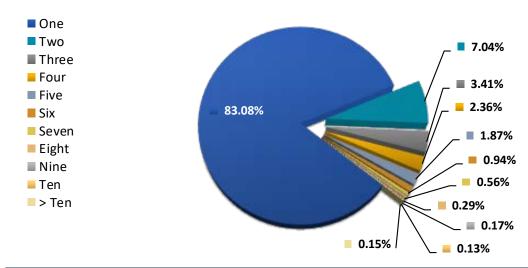
- VRS Investment Portfolio
- Inflation-Protected Bond Fund
- Money Market Fund
- Target Date 2060 Portfolio
- International Stock Fund
- Target Date 2045 Portfolio
- Target Date 2055 Portfolio
- Target Date 2035 Portfolio
- Retirement Portfolio
- Stable Value Fund

Fund Name	Fund Balance 3/31/2021	% of Plan Assets
Target Date 2065 Portfolio	\$4,911,786.95	0.08%
VRS Investment Portfolio	\$46,414,270.72	0.79%
High-Yield Bond Fund	\$49,956,649.70	0.85%
Inflation-Protected Bond Fund	\$53,195,281.61	0.91%
TD Ameritrade	\$90,392,508.78	1.54%
Money Market Fund	\$97,936,606.46	1.67%
Global Real Estate Fund	\$98,873,363.83	1.69%
Target Date 2060 Portfolio	\$117,596,677.37	2.01%
Bond Fund	\$179,207,705.65	3.06%
International Stock Fund	\$219,482,953.59	3.74%
Target Date 2050 Portfolio	\$237,793,002.06	4.06%
Target Date 2045 Portfolio	\$239,534,370.07	4.09%
Target Date 2040 Portfolio	\$256,323,242.11	4.37%
Target Date 2055 Portfolio	\$280,881,488.02	4.79%
Target Date 2030 Portfolio	\$302,127,367.32	5.16%
Target Date 2035 Portfolio	\$302,755,912.38	5.17%
Target Date 2025 Portfolio	\$319,774,223.65	5.46%
Retirement Portfolio	\$423,004,846.60	7.22%
Small/Mid-Cap Stock Fund	\$457,706,671.34	7.81%
Stable Value Fund	\$641,178,740.06	10.94%
Stock Fund	\$1,441,735,559.26	24.60%
Total	\$5,860,783,227.53	100.00%

Number of Investments Held By Participants







Number of Investments Held	Number of Participants	% of Participants
One	219,625	83.08%
Two	18,615	7.04%
Three	9,010	3.41%
Four	6,232	2.36%
Five	4,944	1.87%
Six	2,487	0.94%
Seven	1,478	0.56%
Eight	779	0.29%
Nine	454	0.17%
Ten	337	0.13%
>Ten	394	0.15%
Total	264,355	100.00%

COV 457 and Hybrid 401(a) Plans – Participants Invested In a Single Fund

Note: Beneficiary Plans and Forfeiture Accounts Excluded



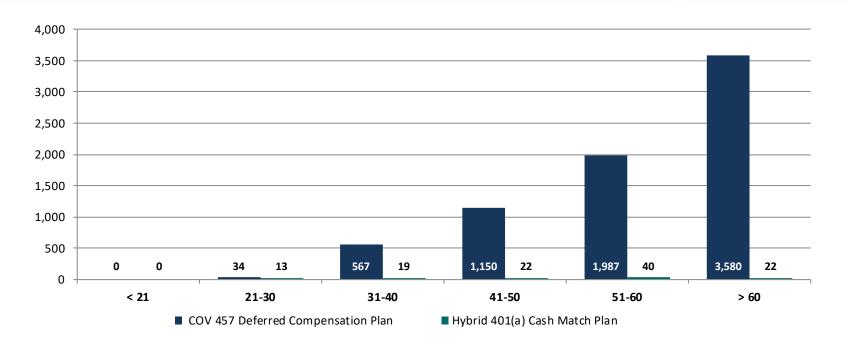
COV 457 Deferred Compensation Plan				
Fund Name	# of Accounts	% of Total		
Bond Fund	236	0.42%		
Global Real Estate Fund	120	0.21%		
High-Yield Bond Fund	84	0.15%		
Inflation-Protected Bond Fund	64	0.11%		
International Stock Fund	169	0.30%		
Money Market Fund	508	0.90%		
Small/Mid-Cap Stock Fund	299	0.53%		
Stable Value Fund	7,318	12.97%		
Stock Fund	2,750	4.87%		
TD Ameritrade	21	0.04%		
VRS Investment Portfolio	68	0.12%		
All Target Date Portfolio	44,796	79.38%		
Retirement Portfolio	4,104			
Target Date 2025 Portfolio	4,065			
Target Date 2030 Portfolio	4,608			
Target Date 2035 Portfolio	5,076			
Target Date 2040 Portfolio	5,152			
Target Date 2045 Portfolio	6,179			
Target Date 2050 Portfolio	6,864			
Target Date 2055 Portfolio	5,706			
Target Date 2060 Portfolio	2,645			
Target Date 2065 Portfolio	397			
Participants With Single Fund	56,433	100.00%		

Hybrid 401(a) Cash Match Plan				
Fund Name	# of Accounts	% of Total		
Bond Fund	16	0.01%		
Global Real Estate Fund	12	0.01%		
High-Yield Bond Fund	5	0.00%		
Inflation-Protected Bond Fund	11	0.01%		
International Stock Fund	10	0.01%		
Money Market Fund	59	0.03%		
Small/Mid-Cap Stock Fund	64	0.04%		
Stable Value Fund	116	0.07%		
Stock Fund	615	0.35%		
TD Ameritrade	1	0.00%		
VRS Investment Portfolio	1	0.00%		
All Target Date Portfolio	174,121	99.48%		
Retirement Portfolio	6,065			
Target Date 2025 Portfolio	9,296			
Target Date 2030 Portfolio	13,020			
Target Date 2035 Portfolio	16,105			
Target Date 2040 Portfolio	16,812			
Target Date 2045 Portfolio	19,429			
Target Date 2050 Portfolio	23,844			
Target Date 2055 Portfolio	37,282			
Target Date 2060 Portfolio	29,817			
Target Date 2065 Portfolio	2,451			
Participants With Single Fund	175,031	100.00%		

COV 457 and Hybrid 401(a) Plans – Stable Value as Sole Fund Held – Age Ranges



Note: Forfeiture Accounts Excluded



COV 457 Deferred Compensation Plan		
Age Range	Number of Participants	
<21	0	
21-30	34	
31-40	567	
41-50	1,150	
51-60	1,987	
>60	3,580	
Total	7,318	

Hybrid 401(a) Cash Match Plan			
Age Range	Number of Participants		
<21	0		
21-30	13		
31-40	19		
41-50	22		
51-60	40		
>60	22		
Total	116		

VRS Defined Contribution Plans

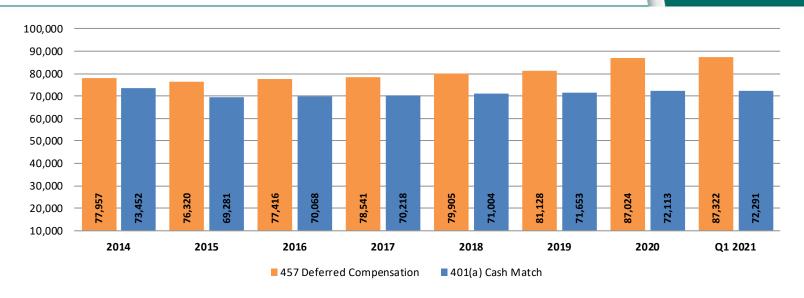


Commonwealth of Virginia 457 Deferred Compensation Plan 401(a) Cash Match Plan

457 and 401(a) Cash Match Plans – Number of Participant Accounts



Note: Includes Beneficiary Plans; Forfeiture Accounts and 457 Reserve Account Excluded

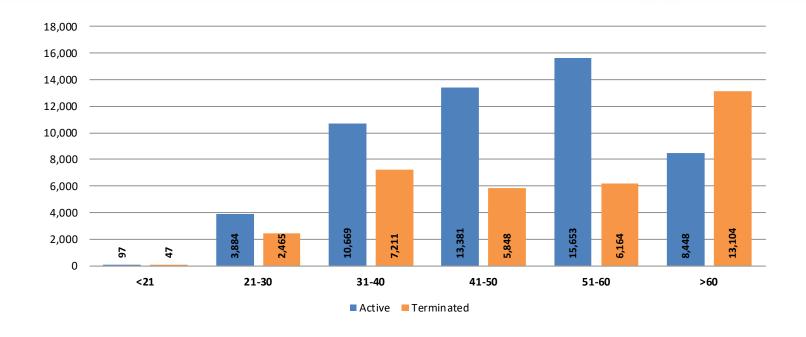


Period	457 Deferred Compensation	401(a) Cash Match	Total
2014	77,957	73,452	151,409
2015	76,320	69,281	145,601
2016	77,416	70,068	147,484
2017	78,541	70,218	148,759
2018	79,905	71,004	150,909
2019	81,128	71,653	152,781
2020	87,024	72,113	159,137
Q1 2021	87,322	72,291	159,613

457 Plan – Participant Status Count by Age







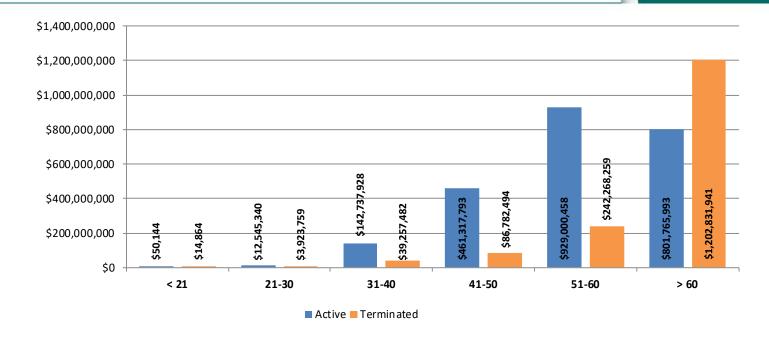
Age Range	Active	Terminated	Total
<21	97	47	144
21-30	3,884	2,465	6,349
31-40	10,669	7,211	17,880
41-50	13,381	5,848	19,229
51-60	15,653	6,164	21,817
>60	8,448	13,104	21,552
Total	52,132	34,839	86,971

^{*} Active Participants do not have a termination date on file and may not have made a contribution during the quarter. Terminated Participants have a terminate date on file.

457 Plan – Participant Status Assets by Age







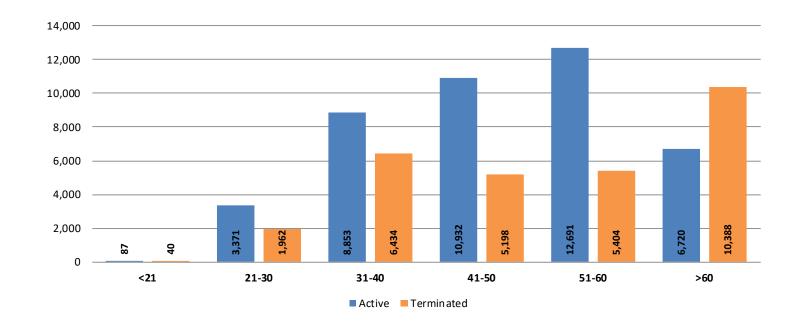
Age	Active	Terminated	Total
< 21	\$50,144	\$14,864	\$65,008
21-30	\$12,545,340	\$3,923,759	\$16,469,099
31-40	\$142,737,928	\$39,257,482	\$181,995,410
41-50	\$461,317,793	\$86,782,494	\$548,100,287
51-60	\$929,000,458	\$242,268,259	\$1,171,268,718
> 60	\$801,765,993	\$1,202,831,941	\$2,004,597,934
Total	\$2,347,417,657	\$1,575,078,799	\$3,922,496,456

^{*} Active Participants do not have a termination date on file and may not have made a contribution during the quarter. Terminated Participants have a terminate date on file.

401(a) Cash Match Plan – Participant Status Count by Age







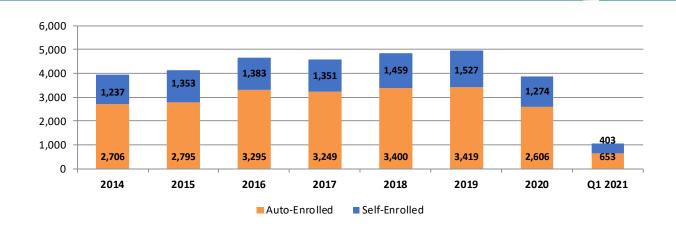
Age Range	Active	Terminated	Total
<21	87	40	127
21-30	3,371	1,962	5,333
31-40	8,853	6,434	15,287
41-50	10,932	5,198	16,130
51-60	12,691	5,404	18,095
>60	6,720	10,388	17,108
Total	42,654	29,426	72,080

^{*} Active Participants do not have a termination date on file and may not have made a contribution during the quarter. Terminated Participants have a terminate date on file.

457 Plan – New Enrollments



Note: Auto-enrolled category includes participants designated as auto-enroll eligible on incoming indicative data files during the quarter as well as those auto-enrolled during the quarter



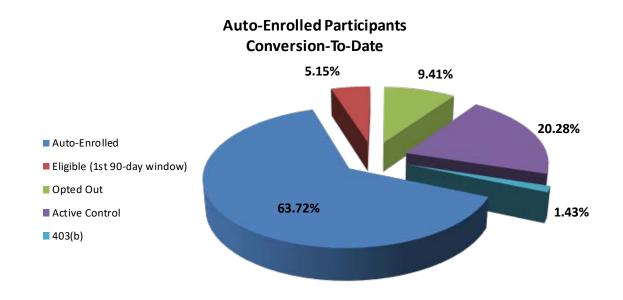
Period	Auto-Enrolled	Self-Enrolled	Total Enrolled
2014	2,706	1,237	3,943
2015	2,795	1,353	4,148
2016	3,295	1,383	4,678
2017	3,249	1,351	4,600
2018	3,400	1,459	4,859
2019	3,419	1,527	4,946
2020	2,606	1,274	3,880
Q1 2021	653	403	1,056

Daviad	Sch	ools	Political Su	b-Divisions	State Ag	gencies	Total
Period	Auto-Enrolled	Self-Enrolled	Auto-Enrolled	Self-Enrolled	Auto-Enrolled	Self-Enrolled	Enrolled
2020	n/a	204	n/a	171	2,606	899	3,880
Q1 2021	n/a	66	n/a	43	653	294	1,056

457 Plan – Automatic Enrollment Snapshot





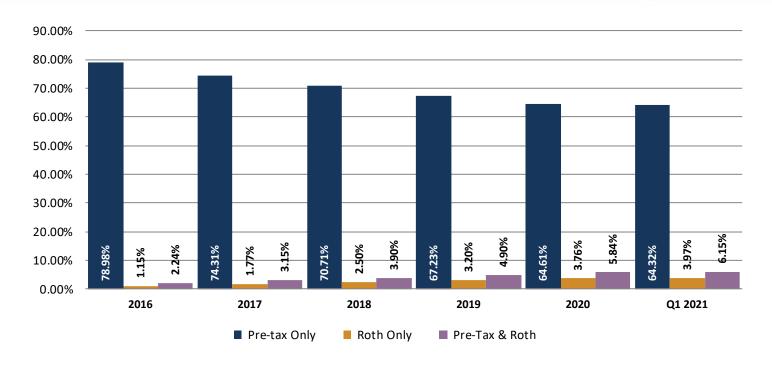


Enrollment Category	Active	% of Active Participants
Auto-Enrolled	7,047	63.72%
Eligible (1st 90-day window)	570	5.15%
Opted Out	1,041	9.41%
Active Control	2,243	20.28%
403(b)	158	1.43%

457 Plan – Deferral Types



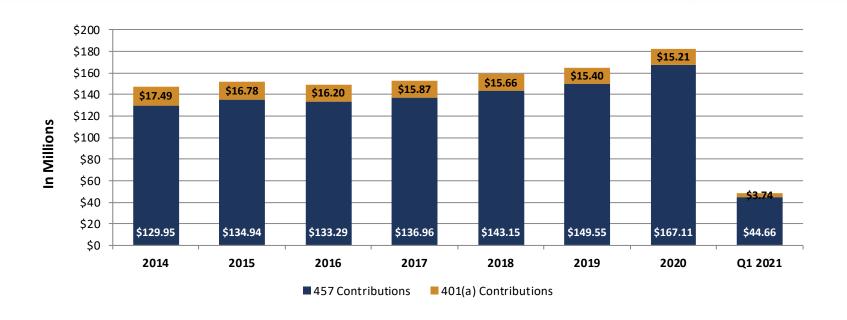
Note: Active count — all active participants, including participants who do not have a balance in the plan



Period	Active Participants	Pre-tax Only	Roth Only	Pre-Tax & Roth	% of Participants With Deferrals
2016	57,510	78.98%	1.15%	2.24%	82.37%
2017	59,104	74.31%	1.77%	3.15%	79.23%
2018	60,399	70.71%	2.50%	3.90%	77.11%
2019	61,554	67.23%	3.20%	4.90%	75.33%
2020	64,569	64.61%	3.76%	5.84%	74.21%
Q1 2021	64,221	64.32%	3.97%	6.15%	74.43%

457 and 401(a) Cash Match Plans – Contributions

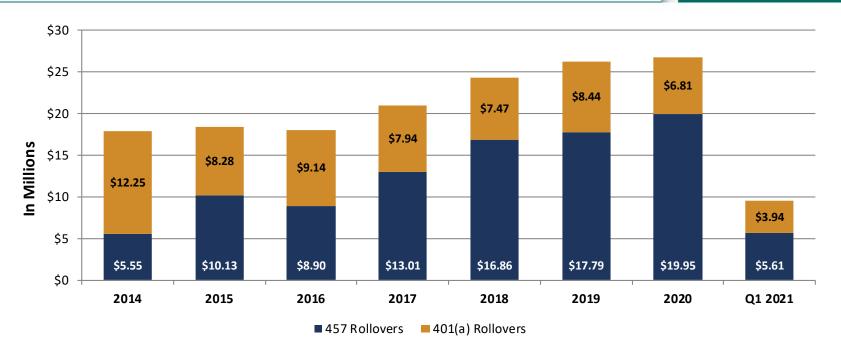




Period	457 Contributions	401(a) Contributions	Total
2014	\$129.95	\$17.49	\$147.44
2015	\$134.94	\$16.78	\$151.72
2016	\$133.29	\$16.20	\$149.49
2017	\$136.96	\$15.87	\$152.83
2018	\$143.15	\$15.66	\$158.82
2019	\$149.55	\$15.40	\$164.95
2020	\$167.11	\$15.21	\$182.32
Q1 2021	\$44.66	\$3.74	\$48.40

457 and 401(a) Cash Match Plans – Incoming Rollovers

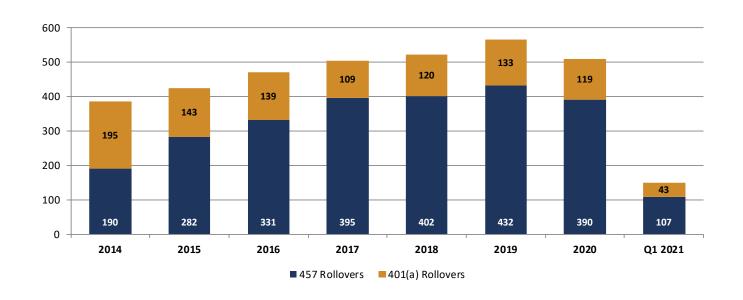




Period	457 Rollovers	401(a) Rollovers	Total
2014	\$5.55	\$12.25	\$17.81
2015	\$10.13	\$8.28	\$18.41
2016	\$8.90	\$9.14	\$18.04
2017	\$13.01	\$7.94	\$20.95
2018	\$16.86	\$7.47	\$24.33
2019	\$17.79	\$8.44	\$26.23
2020	\$19.95	\$6.81	\$26.76
Q1 2021	\$5.61	\$3.94	\$9.55

457 and 401(a) Cash Match Plans – Incoming Rollovers – Counts



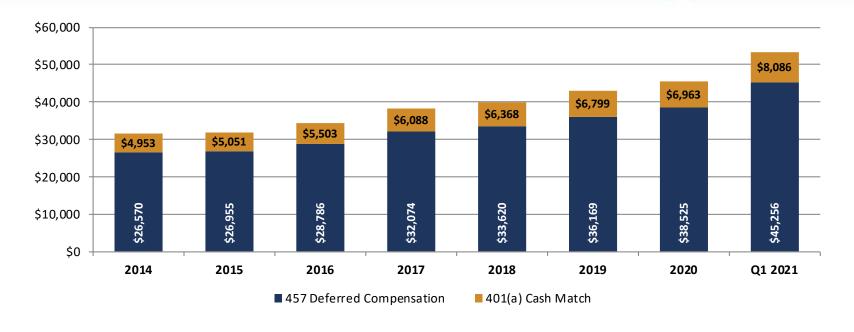


Period	457 Rollovers	401(a) Rollovers	Total
2014	190	195	385
2015	282	143	425
2016	331	139	470
2017	395	109	504
2018	402	120	522
2019	432	133	565
2020	390	119	509
Q1 2021	107	43	150

457 and 401(a) Cash Match Plans – Participant Average Account Balance

Note: Includes Beneficiary Plans



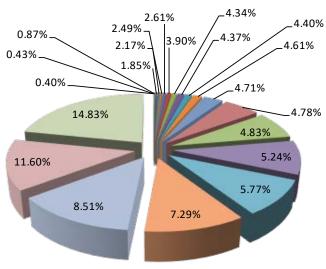


Period	457 Deferred Compensation	401(a) Cash Match	Total
2014	\$26,570.18	\$4,953.42	\$31,523.60
2015	\$26,954.62	\$5,051.05	\$32,005.67
2016	\$28,786.34	\$5,502.95	\$34,289.28
2017	\$32,073.51	\$6,087.86	\$38,161.37
2018	\$33,619.62	\$6,367.88	\$39,987.50
2019	\$36,168.70	\$6,798.54	\$42,967.24
2020	\$38,525.35	\$6,963.06	\$45,488.41
Q1 2021	\$45,256.38	\$8,086.37	\$53,342.75

457 Plan – Participant Use of Funds

Note: Includes Beneficiary Plan and Reserve Account





- Target Date 2065 Portfolio ■ VRS Investment Portfolio
- Inflation-Protected Bond Fund
- Money Market Fund
- Global Real Estate Fund
- Target Date 2025 Portfolio
- Target Date 2035 Portfolio ■ Target Date 2050 Portfolio
- Bond Fund
- Small/Mid-Cap Stock Fund
- Stock Fund

■ TD Ameritrade
■ Target Date 2060 Portfolio
■ High-Yield Bond Fund
■ Target Date 2055 Portfolio
■ Target Date 2040 Portfolio
■ Target Date 2030 Portfolio
■ Target Date 2045 Portfolio
■ Retirement Portfolio
International Stock Fund

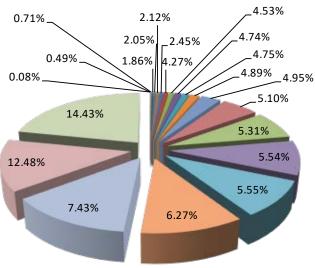
■ Stable Value Fund

Fund Name	Participant Count 12/31/2020	Participant Count 3/31/2021	% of Participants 3/31/2021	% Change
Target Date 2065 Portfolio	536	654	0.40%	22.01%
TD Ameritrade	646	706	0.43%	9.29%
VRS Investment Portfolio	1,437	1,435	0.87%	-0.14%
Target Date 2060 Portfolio	2,917	3,062	1.85%	4.97%
Inflation-Protected Bond Fund	3,598	3,598	2.17%	0.00%
High-Yield Bond Fund	4,132	4,115	2.49%	-0.41%
Money Market Fund	4,383	4,321	2.61%	-1.41%
Target Date 2055 Portfolio	6,335	6,454	3.90%	1.88%
Global Real Estate Fund	7,243	7,193	4.34%	-0.69%
Target Date 2040 Portfolio	7,166	7,233	4.37%	0.93%
Target Date 2025 Portfolio	7,278	7,284	4.40%	0.08%
Target Date 2030 Portfolio	7,590	7,632	4.61%	0.55%
Target Date 2035 Portfolio	7,726	7,795	4.71%	0.89%
Target Date 2045 Portfolio	7,844	7,906	4.78%	0.79%
Target Date 2050 Portfolio	7,905	7,999	4.83%	1.19%
Retirement Portfolio	8,806	8,674	5.24%	-1.50%
Bond Fund	9,708	9,560	5.77%	-1.52%
International Stock Fund	12,082	12,073	7.29%	-0.07%
Small/Mid-Cap Stock Fund	14,020	14,092	8.51%	0.51%
Stable Value Fund	19,467	19,206	11.60%	-1.34%
Stock Fund	24,614	24,559	14.83%	-0.22%

401(a) Cash Match – Participant Use of Funds

Note: Includes Beneficiary Plan





■TD Ameritrade		
■ VRS Investment Portfolio		
■ High-Yield Bond Fund		
■ Money Market Fund		
■ Target Date 2055 Portfolio		

- Target Date 2040 Portfolio ■ Target Date 2030 Portfolio
- Target Date 2045 Portfolio
- Target Date 2050 Portfolio
- Small/Mid-Cap Stock Fund
- Stock Fund

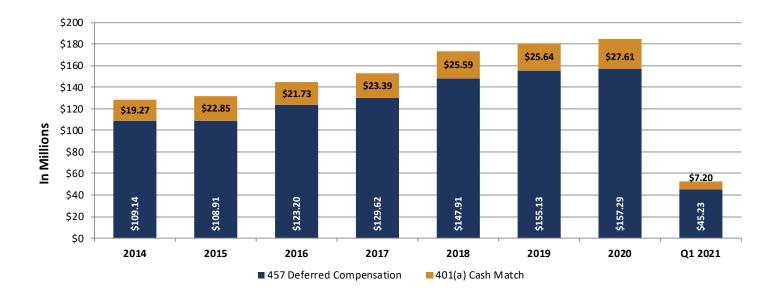
■ Target Date 2065 Portfolio
■ Inflation-Protected Bond Fu

- Target Date 2060 Portfolio
- Global Real Estate Fund ■ Target Date 2025 Portfolio
- Bond Fund
- Target Date 2035 Portfolio ■ Retirement Portfolio
- International Stock Fund
- Stable Value Fund

Fund Name	Participant Count 12/31/2020	Participant Count 3/31/2021	% of Participants 3/31/2021	% Change
TD Ameritrade	86	95	0.08%	10.47%
Target Date 2065 Portfolio	490	595	0.49%	21.43%
VRS Investment Portfolio	873	870	0.71%	-0.34%
Inflation-Protected Bond Fund	2,292	2,276	1.86%	-0.70%
High-Yield Bond Fund	2,507	2,497	2.05%	-0.40%
Target Date 2060 Portfolio	2,477	2,590	2.12%	4.56%
Money Market Fund	3,037	2,995	2.45%	-1.38%
Global Real Estate Fund	5,262	5,208	4.27%	-1.03%
Target Date 2055 Portfolio	5,446	5,533	4.53%	1.60%
Target Date 2025 Portfolio	5,813	5,793	4.74%	-0.34%
Target Date 2040 Portfolio	5,762	5,802	4.75%	0.69%
Bond Fund	6,066	5,966	4.89%	-1.65%
Target Date 2030 Portfolio	6,009	6,045	4.95%	0.60%
Target Date 2035 Portfolio	6,197	6,229	5.10%	0.52%
nd Target Date 2045 Portfolio	6,445	6,483	5.31%	0.59%
Retirement Portfolio	6,848	6,760	5.54%	-1.29%
Target Date 2050 Portfolio	6,707	6,774	5.55%	1.00%
International Stock Fund	7,662	7,651	6.27%	-0.14%
Small/Mid-Cap Stock Fund	9,034	9,069	7.43%	0.39%
Stable Value Fund	15,456	15,240	12.48%	-1.40%
Stock Fund	17,702	17,620	14.43%	-0.46%

457 and 401(a) Cash Match Plans – Distributions

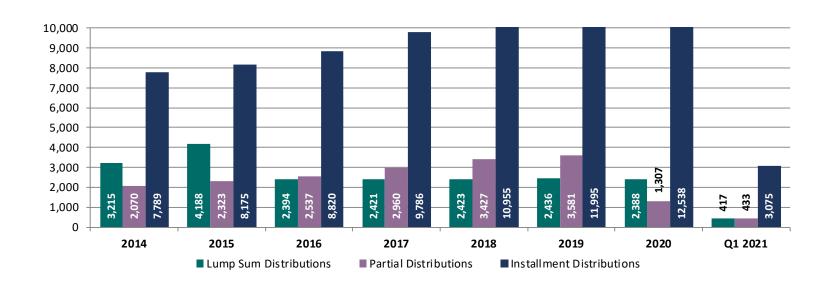




Period	457 Deferred Compensation	401(a) Cash Match	Total
2014	\$109.14	\$19.27	\$128.41
2015	\$108.91	\$22.85	\$131.77
2016	\$123.20	\$21.73	\$144.93
2017	\$129.62	\$23.39	\$153.01
2018	\$147.91	\$25.59	\$173.50
2019	\$155.13	\$25.64	\$180.77
2020	\$157.29	\$27.61	\$184.90
Q1 2021	\$45.23	\$7.20	\$52.43

457 Plan – Distributions by Type



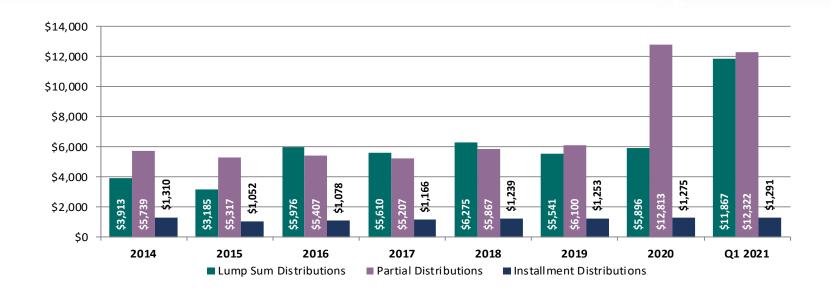


Period	Lump Sum Distributions*	Partial Distributions	Installment Distributions
2014	3,215	2,070	7,789
2015	4,188	2,323	8,175
2016	2,394	2,537	8,820
2017	2,421	2,960	9,786
2018	2,423	3,427	10,955
2019	2,436	3,581	11,995
2020	2,388	1,307	12,538
Q1 2021	417	433	3,075

Includes EACA distributions.

457 Plan – Distribution Average Amounts

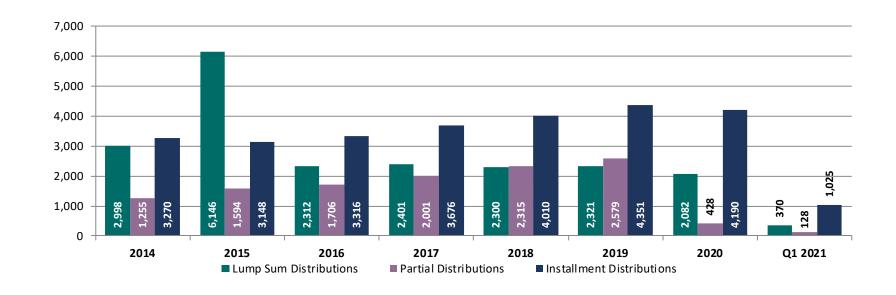




Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2014	\$3,913	\$5,739	\$1,310
2015	\$3,185	\$5,317	\$1,052
2016	\$5,976	\$5 <i>,</i> 407	\$1,078
2017	\$5,610	\$5,207	\$1,166
2018	\$6,275	\$5 <i>,</i> 867	\$1,239
2019	\$5,541	\$6,100	\$1,253
2020	\$5,896	\$12,813	\$1,275
Q1 2021	\$11,867	\$12,322	\$1,291

401(a) Cash Match – Distributions by Type

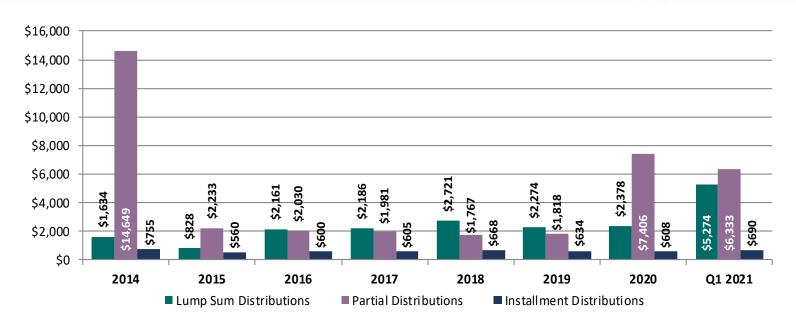




Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2014	2,998	1,255	3,270
2015	6,146	1,594	3,148
2016	2,312	1,706	3,316
2017	2,401	2,001	3,676
2018	2,300	2,315	4,010
2019	2,321	2,579	4,351
2020	2,082	428	4,190
Q1 2021	370	128	1,025

401(a) Cash Match Plan – Distribution Average Amounts

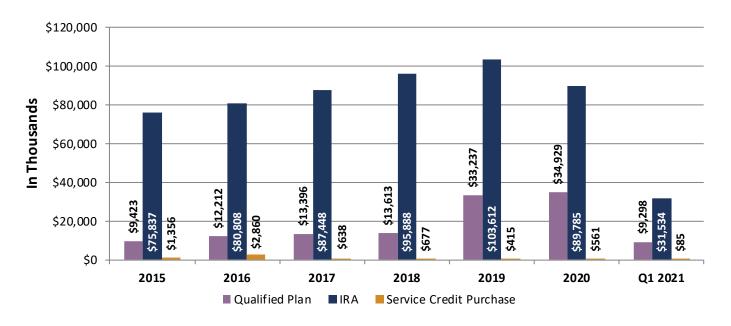




Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2014	\$1,634	\$14,649	\$755
2015	\$828	\$2,233	\$560
2016	\$2,161	\$2,030	\$600
2017	\$2,186	\$1,981	\$605
2018	\$2,721	\$1,767	\$668
2019	\$2,274	\$1,818	\$634
2020	\$2,378	\$7,406	\$608
Q1 2021	\$5,274	\$6,333	\$690

457 and 401(a) Plans – Rollover Distribution Destinations – Total Amounts

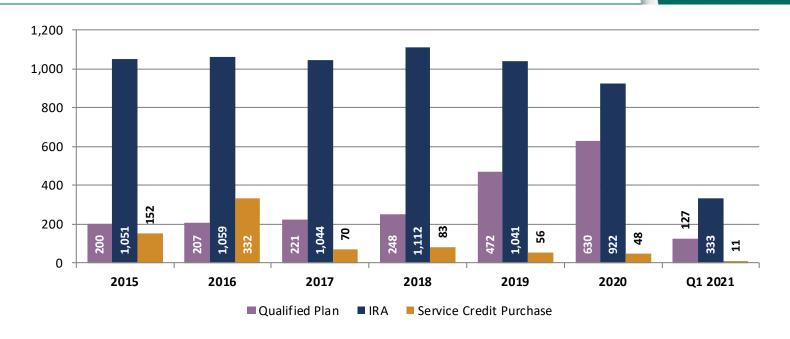




Period	Qualified Plan	IRA	Service Credit Purchase	Total
2015	\$9,423	\$75,837	\$1,356	\$86,616
2016	\$12,212	\$80,808	\$2,860	\$95,880
2017	\$13,396	\$87,448	\$638	\$101,481
2018	\$13,613	\$95,888	\$677	\$110,178
2019	\$33,237	\$103,612	\$415	\$137,264
2020	\$34,929	\$89,785	\$561	\$125,275
Q1 2021	\$9,298	\$31,534	\$85	\$40,918

457 Plan – Rollover Distribution Destinations

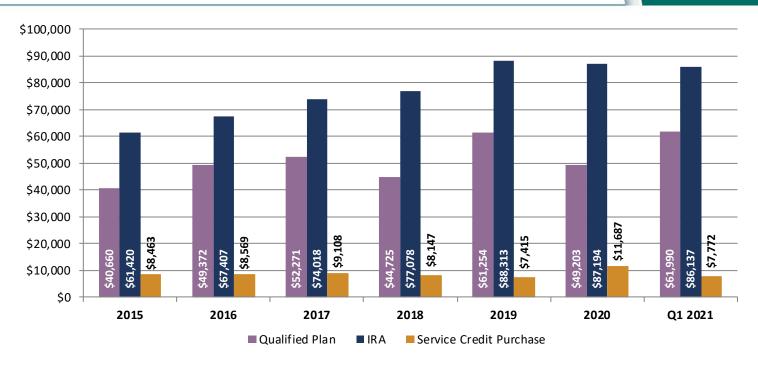




Period	Qualified Plan	IRA	Service Credit Purchase	Total Rollover Distributions
2015	200	1,051	152	1,403
2016	207	1,059	332	1,598
2017	221	1,044	70	1,335
2018	248	1,112	83	1,443
2019	472	1,041	56	1,569
2020	630	922	48	1,600
Q1 2021	127	333	11	471

457 Plan – Rollover Distribution Average Amounts

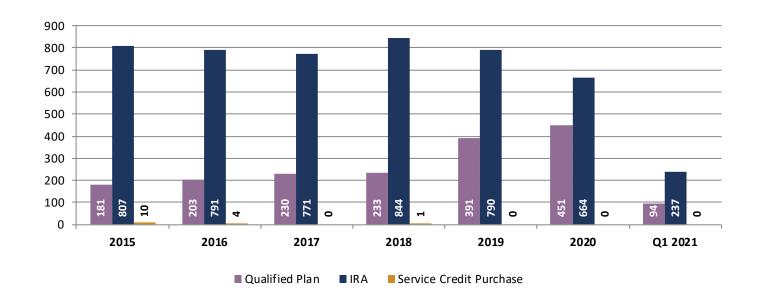




Period	Qualified Plan	IRA	Service Credit Purchase	Average Rollover Distribution
2015	\$40,660	\$61,420	\$8,463	\$52,855
2016	\$49,372	\$67,407	\$8,569	\$52,847
2017	\$52,271	\$74,018	\$9,108	\$67,015
2018	\$44,725	\$77,078	\$8,147	\$67,553
2019	\$61,254	\$88,313	\$7,415	\$77,285
2020	\$49,203	\$87,194	\$11,687	\$69,970
Q1 2021	\$61,990	\$86,137	\$7,772	\$77,796

401(a) Cash Match Plan – Rollover Distribution Destinations

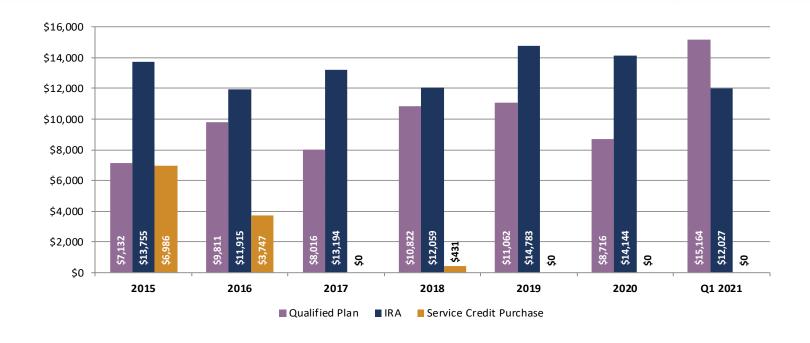




Period	Qualified Plan	IRA	Service Credit Purchase	Total Rollover Distributions
2015	181	807	10	998
2016	203	791	4	998
2017	230	771	0	1,001
2018	233	844	1	1,078
2019	391	790	0	1,181
2020	451	664	0	1,115
Q1 2021	94	237	0	331

401(a) Cash Match Plan – Rollover Distribution Average Amounts



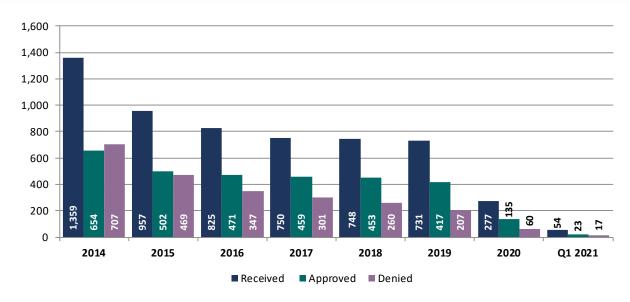


Period	Qualified Plan	IRA	Service Credit Purchase	Average Rollover Distribution
2015	\$7,132	\$13,755	\$6,986	\$12,486
2016	\$9,811	\$11,915	\$3,747	\$11,454
2017	\$8,016	\$13,194	\$0	\$12,005
2018	\$10,822	\$12,059	\$431	\$11,781
2019	\$11,062	\$14,783	\$0	\$13,551
2020	\$8,716	\$14,144	\$0	\$11,949
Q1 2021	\$15,164	\$12,027	\$0	\$12,918

457 Plan – Unforeseeable Emergency Withdrawals



Note: Reporting for Withdrawal Reasons Started In 2015



Withdrawals Approved and Paid							
Withdrawal Reason	2015	2016	2017	2018	2019	2020	Q1 2021
Eviction	121	118	98	103	122	29	4
Foreclosure	48	52	50	29	24	6	0
Funeral Expenses	14	14	11	9	12	4	1
Lost Wages*	0	0	5	29	33	12	1
Medical Bills	312	279	288	269	215	82	17
Property Damage	7	8	7	14	11	2	0
Total Paid	502	471	459	453	417	135	23

^{*} New category added in October 2017.

During Q2 2020 a moratorium was placed on Evictions as a result of the COVID-19 pandemic. Other UEWs

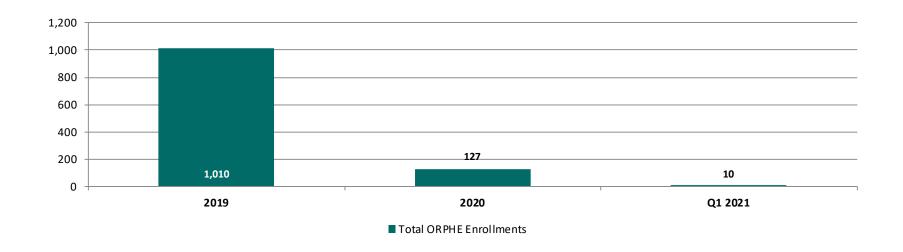
VRS Defined Contribution Plans



ORP for Higher Ed

ORPHE Plan – New Enrollments

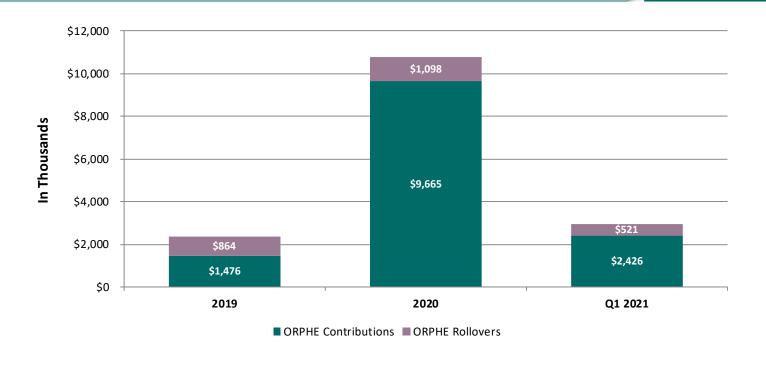




Period	Total ORPHE Enrollments
2019	1,010
2020	127
Q1 2021	10

ORPHE Plan – Contributions and Incoming Rollovers

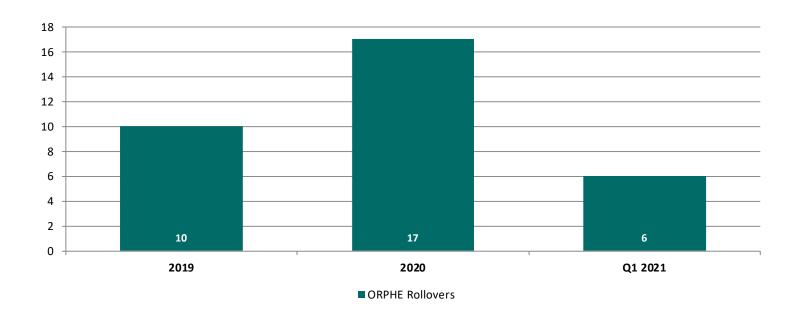




Period	ORPHE Contributions	ORPHE Rollovers	Total
2019	\$1,476.42	\$864.47	\$2,340.89
2020	\$9,664.81	\$1,097.86	\$10,762.67
Q1 2021	\$2,426.33	\$521.38	\$2,947.71

ORPHE Plan – Incoming Rollovers – Counts

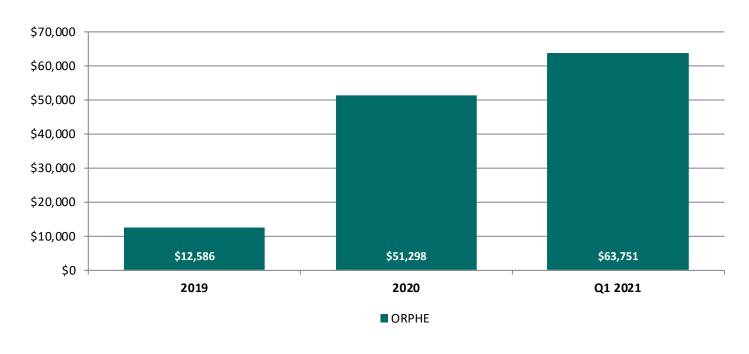




Period	ORPHE Rollovers
2019	10
2020	17
Q1 2021	6

ORPHE Plan – Participant Average Account Balance



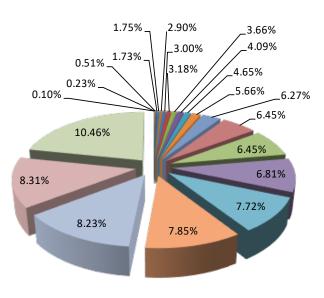


Period	ORPHE
2019	\$12,586
2020	\$51,298
Q1 2021	\$63,751

ORPHE- Participant Use of Funds

Note: Includes Beneficiary Plan





■ VRS Investment Portfolio		
■TD Ameritrade		
■ Inflation-Protected Bond Fund		
■ Bond Fund		
■ Money Market Fund		
■Target Date 2025 Portfolio		
■ International Stock Fund		
■ Target Date 2035 Portfolio		
■ Target Date 2050 Portfolio		
■ Target Date 2040 Portfolio		

Stock Fund

■ Target	Date	2065	Portfolio

■ Stable Value Fund

■ High-Yield Bond Fund

■Target Date 2060 Portfolio

■ Global Real Estate Fund ■ Target Date 2055 Portfolio

■ Target Date 2030 Portfolio

■ Target Date 2045 Portfolio
■ Retirement Portfolio

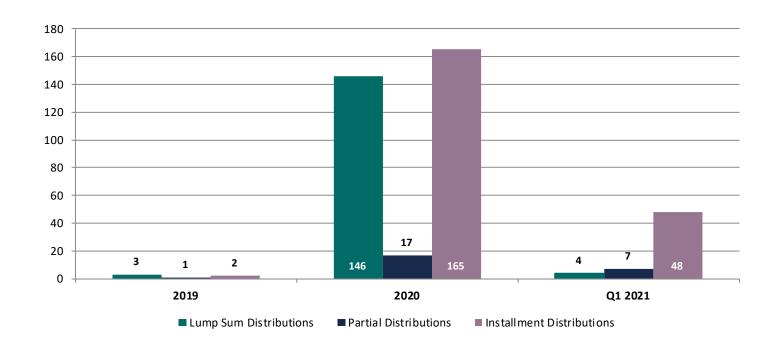
■ Small/Mid-Cap Stock Fund

Fund Name	Participant Count 12/31/2020	Participant Count 3/31/2021	% of Participants 3/31/2021	% Change
VRS Investment Portfolio	3	4	0.10%	33.33%
Target Date 2065 Portfolio	8	9	0.23%	12.50%
TD Ameritrade	17	20	0.51%	17.65%
Stable Value Fund	72	68	1.73%	-5.56%
Inflation-Protected Bond Fund	75	69	1.75%	-8.00%
High-Yield Bond Fund	123	114	2.90%	-7.32%
Bond Fund	124	118	3.00%	-4.84%
Target Date 2060 Portfolio	123	125	3.18%	1.63%
Money Market Fund	152	144	3.66%	-5.26%
Global Real Estate Fund	162	161	4.09%	-0.62%
Target Date 2025 Portfolio	185	183	4.65%	-1.08%
Target Date 2055 Portfolio	223	223	5.66%	0.00%
International Stock Fund	248	247	6.27%	-0.40%
Target Date 2030 Portfolio	257	254	6.45%	-1.17%
Target Date 2035 Portfolio	249	254	6.45%	2.01%
Target Date 2045 Portfolio	268	268	6.81%	0.00%
Target Date 2050 Portfolio	305	304	7.72%	-0.33%
Retirement Portfolio	318	309	7.85%	-2.83%
Target Date 2040 Portfolio	325	324	8.23%	-0.31%
Small/Mid-Cap Stock Fund	327	327	8.31%	0.00%
Stock Fund	408	412	10.46%	0.98%

ORPHE Plan - Distributions by Type

Note: Rollover Distributions Excluded and Reported on Subsequent Pages



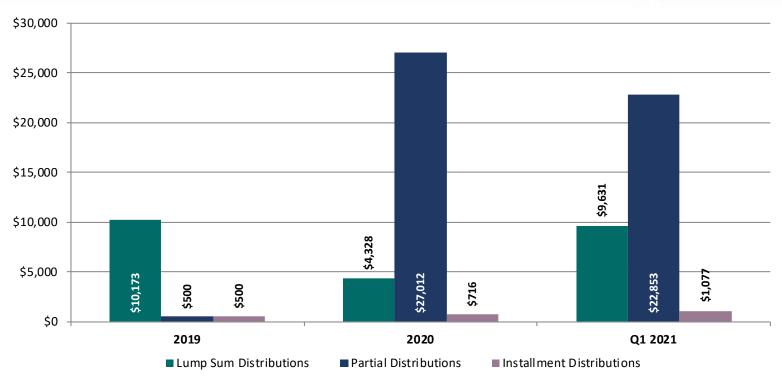


Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2019	3	1	2
2020	146	17	165
Q1 2021	4	7	48

ORPHE Plan – Average Distribution Amount

Note: Rollover Distributions Excluded and Reported on Subsequent Pages

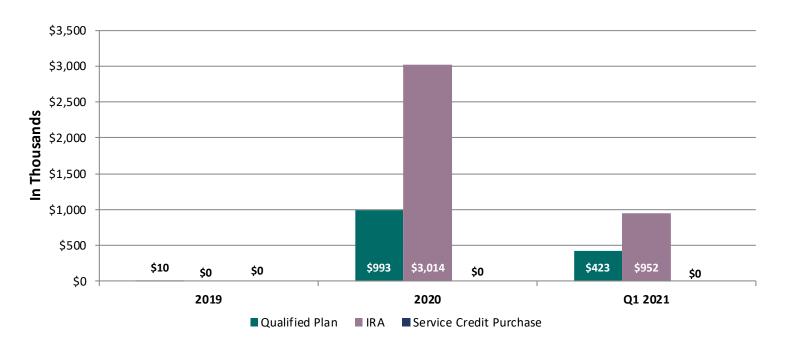




Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2019	\$10,173	\$500	\$500
2020	\$4,328	\$27,012	\$716
Q1 2021	\$9,631	\$22,853	\$1,077

ORPHE Plan – Rollover Distribution Destinations – Total Amounts

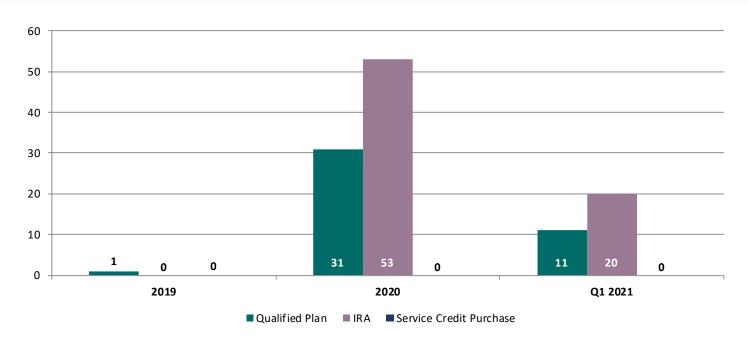




Period	Qualified Plan	IRA	Service Credit Purchase	Total
2019	\$10	\$0	\$0	\$10
2020	\$993	\$3,014	\$0	\$4,007
Q1 2021	\$423	\$952	\$0	\$1,375

ORPHE Plan – Rollover Distribution Destinations

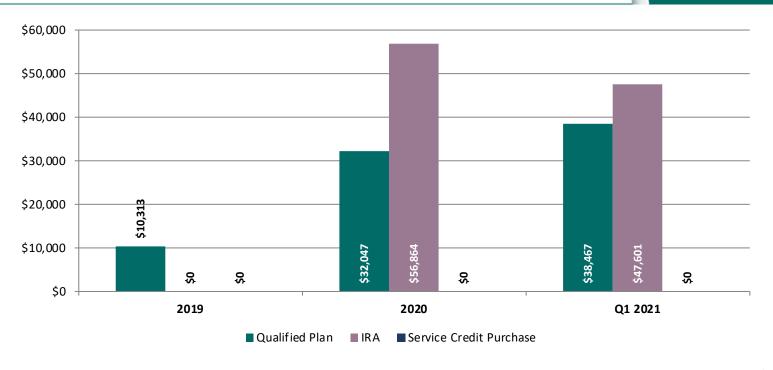




Period	Qualified Plan	IRA	Service Credit Purchase
2019	1	0	0
2020	31	53	0
Q1 2021	11	20	0

ORPHE Plan – Rollover Distribution Average Amounts





Period	Qualified Plan	IRA	Service Credit Purchase	Average Rollover Distribution
2019	\$10,313	\$0	\$0	\$10,313
2020	\$32,047	\$56,864	\$0	\$47,705
Q1 2021	\$38,467	\$47,601	\$0	\$44,360

VRS Defined Contribution Plans



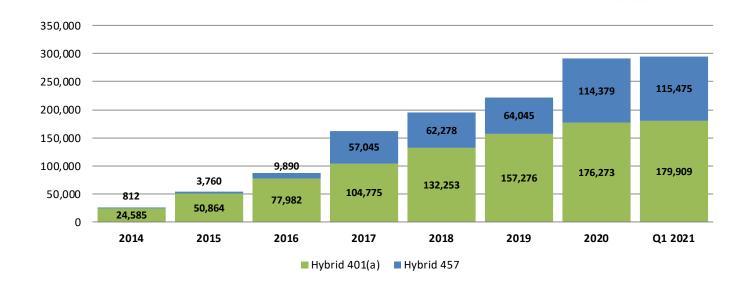
Hybrid Retirement Plan

Note: All data is as of 3/31/2021 unless otherwise stated.

Hybrid 401(a) & 457 Plans – Number of Participant Accounts



Note: Beneficiary Plans excluded; Forfeiture Accounts excluded starting in 2015; Counts include Active and Terminated Members

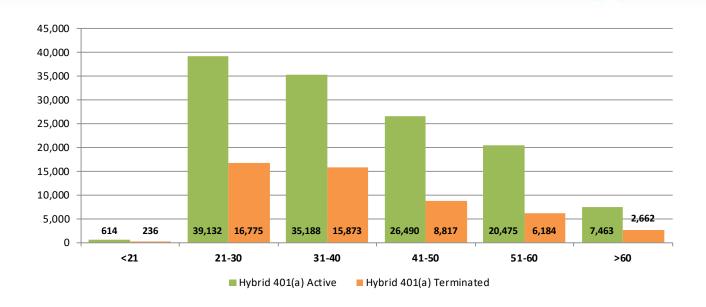


Period	Hybrid 401(a)	Hybrid 457	Total
2014	24,585	812	25,397
2015	50,864	3,760	54,624
2016	77,982	9,890	87,872
2017	104,775	57,045	161,820
2018	132,253	62,278	194,531
2019	157,276	64,045	221,321
2020	176,273	114,379	290,652
Q1 2021	179,909	115,475	295,384

Hybrid 401(a) Plan – Participant Status Count by Age

Virginia Retirement System

Note: Beneficiary Plans and Forfeiture Accounts Excluded

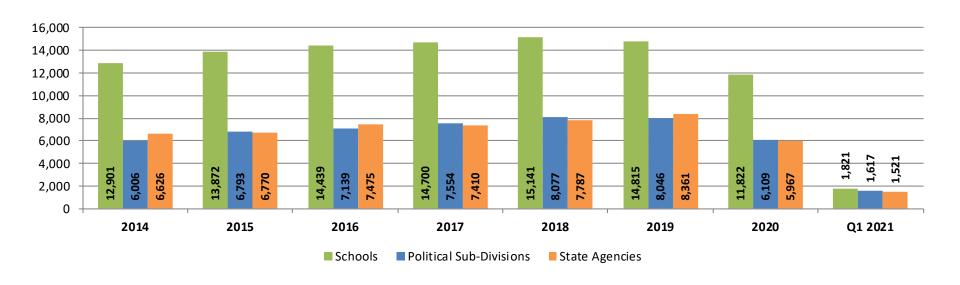


Ago Bongo		Hybrid 401(a)*		
Age Range	Active	Terminated	Total	
<21	614	236	850	
21-30	39,132	16,775	55,907	
31-40	35,188	15,873	51,061	
41-50	26,490	8,817	35,307	
51-60	20,475	6,184	26,659	
>60	7,463	2,662	10,125	
Total	129,362	50,547	179,909	

^{*} Chart shows Hybrid 401(a) counts only, since all participants in the Hybrid 457 counts are included in the Hybrid 401(a) counts.

Hybrid 401(a) Plan – New Enrollments

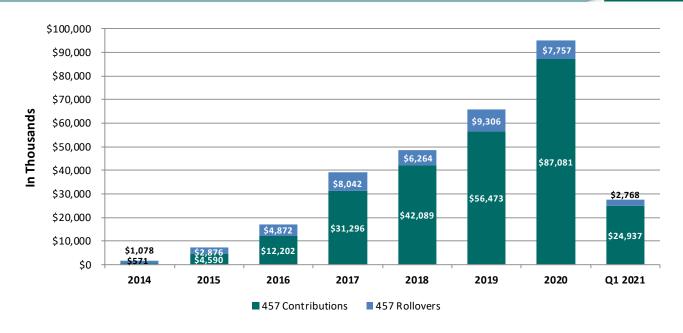




Period	Schools	Political Sub-Divisions	State Agencies	Total Hybrid Enrollments
2014	12,901	6,006	6,626	25,533
2015	13,872	6,793	6,770	27,435
2016	14,439	7,139	7,475	29,053
2017	14,700	7,554	7,410	29,664
2018	15,141	8,077	7,787	31,005
2019	14,815	8,046	8,361	31,222
2020	11,822	6,109	5,967	23,898
Q1 2021	1,821	1,617	1,521	4,959

Hybrid 457 Plan – Contributions and Incoming Rollovers

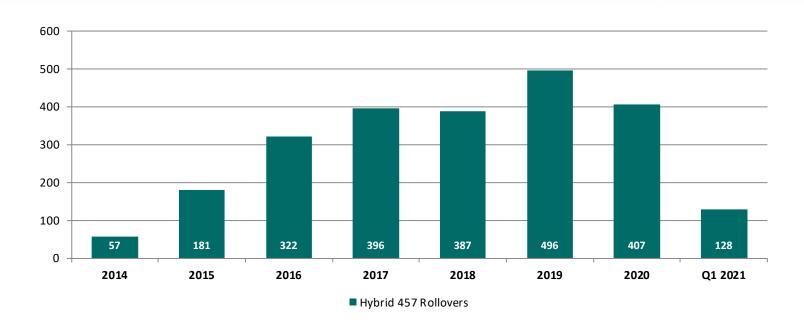




Period	457 Contributions	457 Rollovers	Total
2014	\$571.04	\$1,078.49	\$1,649.53
2015	\$4,590.00	\$2,876.02	\$7,466.02
2016	\$12,202.01	\$4,872.44	\$17,074.45
2017	\$31,295.56	\$8,042.46	\$39,338.02
2018	\$42,088.69	\$6,264.32	\$48,353.01
2019	\$56,472.59	\$9,305.69	\$65,778.28
2020	\$87,080.69	\$7,757.06	\$94,837.75
Q1 2021	\$24,936.64	\$2,768.33	\$27,704.96

Hybrid 457 Plan – Incoming Rollovers – Counts



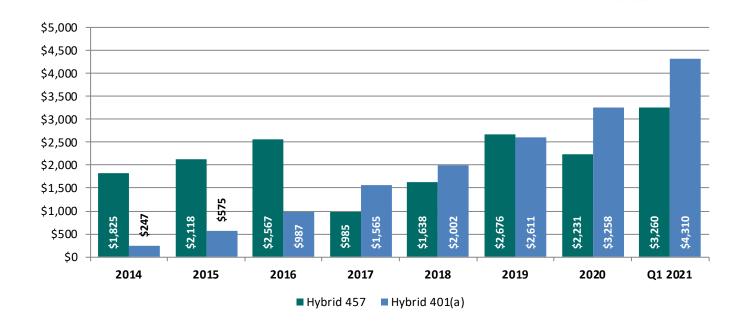


Period	Hybrid 457 Rollovers
2014	57
2015	181
2016	322
2017	396
2018	387
2019	496
2020	407
Q1 2021	128

Hybrid 401(a) & 457 Plans – Participant Average Account Balance



Note: Beneficiary Plans Included; Forfeiture Accounts Excluded Starting 2015

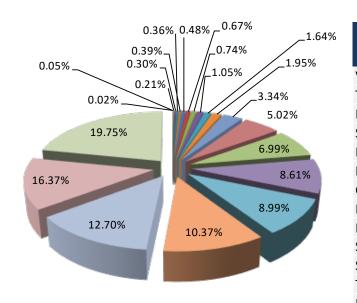


Period	Hybrid 457	Hybrid 401(a)
2014	\$1,825	\$247
2015	\$2,118	\$575
2016	\$2,567	\$987
2017	\$985	\$1,565
2018	\$1,638	\$2,002
2019	\$2,676	\$2,611
2020	\$2,231	\$3,258
Q1 2021	\$3,260	\$4,310

Hybrid 401(a) Plan – Participant Use of Funds

Note: Includes Beneficiary Plan





VRS Investment Portfolio
 Inflation-Protected Bond Fund
 Bond Fund
 Global Real Estate Fund
 International Stock Fund
 Stock Fund
 Retirement Portfolio
 Target Date 2030 Portfolio

■ Target Date 2040 Portfolio

■ Target Date 2050 Portfolio

■ Target Date 2055 Portfolio

High-Yield Bond Fund
Money Market Fund
Small/Mid-Cap Stock Fund
Target Date 2065 Portfolio
Target Date 2025 Portfolio
Target Date 2035 Portfolio
Target Date 2045 Portfolio
Target Date 2045 Portfolio
Target Date 2060 Portfolio

■ TD Ameritrade

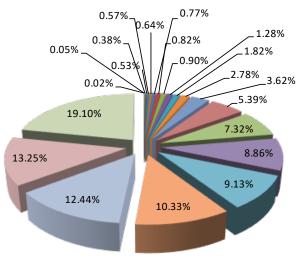
■ Stable Value Fund

Fund Name	Participant Count 12/31/2020	Participant Count 3/31/2021	% of Participants 3/31/2021	% Change
VRS Investment Portfolio	36	40	0.02%	11.11%
TD Ameritrade	77	98	0.05%	27.27%
Inflation-Protected Bond Fund	390	410	0.21%	5.13%
Stable Value Fund	587	581	0.30%	-1.02%
Bond Fund	676	692	0.36%	2.37%
High-Yield Bond Fund	746	755	0.39%	1.21%
Global Real Estate Fund	887	926	0.48%	4.40%
Money Market Fund	1,271	1,280	0.67%	0.71%
International Stock Fund	1,319	1,419	0.74%	7.58%
Small/Mid-Cap Stock Fund	1,851	2,010	1.05%	8.59%
Stock Fund	2,907	3,147	1.64%	8.26%
Target Date 2065 Portfolio	3,186	3,732	1.95%	17.14%
Retirement Portfolio	6,425	6,402	3.34%	-0.36%
Target Date 2025 Portfolio	9,479	9,620	5.02%	1.49%
Target Date 2030 Portfolio	13,149	13,386	6.99%	1.80%
Target Date 2035 Portfolio	16,181	16,491	8.61%	1.92%
Target Date 2040 Portfolio	16,906	17,220	8.99%	1.86%
Target Date 2045 Portfolio	19,522	19,869	10.37%	1.78%
Target Date 2050 Portfolio	23,962	24,329	12.70%	1.53%
Target Date 2060 Portfolio	30,520	31,367	16.37%	2.78%
Target Date 2055 Portfolio	37,399	37,841	19.75%	1.18%

Hybrid 457 Plan – Participant Use of Funds

Note: Includes Beneficiary Plan





- VRS Investment Portfolio
 Inflation-Protected Bond Fund
 Stable Value Fund
- High-Yield Bond Fund
- Global Real Estate Fund ■ Small/Mid-Cap Stock Fund
- Retirement Portfolio
- Target Date 2030 Portfolio
- Target Date 2040 Portfolio
- Target Date 2050 Portfolio
- Target Date 2055 Portfolio

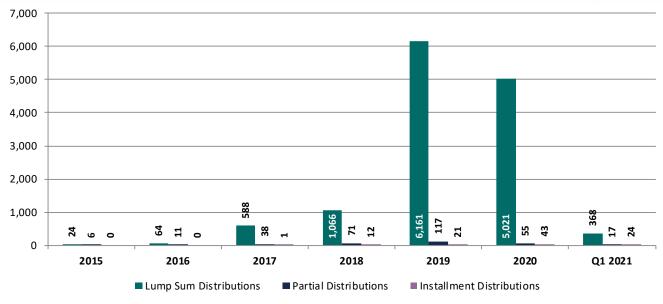
10.33%
TD AmeritradeMoney Market FundBond FundTarget Date 2065 Portfolio
■ International Stock Fund ■ Stock Fund
■ Target Date 2025 Portfolio ■ Target Date 2035 Portfolio ■ Target Date 2045 Portfolio ■ Target Date 2060 Portfolio

Fund Name	Participant Count 12/31/2020	Participant Count 3/31/2021	% of Participants 3/31/2021	% Change
VRS Investment Portfolio	23	25	0.02%	8.70%
TD Ameritrade	49	60	0.05%	22.45%
Inflation-Protected Bond Fund	451	479	0.38%	6.21%
Money Market Fund	663	668	0.53%	0.75%
Stable Value Fund	704	720	0.57%	2.27%
Bond Fund	785	812	0.64%	3.44%
High-Yield Bond Fund	944	975	0.77%	3.28%
Target Date 2065 Portfolio	948	1,039	0.82%	9.60%
Global Real Estate Fund	1,075	1,135	0.90%	5.58%
International Stock Fund	1,501	1,613	1.28%	7.46%
Small/Mid-Cap Stock Fund	2,097	2,299	1.82%	9.63%
Stock Fund	3,215	3,503	2.78%	8.96%
Retirement Portfolio	4,590	4,570	3.62%	-0.44%
Target Date 2025 Portfolio	6,754	6,798	5.39%	0.65%
Target Date 2030 Portfolio	9,155	9,237	7.32%	0.90%
Target Date 2035 Portfolio	11,080	11,176	8.86%	0.87%
Target Date 2040 Portfolio	11,429	11,514	9.13%	0.74%
Target Date 2045 Portfolio	12,921	13,031	10.33%	0.85%
Target Date 2050 Portfolio	15,605	15,701	12.44%	0.62%
Target Date 2060 Portfolio	16,416	16,714	13.25%	1.82%
Target Date 2055 Portfolio	23,997	24,095	19.10%	0.41%

Hybrid 457 Plan – Distributions by Type







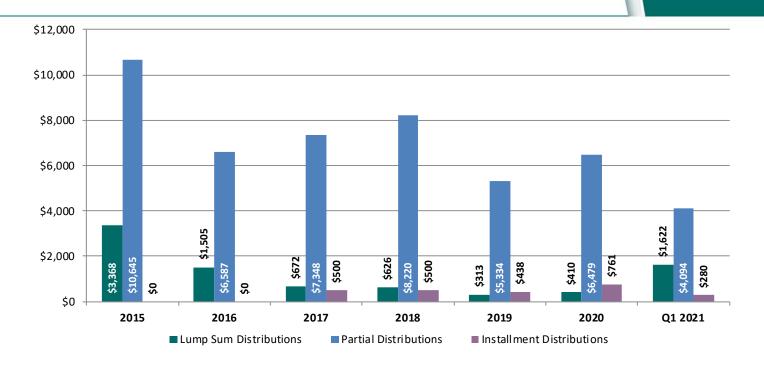
Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2015	24	6	0
2016	64	11	0
2017	588	38	1
2018	1,066	71	12
2019	6,161	117	21
2020	5,021	55	43
Q1 2021	368	17	24

Note: Data not available for 2014. Tracking started in 2015. Small Balance payouts started in Q2 2019.

Hybrid 457 Plan – Average Distribution Amount



Note: Rollover Distributions Excluded and Reported on Subsequent Pages

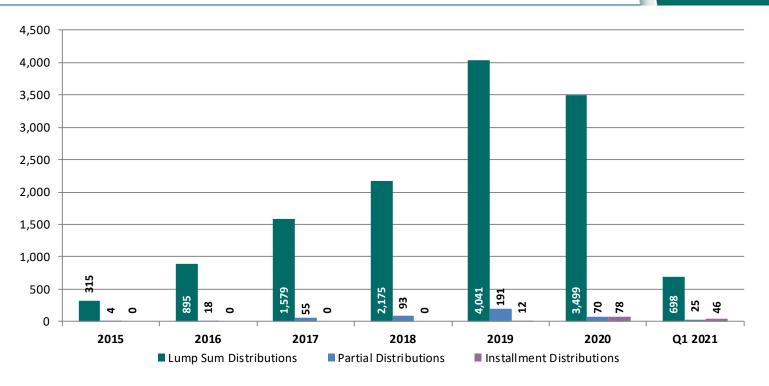


Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2015	\$3,368	\$10,645	\$0
2016	\$1,505	\$6,587	\$0
2017	\$672	\$7,348	\$500
2018	\$626	\$8,220	\$500
2019	\$313	\$5,334	\$438
2020	\$410	\$6,479	\$761
Q1 2021	\$1,622	\$4,094	\$280

Hybrid 401(a) Plan – Distributions by Type



Note: Rollover Distributions Excluded and Reported on Subsequent Pages

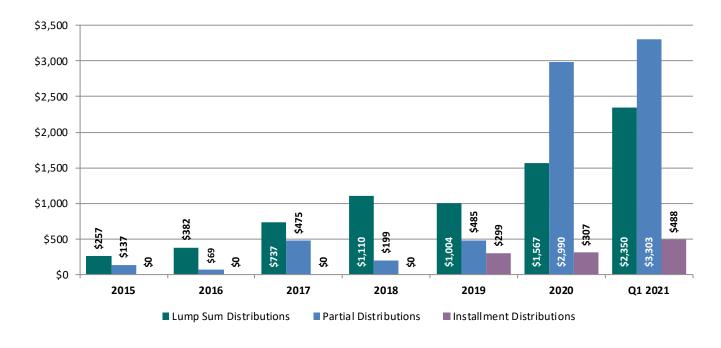


Period	Lump Sum Distributions	Partial Distributions	Installment Distributions
2015	315	4	0
2016	895	18	0
2017	1,579	55	0
2018	2,175	93	0
2019	4,041	191	12
2020	3,499	70	78
Q1 2021	698	25	46

Hybrid 401(a) Plan – Average Distribution **Amount**

Note: Rollover Distributions Excluded and Reported on Subsequent Pages

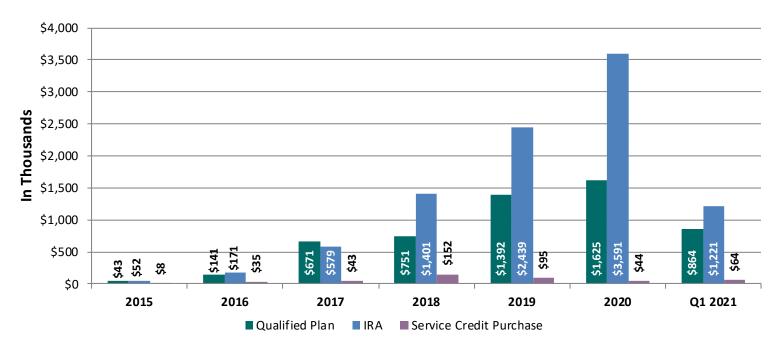




Period	Lump Sum Distributions	Partial Distributions	Installment Distributions	
2015	\$257	\$137	\$0	
2016	\$382	\$69	\$0	
2017	\$737	\$475	\$0	
2018	\$1,110	\$199	\$0	
2019	\$1,004	\$485	\$299	
2020	\$1,567	\$2,990	\$307	
Q1 2021	\$2,350	\$3,303	\$488	

Hybrid 401(a) & 457 Plans – Rollover Distribution Destinations – Total Amounts

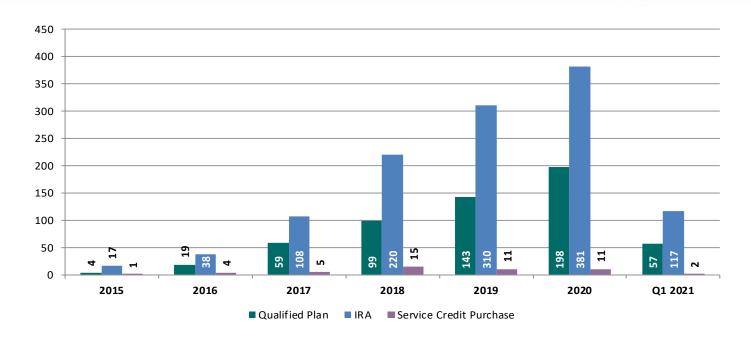




Period	Qualified Plan	IRA	Service Credit Purchase	Total
2015	\$43	\$52	\$8	\$103
2016	\$141	\$171	\$35	\$347
2017	\$671	\$579	\$43	\$1,293
2018	\$751	\$1,401	\$152	\$2,305
2019	\$1,392	\$2,439	\$95	\$3,926
2020	\$1,625	\$3,591	\$44	\$5,260
Q1 2021	\$864	\$1,221	\$64	\$2,149

Hybrid 457 Plan – Rollover Distribution Destinations





Period	Qualified Plan	IRA	Service Credit Purchase	Total Rollover Distributions
2015	4	17	1	22
2016	19	38	4	61
2017	59	108	5	172
2018	99	220	15	334
2019	143	310	11	464
2020	198	381	11	590
Q1 2021	57	117	2	176

Hybrid 457 Plan – Rollover Distribution Average Amounts

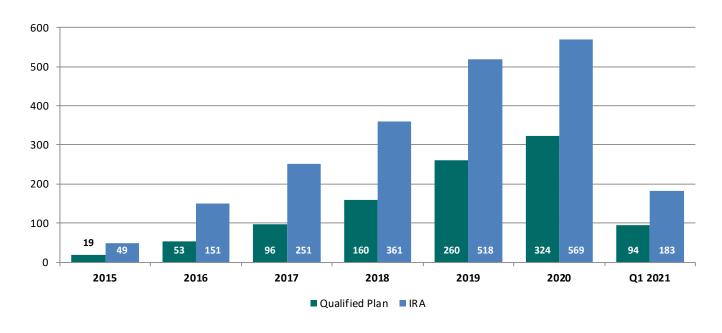




Period	Qualified Plan	IRA	Service Credit Purchase	Average Rollover Distribution
2015	\$8,769	\$1,867	\$7,576	\$3,381
2016	\$5,461	\$1,981	\$8,831	\$3,514
2017	\$9,669	\$2,815	\$8,581	\$5,334
2018	\$4,732	\$3,298	\$10,149	\$4,031
2019	\$4,862	\$3,429	\$8,603	\$3,993
2020	\$3,330	\$3,804	\$3,712	\$3,643
Q1 2021	\$8,193	\$4,216	\$31,941	\$5,819

Hybrid 401(a) Plan – Rollover Distribution Destinations



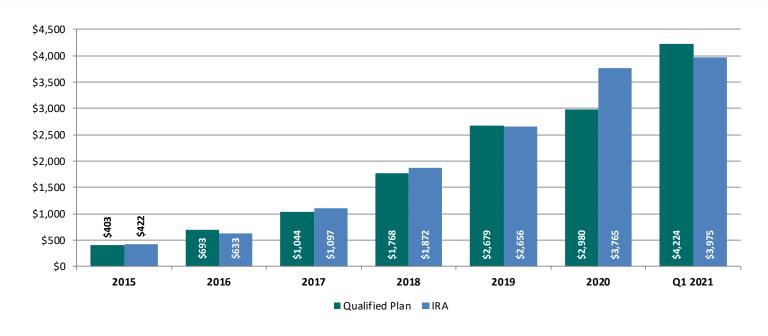


Period	Qualified Plan	IRA	Total Rollover Distributions*
2015	19	49	68
2016	53	151	204
2017	96	251	347
2018	160	361	521
2019	260	518	778
2020	324	569	893
Q1 2021	94	183	277

^{*} Service Credit Purchases are not allowed from the Hybrid 401 plan.

Hybrid 401(a) Plan – Rollover Distribution Average Amounts





Period	Qualified Plan	IRA	Average Rollover Distribution*
2015	\$403	\$422	\$416
2016	\$693	\$633	\$648
2017	\$1,044	\$1,097	\$1,083
2018	\$1,768	\$1,872	\$1,840
2019	\$2,679	\$2,656	\$2,664
2020	\$2,980	\$3,765	\$3,480
Q1 2021	\$4,224	\$3,975	\$4,060

^{*} Service Credit Purchases are not allowed from the Hybrid 401 plan.

VRS Defined Contribution Plans

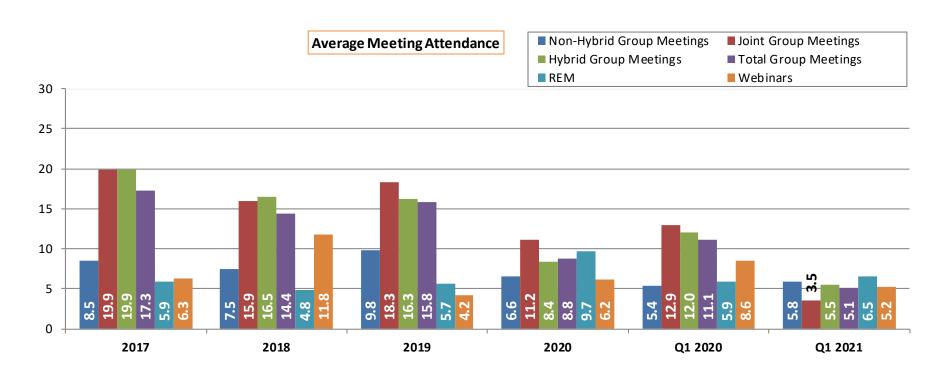


Field Education Services

Note: All data is as of 3/31/2021 unless otherwise stated.

Virginia Service Center – 2021 Activity





	20	017	20	18	20	19	20)20	01-2	020	01-	2021
Туре	Number of Meetings	Attendance										
Non-Hybrid Group Meetings	480	4,087	396	2,968	409	3,998	356	2,346	76	407	123	718
Joint Group Meetings	976	19,463	972	15,503	877	16,007	400	4,476	200	2,582	81	284
Hybrid Group Meetings	623	12,424	552	9,085	599	9,739	360	3,015	80	962	83	453
Total Group Meetings	2,079	35,974	1,920	27,556	1,885	29,744	1,116	9,837	356	3,951	287	1,455
REM*	252	1,487	235	1,135	185	1,049	238	2,298	16	94	77	502
Webinars	53	332	54	638	81	344	495	3,078	9	77	274	1,436

* Includes DC and Hybrid Regular Education Meetings

Field Activity 2014 – 2021



Individual Counseling Sessions/Office Activity						
Period	Number of Individual Virginia Service Center Counseling Sessions Calls Handled		Virginia Service Center Calls Handled	Virginia Service Center Walk-ins		
Q1 2021	Non-Hybrid Hybrid	1,024 975	622	0*		
2020	Non-Hybrid Hybrid	4,215 2,821	2,147	45*		
2019	Non-Hybrid Hybrid	4,601 3,410	2,042	221		
2018	Non-Hybrid Hybrid	5,248 3,070	1,734	151		
2017	Non-Hybrid Hybrid	5,947 3,125	1,552	201		
2016	Non-Hybrid Hybrid	5,720 2,639	1,693	251		
2015	Non-Hybrid Hybrid	5,483 1,480	2,390	177		
2014	Non-Hybrid Hybrid	5,619 202	1,733	141		

^{*} Virginia Service Center closed to participants for Walk-ins on March 23, 2020 due to the COVID-19 pandemic. Reopen TBD.

Survey Highlights – Q1 2021



Audience

- COV 457 Presentations (123 group meetings)
- Hybrid Presentations (83 group meetings)
- Joint Group Presentations (81 group meetings)
- Individual Meetings (1,024 Non-Hybrid, 975 Hybrid)
- Survey: 511 Respondents (288 Non-Hybrid, 223 Hybrid)

Responses — Meetings

- 93% or more strongly agreed or agreed: presenter was professional and prepared (98.6%), clearly explained concepts (98.2%), kept employees engaged (93.6%), and met employee's expectations (96.3%)
- 94% or more strongly agreed or agreed: seminar provided a clear understanding of the content (96.8%), was of value (97.3%), was recommendable to a co-worker (96.3%), and met their expectations (94.5%)

Responses – Individual Consultations

- 96% or more of participants who met individually with reps strongly agreed or agreed: presenter was professional (97.3%), prepared (97.3%), knowledgeable (96.9%), allowed ample time (96.9%), and met their overall expectations (96.9%)
- 95% or more of participants who met individually with reps strongly agreed or agreed: their concerns were addressed (95.9%), the presenter provided value (96.6%), they would recommend to a co-worker (96.6%), and the personalized consultation met their expectations (96.6%)

Survey Highlights – Q4 2020



Action Taken as result of:	Mee	etings	Individual Consultations		
	Hybrid	Non-Hybrid	Hybrid	Non-Hybrid	
Enrolled in the retirement program	4.49%	0.77%	9.70%	1.90%	
Began making voluntary contributions	0.00%	0.00%	0.00%	0.00%	
Created an online account	14.61%	0.77%	5.22%	4.43%	
Increased contributions	15.73%	10.00%	28.36%	21.52%	
Reviewed investment options	32.58%	20.77%	38.06%	31.01%	
Reallocated account	3.37%	6.15%	5.22%	18.99%	
Rolled in assets	4.49%	0.00%	5.22%	4.43%	
Signed up for standard catch-up	1.12%	1.54%	2.24%	2.53%	
Signed up for e-Delivery	0.00%	0.00%	0.00%	0.00%	
Updated beneficiary information	11.24%	4.62%	24.63%	13.92%	
Took no action	30.34%	48.46%	18.66%	25.32%	
Other	26.97%	23.85%	20.15%	18.99%	

^{*&}quot;Other" includes inquiries such as: Indicative Data or Disbursements.

Note: Survey totals may equal less than 100% because respondents may not complete all sections of the survey. Survey totals

VRS Defined Contribution Plans



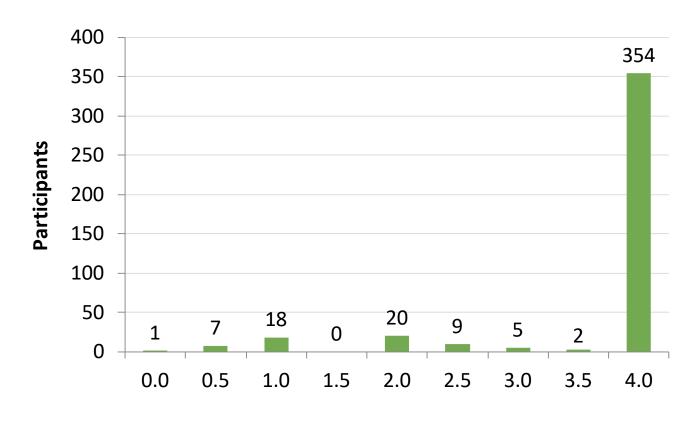
Online Resources

Note: All data is as of 3/31/2021 unless otherwise stated.

Hybrid Voluntary Preset

Since Inception: June 2018





Hybrid Voluntary Deferral %

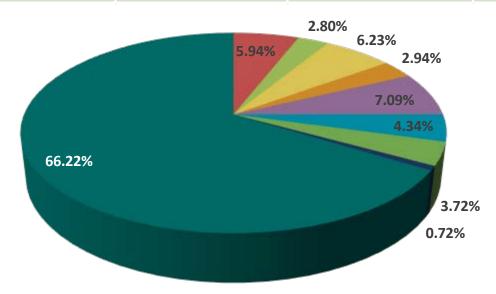
Members Who Saw the Splash Screen & Subsequent Action



Since Launch of Latest Campaign: December 17, 2019

Hybrid members who were not maxing out their contributions at 4% and saw the splash screen

		Button Options:										
Action	Save 4% Now	Choose an amount to save	Wait to Save									
Increased Contributions	940	477	457									
Decreased Contributions	4	38	135									
Remained the Same	13	1	7									





SmartStep - COV Plan

- Launched November 2018
 - 1,580 Participants have signed up
 - Average Pre-Tax SmartStep Election \$60.36
 - Average Roth SmartStep Election \$18.24



SmartStep - Hybrid Plan

- Launched October 2017
 - 2,523 Members have signed up
 - Average SmartStep Election 1.08%
 - 51.37% of members elected 0.5%
 - 26.79% of members elected 1.0%

VRS Defined Contribution Plans ORPHE Quarterly Review



Reports for Quarter ending March 31, 2021

These reports are prepared by the providers and presented by DC Plans Administration.

- Financial Transactions Report TIAA
- Participant Use of Funds TIAA
 - All Funds
 - Selected Funds

ORPHE – TIAA Financial Transactions

Prepared by TIAA as of March 31, 2021 (Page 1 of 2)



		12/31/2020) Pı	rior Closing Ba	alances					Incoming Rollovers/	Trans	fer to		
Account Name	GRA	RA		RC	Other**		Grand Total	C	Contributions		Alternat	e Carrie	r N	et Transfers
BlackRock Equity Index Fund J	\$ -	\$ -	\$	27,811,342.37	\$ -	\$	27,811,342.37	\$	861,969.73	\$ 210.60		-	\$	673,877.88
BlackRock LifePath Index 20250	\$ -	\$ -	\$	19,974,573.63	\$ -	\$	19,974,573.63	\$	356,230.16	\$ 192,994.64	\$	_	\$	28,991.16
BlackRock LifePath Index 2030O	\$ -	\$ -	\$	26,777,167.55	\$ -	\$	26,777,167.55	\$	499,213.15	\$ 274.80	\$	-	\$	(67,466.28
BlackRock LifePath Index 20350	\$ -	\$ -	\$	20,764,046.36	\$ -	\$	20,764,046.36	\$	482,921.23	\$ -	\$	-	\$	(172,303.79
BlackRock LifePath Index 20400	\$ -	\$ -	\$	22,679,393.26	\$ -	\$	22,679,393.26	\$	454,532.36	\$ 3,553.59	\$	-	\$	(125,115.88)
BlackRock LifePath Index 20450	\$ -	\$ -	\$	18,965,140.40	\$ -	\$	18,965,140.40	\$	509,692.14	\$ 23,507.93	\$	-	\$	(9,669.82
BlackRock LifePath Index 2050O	\$ -	\$ -	\$	10,436,302.19	\$ -	\$	10,436,302.19	\$	427,928.23	\$ -	\$	-	\$	1,011.57
BlackRock LifePath Index 20550	\$ -	\$ -	\$	4,570,293.55	\$ -	\$	4,570,293.55	\$	257,663.82	\$ -	\$	-	\$	7,057.96
BlackRock LifePath Index 2060O	\$ -	\$ -	\$	842,287.79	\$ -	\$	842,287.79	\$	80,486.09	\$ -	\$	-	\$	-
BlackRock LifePath Index 20650	\$ -	\$ -	\$	454,789.69	\$ -	\$	454,789.69	\$	27,161.70	\$ -	\$	-	\$	267,039.33
BlackRock LifePath Index Ret O	\$ -	\$ -	\$	28,507,691.51	\$ -	\$	28,507,691.51	\$	386,754.07	\$ 166,700.62	\$	-	\$	(280,250.46)
BlackRock MS AC IMI Idx NoLe M	\$ -	\$ -	\$	37,649,979.53	\$ -	\$	37,649,979.53	\$	1,515,233.09	\$ 6,320.69	\$	-	\$	(313,410.03)
BlackRock MSCIACWIexUSIMIIM	\$ -	\$ -	\$	16,617,848.09	\$ -	\$	16,617,848.09	\$	235,927.68	\$ 6.85	\$	-	\$	(224,166.06
BlackRock Russell 2500 Index M	\$ -	\$ -	\$	8,050,184.83	\$ -	\$	8,050,184.83	\$	66,467.14	\$ 27.41	\$	-	\$	82,654.52
BlackRock Sh Term Investment W	\$ -	\$ -	\$	5,991,279.65	\$ 26,594.80	\$	6,017,874.45	\$	141,770.46	\$ -	\$	-	\$	(172,789.20)
BlackRock US Debt Ind M	\$ -	\$ -	\$	8,595,650.46	\$ -	\$	8,595,650.46	\$	307,287.35	\$ 2,698.94	\$	-	\$	233,257.37
BlackRock US Tre Inf Pro Sec M	\$ -	\$ -	\$	5,008,526.25	\$ -	\$	5,008,526.25	\$	170,292.69	\$ 1,079.58	\$	-	\$	(338,236.04)
CREF Bond Market R3	\$ 28,357,981.55	\$ 1,543,319.54	\$	-	\$ -	\$	29,901,301.09	\$	-	\$ -	\$	-	\$	463,563.24
CREF Equity Index R3	\$ 78,419,431.91	\$ 2,643,842.52	\$	-	\$ -	\$	81,063,274.43	\$	-	\$ -	\$	-	\$	(25,575.43)
CREF Global Equities R3	\$ 49,559,715.30	\$ 1,901,047.24	\$	-	\$ -	\$	51,460,762.54	\$	-	\$ -	\$	-	\$	103,977.51
CREF Inflation-Linked Bond R3	\$ 14,385,745.47	\$ 1,228,905.07	\$	-	\$ -	\$	15,614,650.54	\$	-	\$ -	\$	-	\$	152,529.22
CREF Money Market R3	\$ 13,243,768.49	\$ 1,229,394.35	\$	-	\$ 11,109.05	\$	14,484,271.89	\$	-	\$ -	\$	-	\$	(119,064.68
CREF Stock R3	\$ 194,890,601.01	\$ 28,441,811.46	\$	-	\$ -	\$	223,332,412.47	\$	-	\$ -	\$	-	\$	(1,132,479.54)
TIAA Real Estate	\$ 29,455,350.15	\$ 1,796,607.11	\$	7,387,584.64	\$ -	\$	38,639,541.90	\$	355,392.18	\$ 1,619.37	\$	-	\$	51,911.32
TIAA Traditional	\$ 166,408,675.27	\$ 35,524,247.84	\$	19,135,901.92	\$ 9,220,061.12	\$	230,288,886.15	\$	815,122.56	\$ 457.98	\$	-	\$	744,301.66
TIAA-CREF Self Directed Acct	\$ -	\$ -	\$	3,783,675.18	\$ -	\$	3,783,675.18	\$	-	\$ -	\$	-	\$	344,642.10
Total	\$ 574,721,269.15	\$ 74,309,175.13	\$	294,003,658.85	\$ 9,257,764.97	Ş	952,291,868.10	\$	7,952,045.83	\$ 399,453.00	\$	-	\$	174,287.63
CREF Growth R3	\$ 	\$ 1,615,915.80	•	-	\$ -	\$			-	\$ -	\$	-	\$	(161,387.54
CREF Social Choice R3	\$ 10,365,562.01		•	-	\$ -	\$			-	\$ -	\$	-	\$	(12,900.26
Total	\$ 31,072,509.40	\$ 1,782,824.19	\$	-	\$ -	Ş	\$ 32,855,333.59	\$	-	\$ -	\$	-	\$	(174,287.80)
Grand Total	\$ 605,793,778.55	\$ 76,091,999.32	\$	294,003,658.85	\$ 9,257,764.97	Ş	\$ 985,147,201.69	\$	7,952,045.83	\$ 399,453.00	\$	-	\$	(0.17)
** Other - represent balances in TPA and Interest Only products under the TIAA Traditional fund and Forfeiture/Revenue Credit Account														

***Other - represent balances in TPA and Interest Only products under the TIAA Traditional fund and Forfeiture/Revenue Credit Account balances in the CREF Money Market fund and BlackRock Sh Term Investment W funds

~~ Other Activity - represent Plan Servicing Credits of \$11,740.30 and

External Transfers of (\$191,1 Master Page # 141 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021

ORPHE – TIAA Financial Transactions

Prepared by TIAA as of March 31, 2021 (Page 2 of 2)



					Earnings	-	03/31/2021 Closing Balances					
Account Name	Distribution	Fees	Dividend	s Other Activity ~	Gains/Losse	es GRA	RA	RC	Other**	Gra	nd Total	
BlackRock Equity Index Fund J	\$ (40,506.31)	\$ (7,100.95) \$	- :	\$ (8,620.99) \$	1,772,016.87	\$ -	\$ -	\$ 31,063,189.20	-	\$ 31	1,063,189.20	
BlackRock LifePath Index 2025O	\$ (36,611.84)	\$ (4,337.02) \$	- :	\$ - \$	242,699.74	\$ -	\$ -	\$ 20,754,540.47	-	\$ 20	0,754,540.47	
BlackRock LifePath Index 2030O	\$ (342,528.21)	\$ (5,508.00) \$	-	\$ - \$	587,788.65	\$ -	\$ -	\$ 27,448,941.66	-	\$ 27	7,448,941.66	
BlackRock LifePath Index 2035O	\$ (15,859.59)	\$ (5,380.73) \$	-	\$ 8.93 \$	651,558.93	\$ -	\$ -	\$ 21,704,991.34	-	\$ 21	1,704,991.34	
BlackRock LifePath Index 20400	\$ (68,789.61)	\$ (6,081.03) \$	-	\$ (163,547.98) \$	907,414.62	\$ -	\$ -	\$ 23,681,359.33	-	\$ 23	3,681,359.33	
BlackRock LifePath Index 2045O	\$ (87,369.43)	\$ (6,812.62) \$	- :	\$ 7.27 \$	891,376.36	\$ -	\$ -	\$ 20,285,872.23	-	\$ 20	0,285,872.23	
BlackRock LifePath Index 2050O	\$ (18,052.70)	\$ (5,750.06) \$	- :	\$ - \$	530,655.39	\$ -	\$ -	\$ 11,372,094.62	-	\$ 11	1,372,094.62	
BlackRock LifePath Index 2055O	\$ (129,574.84)	\$ (3,867.97) \$	-	\$ - \$	234,460.23	\$ -	\$ -	\$ 4,936,032.75	-	\$	4,936,032.75	
BlackRock LifePath Index 2060O	\$ (6,031.05)	\$ (1,617.02) \$	-	\$ - \$	43,896.17	\$ -	\$ -	\$ 959,021.98	-	\$	959,021.98	
BlackRock LifePath Index 2065O	\$ (36,482.83)	\$ (320.95) \$	- :	\$ - \$	27,084.55	\$ -	\$ -	\$ 739,271.49	-	\$	739,271.49	
BlackRock LifePath Index Ret O	\$ (653,163.74)	\$ (5,885.80) \$	-	\$ 6.96 \$	99,248.61	ş -	\$ -	\$ 28,221,101.77	-	\$ 28	8,221,101.77	
BlackRock MS AC IMI Idx NoLe M	\$ (63,433.98)	\$ (11,150.45) \$	-	\$ 3.59 \$	1,984,861.58	ş -	\$ -	\$ 40,768,404.02	-	\$ 40	0,768,404.02	
BlackRock MSCIACWIexUSIMIIM	\$ (153,974.87)	\$ (6,414.75) \$	-	\$ 0.13 \$	625,265.44	\$ -	\$ -	\$ 17,094,492.51	-	\$ 17	7,094,492.51	
BlackRock Russell 2500 Index M	\$ (282,743.41)	\$ (1,016.96) \$		\$ - \$	858,839.00	\$ -	\$ -	\$ 8,774,412.53	-	\$ 8	8,774,412.53	
BlackRock Sh Term Investment W	\$ (51,545.43)	\$ (1,444.96) \$	2,574.53	\$ (1,119.24) \$	0.71	\$ -	\$ -	\$ 5,906,852.58	28,468.74	\$!	5,935,321.32	
BlackRock US Debt Ind M	\$ (18,074.31)	\$ (2,074.61) \$	-	\$ 3.46 \$	(301,579.69)	ş -	\$ -	\$ 8,817,168.97	-	\$ 8	8,817,168.97	
BlackRock US Tre Inf Pro Sec M	\$ (10,012.69)	\$ (1,143.98) \$	-	\$ (1,262.81) \$	(69,332.08)	\$ -	\$ -	\$ 4,759,910.92	-	\$	4,759,910.92	
CREF Bond Market R3	\$ (531,921.43)	\$ - \$	-	\$ - \$	(899,326.97)	\$ 27,350,216.99	\$ 1,583,398.94	\$ -	-	\$ 28	8,933,615.93	
CREF Equity Index R3	\$ (717,349.69)	\$ - \$	-	\$ (16,109.05) \$	5,096,962.04	\$ 82,595,874.13	\$ 2,805,328.17	\$ -	-	\$ 85	5,401,202.30	
CREF Global Equities R3	\$ (386,743.21)	\$ - \$	-	\$ - \$	1,717,249.77	\$ 50,895,701.63	\$ 1,999,544.98	\$ -	-	\$ 52	2,895,246.61	
CREF Inflation-Linked Bond R3	\$ (129,775.16)	\$ - \$	-	\$ - \$	(15,304.85)	\$ 14,372,731.36	\$ 1,249,368.39	\$ -	-	\$ 15	5,622,099.75	
CREF Money Market R3	\$ (153,958.32)	\$ - \$	-	\$ - \$	-	\$ 13,118,393.82	\$ 1,081,746.02	\$ -	11,109.05	\$ 14	4,211,248.89	
CREF Stock R3	\$ (2,631,424.87)	\$ - \$	-	\$ - 5	12,319,193.75	\$ 202,836,960.33	\$ 29,050,741.48	\$ -	-	\$ 233	1,887,701.81	
TIAA Real Estate	\$ (309,848.82)	\$ (2,272.64) \$	- :	\$ 4,036.53	863,012.15	\$ 29,849,003.95	\$ 1,797,788.27	\$ 7,956,599.77	-	\$ 39	9,603,391.99	
TIAA Traditional	\$ (2,312,071.00)	\$ (9,726.63) \$	-	\$ 7,189.53	2,147,326.99	\$ 167,016,374.19	\$ 35,562,938.47	\$ 20,056,510.50	9,045,664.08	\$ 233	1,681,487.24	
TIAA-CREF Self Directed Acct	\$ -	\$ - \$	-	\$ - \$	431,655.02	\$ -	\$ -	\$ 4,559,972.30	-	\$	4,559,972.30	
Total	\$ (9,187,847.34)	\$ (87,907.13) \$	2,574.53	\$ (179,403.67) \$	30,747,022.98	\$ 588,035,256.40	\$ 75,130,854.72	\$ 309,860,740.94	9,085,241.87	\$ 982	2,112,093.93	
CREF Growth R3	\$ (153,813.75)	ş - ş	-	ş - ş	352,488.86	\$ 20,719,311.92	\$ 1,640,838.84	\$ -	-	\$ 22	2,360,150.76	
CREF Social Choice R3	\$ (132,844.66)	\$ - \$	- :	\$ - \$	250,696.59	\$ 10,466,757.52	\$ 170,664.55	\$ -	-	\$ 10	0,637,422.07	
Total	\$ (286,658.41)	\$ - \$	- :	\$ - \$	603,185.45	\$ 31,186,069.44	\$ 1,811,503.39	\$ -	\$ -	\$ 32	2,997,572.83	
Grand Total	\$ (9.474.505.75)	\$ (87 907 13) \$	2 574 53	\$ (179.403.67) \$	31 350 208 43	\$ 610 221 325 8 <i>A</i>	\$ 76 942 358 11	\$ 309 860 740 94	\$ 9 085 241 87	\$ 1.015	5 109 666 76	

^{**} Other - represent balances in TPA and Interest Only products under the TIAA Traditional fund and Forfeiture/Revenue Credit Account balances in the CREF Money Market fund and BlackRock Sh Term Investment W funds

~~ Other Activity - represent PM aster Page # 142 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/2021 Servicing Credits of \$11,740.30 and [External Transfers of (\$191,143.97)]

ORPHE – TIAA Participant Use of Funds (All Funds)

Prepared by TIAA as of March 31, 2021 (Page 1 of 2)



VIRGINIA ORP
PARTICIPANT COUNT REPORT
AS OF MARCH 31, 2021
PLAN - 101850 & 500964
ALL LINES OF BUSINESS

FUND NAME	GRA CONTRACTS	INTEREST ONLY CONTRACTS	RA CONTRACTS	RETIREMENT CHOICE (84)	TPA CONTRACTS	RETIREMENT CHOICE TPA (84)	NUMBER OF Participants	Percentage of	Prior Quarter - 4TH QTR 2	7/1/2004	% Change from 7/1/04 to Current Quarter
BlackRock Equity Index Fund J	CONTINUOTO	CONTINUIO	THEODERMOTO	1295	11110011111010	(۷.)	1295	15.7%	1284	0	N/A
BlackRock LifePath Index 20250				361			361	4.4%	357	0	N/A
BlackRock LifePath Index 20300				445			445	5.4%	449	0	N/A
BlackRock LifePath Index 20350				463			463	5.6%	465	0	N/A
BlackRock LifePath Index 20400				488			488	5.9%	488	0	N/A
BlackRock LifePath Index 20450				519			519	6.3%	520	0	N/A
BlackRock LifePath Index 20500				404			404	4.9%	400	0	N/A
BlackRock LifePath Index 20550				267			267	3.2%	267	0	N/A
BlackRock LifePath Index 20600				104			104	1.3%	99	0	N/A
BlackRock LifePath Index 20650				25			25	0.3%	19	0	N/A
BlackRock LifePath Index Ret O				497			497	6.0%	504	0	N/A
BlackRock MS AC IMI Idx NoLe M				1767			1767	21.4%	1777	0	N/A
BlackRock MSCIACWlexUSIMIM				995			995	12.1%	992	0	N/A
BlackRock Russell 2500 Index M				205			205	2.5%	193	0	N/A
BlackRock Sh Term Investment W				422			422	5.1%	422	0	N/A
BlackRock US Debt Ind M				999			999	12.1%	1007	0	N/A
BlackRock US Tre Inf Pro Sec M				669			669	8.1%	672	0	N/A
CREF Bond Market R3	1681		97				1721	20.9%	1784	971	77.24%
CREF Equity Index R3	1869		81				1901	23.0%	1958	1,049	81.22%
CREF Global Equities R3	2037		93				2080	25.2%	2142	1,799	15.62%
CREF Growth R3	806		41				827	10.0%	853	2,038	-59.42%
CREF Inflation-Linked Bond R3	1169		67				1193	14.5%	1245	379	214.78%
CREF Money Market R3	1157		123				1213	14.7%	1298	793	52.96%
CREF Social Choice R3	424		16				432	5.2%	446	1,004	-56.97%
CREF Stock R3	3244		494				3427	41.5%	3761	3,677	-6.80%
TIAA Real Estate	2502		120	1427			2806	34.0%	4074	1,396	101.00%
TIAA Traditional	3905	31	814	1510	254	17	4615	55.9%	6574	3,589	28.59%
TIAA-CREF Self Directed Acct				37			37	0.4%	33	0	N/A
TOTAL INACTIVE PARTICIPANTS							5116	62.0%	5179	3,168	61.49%
TOTAL ACTIVE PARTICIPANTS							3133	38.0%	3109	2,988	4.85%
TOTAL PARTICIPANTS							8249	100.0%	8288	6,156	34.00z

ORPHE – TIAA Participant Use of Selected Funds

DCP
Virginia Retirement System

Prepared by TIAA as of March 31, 2021 (Page 2 of 2)

VIRGINIA ORP
PARTICIPANT COUNT REPORT
AS OF MARCH 31, 2021
PLAN - 101850 & 500964
ALL LINES OF BUSINESS

FUND NAME	GRA CONTRACTS	INTEREST ONLY CONTRACTS	RA CONTRACTS	RETIREMENT CHOICE (84)	TPA CONTRACTS	RETIREMENT CHOICE TPA (84)	NUMBER OF PARTICIPANTS	Percentage of	Prior Quarter - 4TH QTR 2020	7/1/2004	% Change from 7/1/04 to Current Quarter
BlackRock Equity Index Fund J	CONTINCTO	CONTINCTO	TIA GOITTIACTO	1295	TI A COMMINCTO	CHOICE IT A (01)	1295	15.7%	1284	0	N/A
BlackRock LifePath Index 20250				361			361	4.4%	357	0	N/A
BlackRock LifePath Index 20300				445			445	5.4%	449	0	N/A
BlackRock LifePath Index 20350				463			463	5.6%	465	0	N/A
BlackRock LifePath Index 20400				488			488	5.9%	488	0	N/A
BlackRock LifePath Index 20450				519			519	6.3%	520	0	N/A
BlackRock LifePath Index 20500				404			404	4.9%	400	0	N/A
BlackRock LifePath Index 20550				267			267	3.2%	267	0	N/A
BlackRock LifePath Index 2000				104			104	1.3%	99	0	N/A
BlackRock LifePath Index 20650				25			25	0.3%	19	0	N/A
BlackRock LifePath Index Ret O				497			497	6.0%	504	0	N/A
BlackRock MS AC IMI Idx NoLe M				1767			1767	21,4%	1777	0	N/A
BlackRock MSCIACWIEXUSIMIIM				995			995	12.1%	992	0	N/A
BlackRock Russell 2500 Index M				205				2.5%	193	0	N/A
BlackRock Russell 2500 Index W							205		422	0	N/A
BlackRock Sn Term Investment W				422			422	5.1%	1007	0	N/A
				999			999			0	NrA NrA
BlackRock US Tre Inf Pro Sec M	4504		0.7	669			669	8.1%	672	971	
CREF Bond Market R3	1681		97				1721	20.9%	1784		77.24%
CREF Equity Index R3	1869		81				1901	23.0%	1958	1,049	81.22%
CREF Global Equities R3	2037		93				2080	25.2%	2142	1,799	15.62%
CREF Inflation-Linked Bond R3	1169		67				1193	14.5%	1245	379	214.78%
CREF Money Market R3	1157		123				1213	14.7%	1298	793	52.96%
CREF Stock R3	3244		494				3427	41.5%	3761	3,677	-6.80%
TIAA Real Estate	2502		120	1427			2806	34.0%	4074	1,396	101.00%
TIAA Traditional	3905	31	814	1510	254	17	4615	55.9%	6574	3,589	28.59%
TIAA-CREF Self Directed Acct				37			37	0.4%	33	0	NIA
TOTAL INACTIVE PARTICIPANTS							5116	62.0%	5179	3,168	61.49%
TOTAL ACTIVE PARTICIPANTS							3133	38.0%	3109	2,988	4.85%
TOTAL PARTICIPANTS							8249	100.0%	8288	6,156	34.00%

VRS Defined Contribution Plans End of Quarterly Review





Master Page # 145 of 189 - Defined Contribution Plans Advisory Committee (DCPAC) Meeting 6/24/202



VRS Defined Contribution Plans Record Keeper 2020 Report



Service Team

Senior Leadership



Lynne Smith SVP, Chief Client Experience & Technology Officer



Sheri Gilchrist SVP, Chief Marketing Officer



Les McCollum

Managing Vice

President, Chief
Information

Security Officer

Employer Support



Mireya Lacey Relationship Manager, Employer Support Team



Victoria Curington Coordinator, Employer Support Team



Ashley Velazquez
Coordinator,
Employer Support
Team

Plan Administration



Maria PrunerDirector, State Plan
Service Team



Alev Cakmak *Manager, State Plan Service Team*



Severin Aiken *Operations Supervisor*

Senior Leadership Continued



Joe Teague
Managing Vice
President, Field
Sales & Relationship
Management

Relationship Management



Angela Greenleaf Vice President, Key Client Relations



Kathleen Wilson Director, Key Client Relations

Educational Support



Steve Scott *Plan Manager, Field Sales*



Dawn CullenSr. Education
Manager, Marketing
& Communications

Project Management & Reporting



Bob JacobyRelationship
Manager, Key
Client Relations

eBusiness Delivery



Barbara Oppenheim Vice President

Agenda

DAY 1: APRIL 21 1:00 p.m. – 4:00 p.m. ET



By the Numbers



Overall Relationship and 2020 Accomplishments

- Performance Standards
- SS&C Partnership
- Employer Support
- Plan Conversions and Adoptions
- Operational Highlights: State Plan Services Team (SPST)
- Call Center Quality Assurance Monitoring

DAY 2: APRIL 28 1:00 p.m. – 4:00 p.m. ET



Overall Relationship and 2020 Accomplishments (Continued)

- Branding
- Technology
- Defined Contribution Plans Retirement Specialists Activity
- Communications

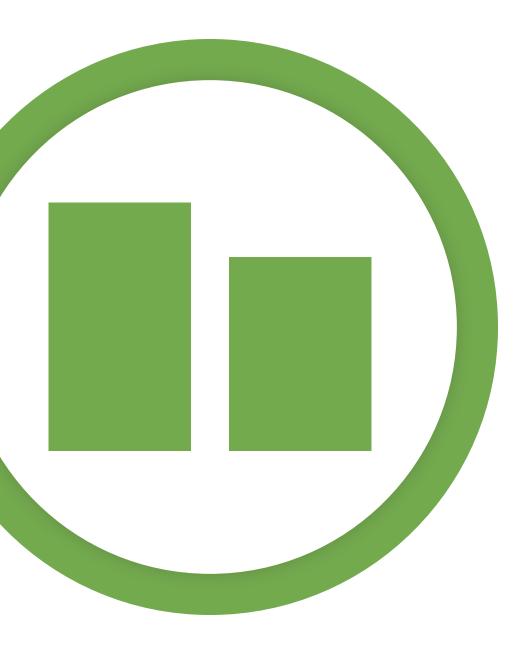


Future Initiatives

- Communications
- Technology
- SPST
- Defined Contribution Plans Retirement Specialists
- Enhanced Rollover In Process

By the Numbers

For the Year Ending December 31, 2020

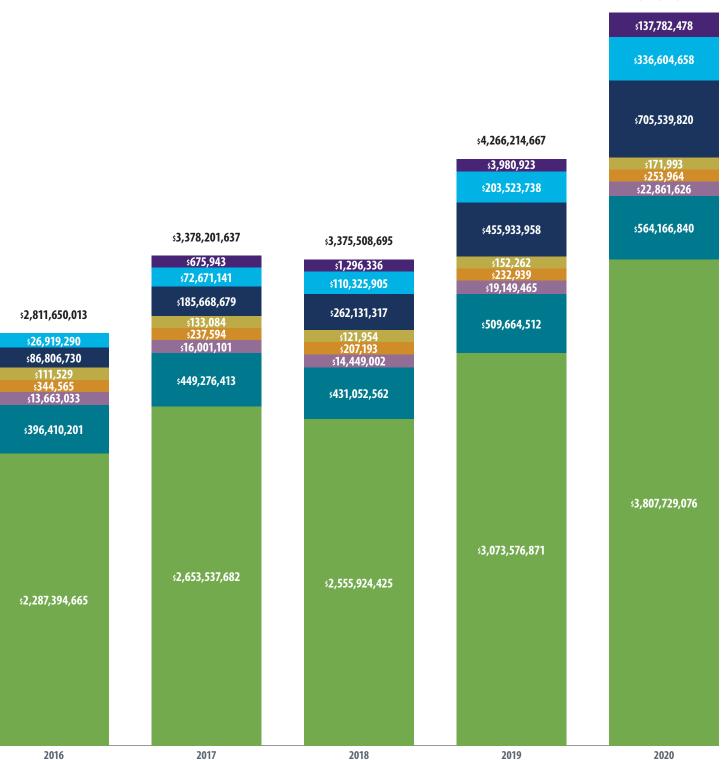


COV 457

 VCM 401
 ORPPA
 ORPSS
 VA SUPP
 HYBRID 401
 HYBRID 457
 ORPHE

ASSETS*

\$5,575,110,453

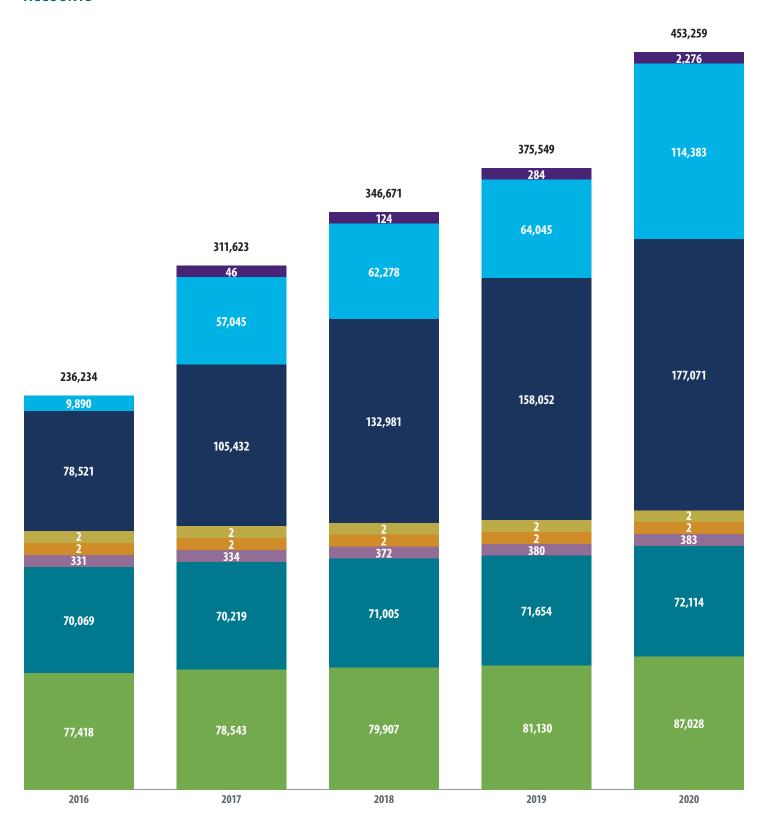


^{*} Includes beneficiary plans, forfeiture accounts and reserve account.

Data generated by ICMA-RC and may differ from results reported by VRS.

● COV 457 ● VCM 401 ● ORPPA ● ORPSS ● VA SUPP ● HYBRID 401 ● HYBRID 457 ● ORPHE

ACCOUNTS*,**



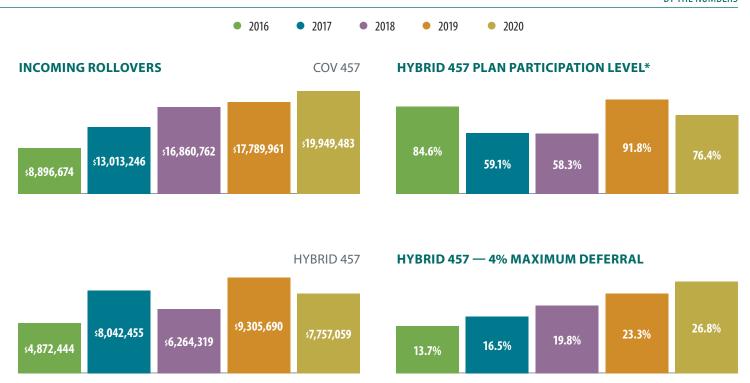
* With balances; includes active and terminated.

** Includes beneficiary plans, forfeiture accounts and reserve account.

Data generated by ICMA-RC and may differ from results reported by VRS.



Data generated by ICMA-RC and may differ from results reported by VRS.

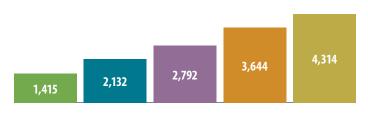


HYBRID PLAN VOLUNTARY DEFERRALS

8,960 13,804 19,703 27,452 34,194 4% 211 3.5% 222 190 638 547 3% 208 443 630 886 699 2.5% 586 1,348 1,308 2% 362 764 1,119 906 1,269 1.5% 513 501 578 1,258 1,104 1% 380 776 1,131 19,123 16,189 32,252 24,074 40,236 0.5% 43,976 52,813 0% 10,065 34,534 51,365 13,489 31,959

HYBRID PLAN — ACTIVE PARTICIPANTS IN COV 457









HYBRID 457/COV 457 PARTICIPATION RATE



*2016 & 2019 figures increased due to auto-escalation deferrals captured during October — December opt-out window.

Data generated by ICMA-RC and may differ from results reported by VRS.



Data generated by ICMA-RC and may differ from results reported by VRS.





^{*} Does not include 48 Purchase of Service Credits (PSC) Rollouts (\$560,965).

^{**} Does not include 11 Purchase of Service Credits (PSC) Rollouts (\$40,831). Data generated by ICMA-RC and may differ from results reported by VRS.

2017201820192020

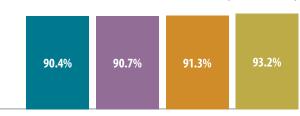
RETENTION: COV 457

On 12/31/2019:

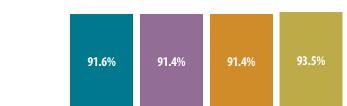
27,464 COV 457 account balances were greater than \$1,000 and the participants were eligible to take a distribution.

The total sum of the eligible participants' average account balances totaled \$1,284,289,555.

COV 457 RETENTION RATE (ACCOUNTS)







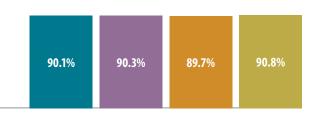
RETENTION: HYBRID 401 AND 457 PLANS

On 12/31/2019:

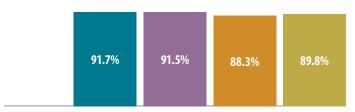
29,439 Hybrid account balances were greater than \$1,000 and the participants were eligible to take a distribution.

The total sum of the eligible participants' average account balances totaled \$111,088,683.

HYBRID 401 & 457 RETENTION RATE (ACCOUNTS)



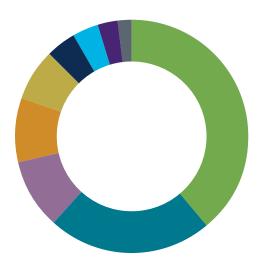
HYBRID 401 & 457 RETENTION RATE (\$)



2016 2017 2018 2019 2020

CALL CENTER ACTIVITY

	CALLS TO 800#	79,131	85,968	81,385	94,630	90,931
	TAKEN BY PARTICIPANT SERVICES ASSOCIATES	46,383	52,026	54,406	61,384	63,953
n.	DURING BUSINESS HOURS (8:30 A.M. TO 9:00 P.M.)	17,754	20,378	20,920	24,686	20,211
VRU	AFTER HOURS (9:00 P.M. TO 8:30 A.M.)	11,994	13,564	6,059	8,560	6,767
	AVERAGE SPEED OF ANSWER (ASA)*	0:39	0:26	0:28	0:32	0:35
	AVERAGE CALL LENGTH	6:08	6:09	6:26	7:44	8:48

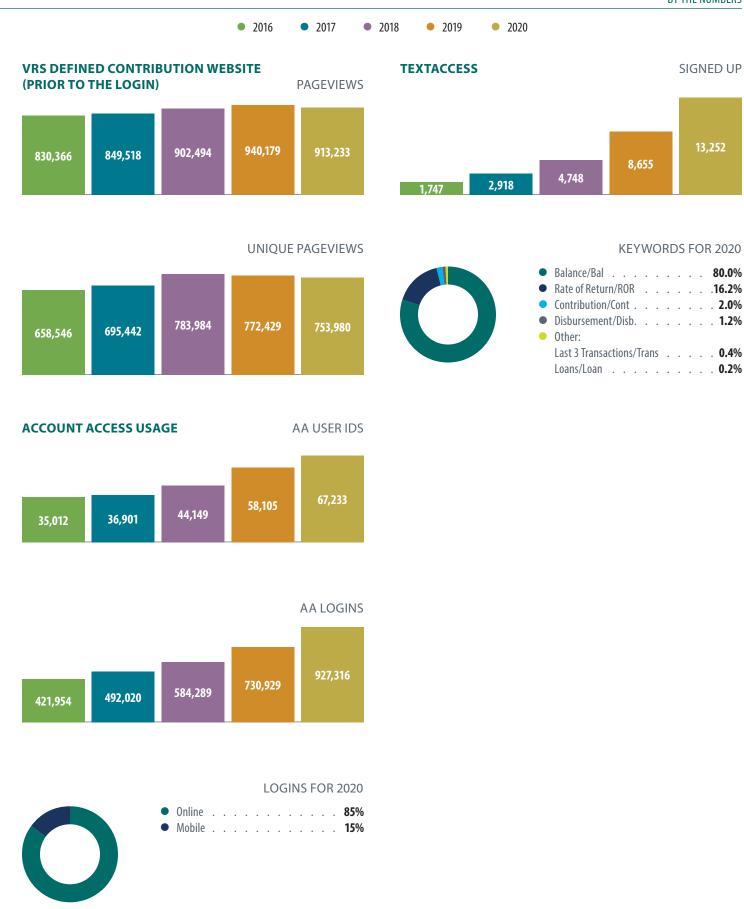


Dishussament Inquisias										20.010/
Disbursement Inquiries										
General Inquiries										22.87 %
Account Access Assistance										. 9.72 %
Deferral Changes/Inquiries										. 8.79 %
• COVID-19										. 7.38 %
 Indicative Data Update/Inquiries 										. 4.18 %
Transactions (FTF, MF, Allocation)										. 3.45%
Beneficiary Inquiry										. 2.90 %
• Other:										
Enrollment										. 0.97%
Loans										. 0.39%
Third-Party/ADRO										. 0.25%
Emergency W/D — Separate Process .										. 0.10%
Fraud/Risk										

Inquiry Topics exceed 100% due to rounding.

** Represents Advisory Services Inquiries.
Data generated by ICMA-RC and may differ from results reported by VRS.

 $^{* \}textit{Annual ASA calculation excluding top 1\%}.$



2020 Accomplishments



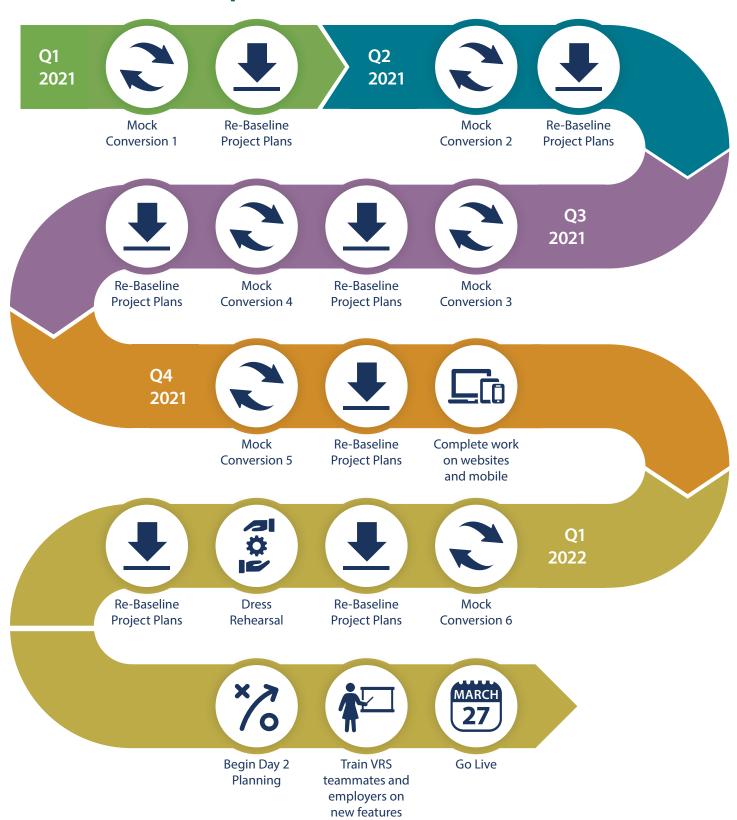
Performance Standards For the Year Ending December 31, 2020

Meetings MET 700 meetings per year) 1,116 g Sessions (3,600 per year) 7,036 atements MET
g Sessions (3,600 per year) 7,036 atements
atements
MET
Mailing Confirmation
quarterly statements ness days and 100% ys following quarter end)
andards
MET
nternet System Downtime
nt Notice
it Notice
rt
atement
ds
ce Statement
Exercise Report
·
r

^{*} The monthly Distribution Activity Report is no longer needed. The last report provided to VRS was as of 6/30/2018.

^{**} Annual ASA calculation excluding top 1%.

SS&C Partnership



Employer Support

The Defined Contribution Plans Employer Support Team serves all VRS decentralized employers, schools and political subdivisions with their administrative needs.

Interaction — The team answered **1,844** calls from employers throughout the year, including **1,744** calls made via the toll-free number and over **140** calls directly to team members' phone extensions. We also responded to more than **4,160** emails.

ACH Debit Process — The team now supports **557** Divisions utilizing ACH Debit to fund contributions. In 2020, ICMA-RC processed **22** ACH Debit forms to update bank account information.

Cash Imbalances — The team resolved **334** cash imbalances that required outreach and follow up. The team also contacted employers to resolve over **1,959** scenarios where ICMA-RC received funds but was missing the enrollment data (PNOF: Participant Not on File).

Hybrid Reconciliation — The team collaborated with VRS to assist with the Hybrid reconciliation and contacted employers who were late submitting their contributions to ICMA-RC. Due to our joint outreach and educational efforts, an average of only **six** employers per month needed to be escalated to VRS.

VRS Hybrid Missing Contributions: Escalated Employers

Report — During the first quarter in 2020, a new report was developed to reflect employers being escalated to VRS for missing contributions for 2020. This report provides detailed information regarding ICMA-RC's interactions. In 2020, the team assisted in completing **32** escalated situations and required **255** interactions (emails, calls and meetings).

COV 457 Reconciliation — The team contacted the decentralized VRS Universities regarding reconciliation issues, including participant data cleanup and research.

EZLink Access — In 2020, the team processed **171** VRS EZLink forms and updated **265** EZLink IDs.

Stale-Dated Employer Checks — The team reviewed stale-dated employer checks, conducted outreach to 71 employers and reissued 467 checks.

CARES Act Employer Support — During 2020, the team quickly responded to the CARES Act impact on VRS Defined Contribution Plans and created several communications for employers to provide information around the changes.

Team Kudos

"Thank you, Ashley! You always respond quickly and know who to reach out to. I appreciate all your help."

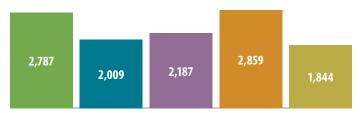
— Jesse Lippard, VA Tech

"Yay Victoria! Batch reporting is so much easier. I don't know why I waited so long to start.

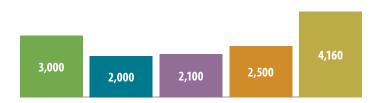
Thank you for your help getting this set up."

— Karen Lindsay, Poquoson City Public Schools

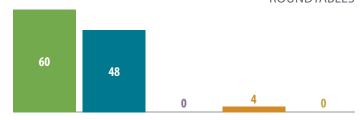
EMPLOYER CALLS ANSWERED



EMAILS ANSWERED



ROUNDTABLES



Plan Conversions & Adoptions

PLAN ADOPTIONS

Chesapeake City Public Schools (40233/55533)

Effective 1/1/2020

Town of West Point School Board (55638) ● ●

Effective 5/1/2020

Peanut Soil and Water Conservation District (55857)

Effective 6/1/2020

Town of Occoquan (55265) ●

• Effective 6/1/2020

PLAN CONVERSIONS

City of Virginia Beach (55234)

 Transitioned \$285,177,949.31 in assets and 4,870 accounts on January 14 from Empower.

Virginia Beach Schools (40234/55534)

• Transitioned \$25,610,973.29 in assets and 1,163 accounts on January 14 from Empower. ■

Virginia Beach Sheriffs (55234)

• Transitioned \$3,612,672.82 in assets and 503 accounts on January 14 from Empower. ■

Optional Retirement Plan for Higher Ed (108732)

 Transitioned \$115,306,665.32 in assets and 2,057 on February 7, 2020, from Fidelity.



PLAN ADOPTIONS

PLAN CONVERSIONS

Operational Highlights: State Plan Services Team (SPST)

SPST has a dedicated group of team members and analysts processing VRS participant/member and employer transactions.

Deposits — The team received and processed **31,035** deposits totaling **\$914,250,414.10** in contributions and rollovers.

Participants Not on File — The team researched **1,959** individual contributions for participants not yet enrolled (in which **1,879** were Hybrid related).

Distributions — **38,068** distribution requests were processed. Additionally, there were **5,610** CARES Act Distributions totaling **\$25,444,733.10**. **10,343** distributions were processed from forms in addition to those processed under the CARES Act, totaling **15,953** paper forms.

Emergency Distributions — **137** emergency distributions were paid out, totaling **\$213,864.71**.

Amendments — 7,540 documents were processed.

Research/Adjustments/Corrections — **5,080** total corrections were processed, including:

- 870 corrections for the Hybrid Plan
- 316 for the COV 457 and VCM Plans
- Total includes source corrections for two large employers
 Hampton City Schools (1,800) and Portsmouth (360)

Forfeiture Usage — **235** decentralized employers used forfeiture assets to fund their December employer contributions. **161** CIPPS agencies used forfeitures funds in June, for a 2020 total of **\$2,647,282.98**.

Small Balance Payouts — Completed small balance payout in Q2 and Q4 for all participants in 2020.

 1,931 small balance payouts were processed for the COV 457, Virginia Cash Match Plans, the Hybrid 401 and 457 in June and 3,953 in December for a total of 5,884.

Administrative Guide — Completed review and analysis of the Administrative Guide to align with revised plan document and overall enhancements.

SPST Projects

The SPST, Key Client Relations Team, Employer Support Team, Communications Manager, ICMA-RC Information Technology Team and VRS partnered to enhance plan administration and completed or initiated several projects in 2020. Here are some of these enhancements:

- Response rate of 54.66% for the Deceased Participants with DCP Balances project completed in 2020.
- Moved **110** beneficiary accounts with installments on file under the main plans to the beneficiary plan.

- Enhanced VNAV Hybrid 403(b) Elect/Deferral Allow Indicator for participants who are changing employers to allow for deferral updates.
- Assisted in the online ACH information initiative to help encourage participants to enter their banking information securely online and reduce banking information sent via regular mail by participants.
- Partnered with Cardinal on the design documentation and testing phase of the Cardinal Project.
- Aligned VRS and ICMA-RC systems to provide the most accurate vesting details for members' forfeitures.
- Developed an efficient process to prevent inadvertent contributions from posting to members' accounts by using status 10 and 12. Eliminated fee for status 10 and 12 participants.

COVID-Related Projects and Reporting

Weekly COVID Operational Report — Provided an overview of call center activity and Coronavirus-Related Distribution requests. Report contained details about:

- · Call topic trends
- ASA
- Coronavirus-Related Distribution details

Hybrid Voluntary Contribution Exception Report —

Provided a list of Hybrid participants who submitted the Hybrid Deferral Change Exception Form to their employer to change their voluntary contribution prior to the quarterly window close.

Coronavirus-Related Distribution Form — Allowed eligible participants to request a Coronavirus-Related Distribution from the COV 457 Plan, 401 Cash Match Plan or the Hybrid 457 Plan.

Hybrid Deferral Change Exception Form — Allowed participants being furloughed or experiencing a salary reduction to change their Hybrid 457 voluntary contribution prior to the guarterly window close.

Incoming Indirect Rollover Form — Allows participants to repay their Coronavirus-Related Distributions over the next three years. Also permitted participants to roll over eligible RMD payments that were waived in the CARES Act.

Other New Reports and Enhancements

- · COV 457 Participation Report
- Address on Record Report
- Biweekly Corrections Report Enhanced report to include gain/loss due to market fluctuation for negative corrections in the earnings column.

2016
 2017
 2018
 2019
 2020

OPERATIONAL SUPPORT

	PARTICIPANTS NOT ON FILE (PNOFs)	959	1,764	3,096	1,882	1,959
	CASH IMBALANCES	322	359	537	562	334
	DEPOSITS	22,903	28,447	28,648	29,403	31,035
	ACH DEBIT USERS	511	533	566	553	557
	FORFEITURE ACCOUNTS	539	661	731	769	790
	NON-CIPPS FORFEITURE USERS	173	201	304	270	235
	CIPPS FORFEITURE USERS	95	142	156	160	161
	ADJUSTMENTS	3,954	4,384	4,118	2,794	7,540
NTS	HYBRID ADJUSTMENTS			1,269	1,364	870
ADJUSTMENTS	COV 457/VCM ADJUSTMENTS (MOFs)			50	67	316
ADJI	ORPPA ADJUSTMENTS			1	0	3
	DISTRIBUTIONS PAID	25,042	28,554	32,864	42,170	38,068**
	TOTAL DISTRIBUTIONS REQUESTED	12,447	13,717	18,054	17,695	13,991
	DISTRIBUTIONS REQUESTED: PAPER	12,447	13,717	18,054	17,695	10,343**
	DISTRIBUTIONS REQUESTED: ONLINE					3,648
	AMENDMENTS	10,787	11,538	11,845	11,264	7,540

Cash Imbalances — Represents occurrences in which ICMA-RC received funding that could not post on the same business day. For example, received funding but did not receive the payroll file on the same day.

Adjustments — Prior to 2018, Mistake of Fact numbers were represented by COV MOFs and Hybrid Adjustments. Total annual numbers were: 2016 – 733; 2017 – 572. For these years, ICMA-RC reported numbers for parent MOFs.

Distribution Request — Includes full and partial lump sum payouts, initial setup of installment payments, rollovers, unforeseen emergency withdrawals, de minimis distributions, requested RMD payments, purchase of service credits and beneficiary distributions.

Distributions Paid — In addition to the Distribution Requests, Distributions Paid also includes reoccurring installment payments, small balance payouts and RMD payments.

Amendments — Represents nonfinancial transactions, such as adding beneficiary information to account(s), updating indicative data on wage accounts, etc.

^{* 2018} figure increased due to a change in capturing MOFs at the participant level.

** Does not include 5,610 Coronavirus-Related Distributions.

Call Center Quality Assurance Monitoring

ICMA-RC's Contact Center received **63,953** calls from VRS participants in 2020. It is critical that we provide accurate plan information while expressing empathy to participants during these calls.

Currently leading the quality enhancement effort for the Contact Center are Bob Jacoby, Relationship Manager, Kathleen Wilson, Director and Angela Greenleaf, Vice President for the Key Client Relations Team, along with the Participant Services Leadership team.

Training

ICMA-RC has implemented the following training opportunities for Contact Center team members to ensure they are knowledgeable in all aspects of the VRS plans.

- Seven team members trained on the COV 457, Cash Match and Optional Retirement Plans
- Four team members trained on the Hybrid 401(a) and 457(b) Plans
- Four training sessions for team members
- Continued to update Plan Help in Salesforce
- Utilized the VRS DCP Participant Services Distribution List to send out quick updates based on trends taking place in the Contact Center and technology enhancements

Monitoring

The following meetings and tools have been put into place to monitor the quality of the service being provided team members:

- · Leadership meetings
- · Repeat call monitoring
- SOAR 2.0 guide

Talent

- Team consists of managers to provide coaching, senior specialists to provide plan-specific mentoring and specialists to develop succession planning
- Statement period queue alignment:
 - Equivalent of 13.3 Contact Center team members dedicated to the VRS general queue and Hybrid Plan queue
- Non-statement period queue alignment:
 - Equivalent of five Contact Center team members dedicated to the VRS general queue and Hybrid Plan queue

Wow Calls — Feedback from VRS Participants

Not a question, really, but a commendation. Please share with my representative Crystal's supervisor how accommodating, clear and helpful she was on a call yesterday. I really appreciated the excellent, timely service. She was on point in discussion, providing appropriate explanations and respecting my existing knowledge. She made it easy. Thank you. Again, for reference, I called on 2.3.21.

Thank you, ma'am, and have a wonderful day!

— Email from participant about Crystal Harper

Percy was kind, helpful and patient on my account and he deserves a 10. Awesome Job, Percy!

— Voicemail from participant about Percy Jones

Branding

PHASE 1: March – May

ICMA-RC is becoming

Missi*nSquare

3/16/21 Introduce new name to VRS

3/18/21 Introduce new name to Employers4/8/21 Introduce new name to Participants

4/22/21 Q1 statement message

PHASE 2: June - August

ICMA-RC is now

Missi*nSquare

6/30/21 Participant brochures, forms, flyers, emails, presentations, IOP, statements and confirms

6/30/21 Employer emails and forms

8/15/21 Fund fact sheets

PHASE 3: September and beyond

Missi*nSquare

9/30/21 Participant calculators, websites and mobile app

- I I I

9/30/21 Employer job aids, flyers

3/31/22 Participant videos

3/31/22 Employer webinars



Technology

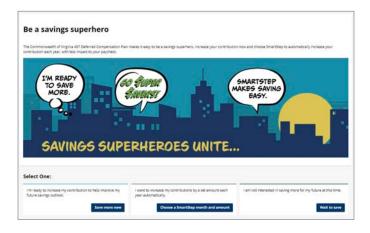
Participant Resources

Developed an efficient process to prevent inadvertent contributions from posting to members' accounts by using **status 10 and 12**.

Developed, tested and rolled out **online withdrawals** for participants with a termination date on file.



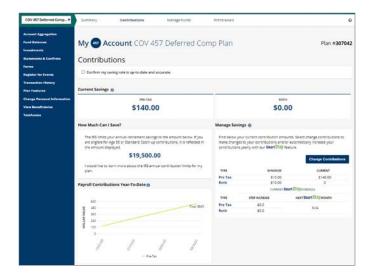
Launched **COV 457 splash screen** using Enhanced Active Choice to encourage participants to increase savings in the COV 457 Plan.



Enhanced COV plan contribution participant experience including:

- Enhanced the "How Much Can I Save?" tile on the Contribution Overview page to reflect the participant's eligible annual IRS contribution limits.
- Improved the contribution bullets that appear on the Contribution Change Page to better explain annual IRS contribution maximums, payroll frequency and catch-up opportunities.

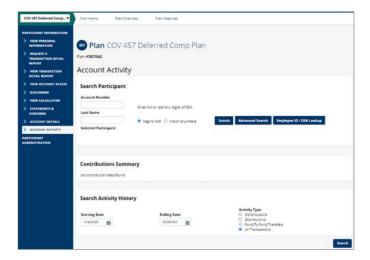
- Developed smarter programming that assesses account payroll frequency through a drop-down menu and catch-up contributions.
- Implemented a section that includes "Annual Total Amount" so participants can visualize the potential impact of their payroll amount and frequency.
- Created pop-up messages for the Change Contributions section to provide smarter programming. The messaging:
 - notifies participants if contributions may exceed annual IRS contribution maximum based upon information entered into Account Access
 - encourages participants to max out 4% contribution to the Hybrid 457 Plan before contributing to the COV 457 Plan.





Plan Sponsor & Employer Resources

Fixed date fields used to conduct searches in the **Account Activity** section of EZLink.



Updated custom mapping of **GL MUNIS report** to match the Investment Account.

Reported and removed division-level reporting from the GL MUNIS Report.

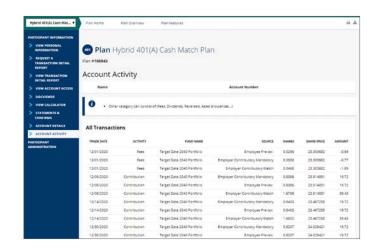
Added **Indicative Allow Flag** to the ORPHE Plans so indicative data updates can be made by ICMA-RC, similar to a wage participant.

Updated the **Hybrid VRS Quarterly Deferral Report** to keep data static and only show changes made from the division accessing the information.

Automated the **Hybrid Recon Report** process and delivered to VRS.

Developed programming to notify VRS if the **VNAV DB Relinquish Indicator** is equal to Y or N to ensure proper legal holds are on participant accounts.

Modified the naming convention of labels in the **Employer Source Contribution Breakdowns** in the EZLink view and downloadable reports to include the employer mandatory and employer match contributory sources.



Infrastructure

Transitioned to a remote-first environment over a single weekend to maintain business continuity during the COVID-19 pandemic.

2016
 2017
 2018
 2019
 2020

Defined Contribution Plans Retirement Specialists Activity

Educational Support

The Education Team added two new members, Tejan Rahman (covering the Northern Virginia Territory) and Homer Stinson (covering the Southeastern Virginia Territory). The Plan Manager, with assistance from the team, provided educational support in these territories until the new specialists took over responsibilities.

In 2020, a total of **16,873** participants and members received educational support from ICMA-RC through group meetings, individual meetings and webinars.

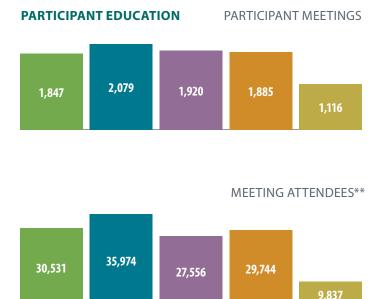
GROUP MEETING ACTIVITY

The team of seven Defined Contribution Plans Retirement Specialists and the Plan Manager conducted 1,116* group meetings attended by 9,837 participants and members throughout the Commonwealth in 2020. They consisted of:

- 358 non-Hybrid Plan group meetings attended by 2,446 participants
- 361 Hybrid Plan group meetings attended by 2,909 members
- **397** joint Hybrid Plan and non-Hybrid Plan group meetings attended by **4,482** participants and members

These group meetings consisted of:

- · Benefits fairs
- · New hire orientations
- · Plan overviews
- Plan investment reviews
- Distribution strategies
- Optional Retirement Plan for Higher Education (ORPHE) overview
- Regional education seminars



EDUCATION TEAM SPECIAL PROJECT

The team conducts two semi-annual projects illuminating a particular segment of the VRS Defined Contribution Plans universe. The first project (January – June) entailed a rework of the **Summertime and the Saving is Easy** initiative. The original plan was to expand this project and gain a broader reach to public school districts across the Commonwealth. Because of the pandemic, we changed the delivery method to virtual and featured the Hybrid Retirement Plan Defined Contribution Component presentation. We were successful in expanding the number of participating school districts and members, compared to the 2019 in-person initiative.

For the second project (July – December), we conducted direct outreach to employees age 60 and older who separated from service in 2020. The identified employees were sent an email from their local DC Plans Specialist inviting them to attend a webinar derived from the "Life in Retirement" presentation from the Retirement Education Seminar series. Individual account review appointments also were offered. The objective was twofold; to establish a relationship with the local DC Plans Specialist and to retain the participant/member assets in the plan. The project participation rate was 2% and at year end, \$3.7 million in plan assets were identified. We will revisit these asset balances midyear in 2021 to measure retention.

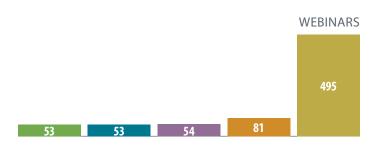
^{*} Coronavirus and ICMA-RC Remote First status, initiated late in the first quarter, resulted in meeting activity being conducted almost exclusively through virtual channels for the remainder of 2020.

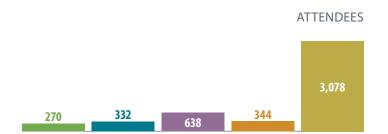
** In 2020, meeting categories were modified to reflect only group sessions and not group/individual sessions impacting the count for this chart.

WEBINARS

As a result of the pandemic, webinars took on an expanded, critical role in maintaining connection and educational support to VRS participants and members. Webinar topics included plan overviews, a review of the plan investments, distribution strategies and ORPHE overview. Hybrid-specific webinars included the Hybrid Features and Benefits presentation (delivered in partnership with the VRS Hybrid Member Counseling team beginning with the 3rd quarter Hybrid Regional Education Meeting) and the Hybrid Defined Contribution Component overview.

The team conducted **495** webinars in 2020, attended by **3,078** participants/members.

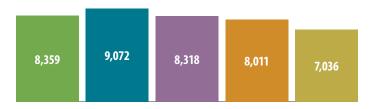




INDIVIDUAL MEETING ACTIVITY

The team conducted **7,036** total individual meetings, including **4,215** individual meetings with non-Hybrid Plan participants and **2,821** individual meetings with Hybrid Plan members.

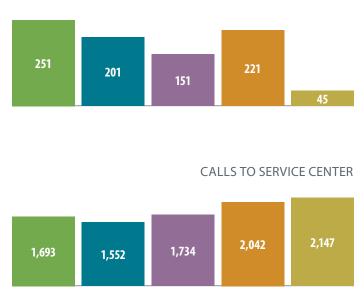
INDIVIDUAL COUNSELING SESSIONS



VIRGINIA SERVICE CENTER*

The Virginia Service Center of ICMA-RC fielded **2,147** phone calls and assisted with **45** walk-in sessions.

WALK-IN SESSIONS



^{*} The Virginia Service Center was closed to walk-in service with the commencement of Remote First on March 16, 2020.

Participant and Member Feedback

SHERREL ADDISON:

"My expectations were more than met!!! She explained everything and was extremely professional and personable. No question was left unanswered. The best part was she made me feel valued even though I'm sure some of my questions were trivial. Great first experience plus I learned there was another account I could use for a cash match."

SHARON BRADLEY:

"Sharon was excellent...not only explained options, but waited until I could log into my account and walked me through the process to change to a Roth option. Excellent service, very polite. Thanks!!"



VAINY GLEVECKAS:

"Earlier this month, I had to make a difficult decision to pull from my deferred compensation plan. I spoke with Vainy and he emailed me some great information on things to think about. He was patient and extremely helpful. He walked me through the process and has been there every step of the way. He even called to check up on the progress with me this morning. His helpfulness and empathy were incredible; I wish there were more people in the world like Vainy."



"Lauren Hand was the best! She made everything so simple to understand and assured me if I have any questions or problems she'd be available to help. Just a phone call away. Very grateful. I'd give her a gold star. Thank goodness there are people like her to take the time and have the patience to help. She's the GREATEST!"



STEVE MCGREGOR:

"Steven always goes above and beyond the call of duty and he is a GREAT ASSET to have as an employee and a financial professional. He explains things so it is easy to understand.



I would love to have an employee like Steven and hope you would consider giving him a raise and/or a bonus for great customer service, going out of his way to help others, being a financial expert who truly knows the business, and being a financial expert who is truly looking out for my best interests! Steven is someone I trust and hope he will be there to help me through retirement!"

JANICE PARKER:

"Janice has always been eager to provide assistance, dedicated to making sure you understand the DC arena and always available to help in any way. She is more like family here than not. Thanks Janice outstanding job!"



TEJAN RAHMAN:

"Teian Rahman was excellent to consult with regarding rolling in funds, referred me directly to another party to assist with rolling out on that end, and was quickly responsive to a followup email from me. I was extremely satisfied with his service—well done!"



HOMER STINSON:

"The seminar was excellent. I immediately contacted Homer Stinson and he called me right back. I had a wonderful conversation with additional information that let me maximize my investments. Thank you!"



STEVEN SCOTT (PLAN MANAGER):

"I really appreciate the time and effort you put into helping me determine the appropriate amount to contribute to "catch up". I never would have figured it out without you. It is especially heartening during this uncertain time to have a professional such as yourself take the time to not only assist, but to educate me about my accounts and the individual investment choices available to me and the impact of each on

my accounts. I really appreciate your invaluable assistance."



Communications For the Year Ending December 31, 2020

In 2020, our education and communication efforts included:

- · Virtual education and support to navigate financial challenges during the pandemic
- · Technology and interactive multimedia to engage participants with quick and easy account access
- · Hybrid initiatives to encourage voluntary contributions and promote the employer match
- COV 457 Plan initiatives to encourage plan adoption and promote SmartStep contribution increases
- ORPHE DCP resources to support open enrollment and plan education
- · Educational resources for targeted outreach, investment changes and to announce plan features

Communication Highlights

VIRTUAL EDUCATION AND PANDEMIC SUPPORT

In 2020, we implemented strategies to prepare and brace for the impact of the coronavirus and to help keep members, employers and retirees informed, educated and on track for retirement. Our initiatives included adoption of new plan provisions for coronavirus-related relief and virtual retirement education opportunities. The result was a cohesive response, timely updates and informative education to help participants navigate challenges while staying connected with their retirement plan.

Coronavirus-Related Plan Provisions

New plan provisions including the Coronavirus Aid, Relief, and Economic Security (CARES) Act offered financial relief for members. Features included flexible distribution options and a waiver of required minimum distributions (RMDs).

Communications included:

- Webpage with consistent updates, site alerts and banner ads
- Account messages and online resources
- Distribution and repayment forms
- · RMD waiver letters and outreach
- · DC Plans Specialist education





Virtual Education

Out of an abundance of caution, all VRS offices, including the VRS Service Center, were closed to in-person and walk-in appointments. The DC Plans Specialists quickly shifted to virtual assistance with phone and email support, virtual oneon-one appointments and engaging virtual webinars.

Communications included:

- "Staying Connected" campaign with participant emails, website messages and banner ads promoting continuation of services including virtual one-on-one appointments
- FOCUS Newsletter articles promoting available support, plan resources and webinars
- Virtual webinar emails and e-flyers promoting quarterly topics and sign-up instructions

As a result, DCP participants continued to receive education and assistance to help them reach their retirement goals without interruption. One-on-one appointments were provided virtually to 1,343 participants in 2020 (not conducted virtually in 2019).*

TECHNOLOGY AND INTERACTIVE MULTIMEDIA

In 2020, we rolled out new technology for a virtual world, including mobile app features and an interactive tool to quickly locate a local DC Plans Specialist. We also promoted quick access to account information for a more engaging virtual experience during the pandemic.

DCP Mobile App ▼

In 2020, our DCP app video communications promoted new mobile app biometric login features and online transactions. Participants downloaded the free app to manage their accounts, boost their investment knowledge and contact their local DC Plans Specialist. The app is available for IOS, Android and tablets.

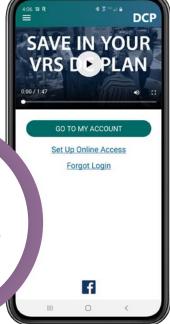
DCP app enhancements included:

- Simplified app layout
- Refreshed design elements
- Embedded video
- Biometric login features including facial and touch recognition
- New analytics features
- Help page
- Contact Us page updates

Communications included:

- New DCP mobile app video
- New jump page
- Participant flyer
- Media kit
- Presentation slide
- **Newsletter articles**
- Website slider
- **VRS Facebook posts**







Find Your DC Plans Specialist Tool 🛕

In 2020, we launched our new "Find Your DC Plans Specialist" website tool. The interactive dropdown allows participants to quickly locate their DC Plans Specialist by county, city of employment, employer name or higher education employer.

Communications included:

- Website banner ads
- **FOCUS Newsletter articles**



Account Access

increase in TextAccess We continued encouraging participants to log in to claim their online account, keep account information up to date and utilize plan features including text, account aggregation and e-delivery.

Communications included:

- Website sliders A
- **FOCUS Newsletter articles**
- Account and statement messages

As a result, we increased text utilization by 53%, account aggregation usage by 37% and e-delivery by 25%.

utilization

HYBRID 457 PLAN

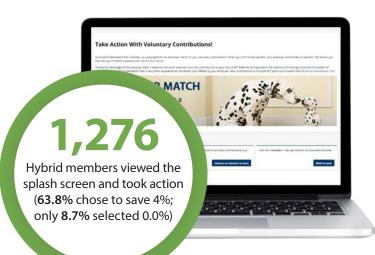
In 2020, we continued our Hybrid 457 Plan initiatives, encouraging Hybrid members to save more with voluntary contributions, including starting early and saving the full 4% to receive their full employer match. Members looking for a more gradual approach were educated about the benefits of the automatic 0.5% increase from autoescalation and the ability to step up automatic saving at their own pace with SmartStep.

Voluntary Contributions

Our Hybrid Plan communications encouraged participants to increase their voluntary contributions.

Communications included:

- "Meet Your Match" Dalmatian-themed splash screen (launched on December 17, 2019)
- "Meet Your Match" site ad with action button
- Member tutorial video, "How to Increase Your Voluntary Contributions"
- · Quarterly contribution deadline reminder emails
- Crossover emails, account messages and newsletter articles on the benefits of strategically contributing using hybrid voluntary contributions with supplemental plan contributions to maximize match and contribution limits
- Milestone education site page to explain "Maximizing Contributions"
- · Website, account and statement messages
- Newsletter articles promoting savings tactics to help the underserved and members experiencing savings challenges



COV 457 PLAN

In 2020, our COV 457 Plan efforts focused on the new COV 457 Plan Adoption page to promote the benefits of adopting the plan, including ease of administration and seamless integration with myVRS. We also designed a COV 457 retro comic book-themed splash screen to promote auto increases (splash screen and promotions planned for 2021).

As a result, the COV 457 Plan Adoption page had **93** views in 2020, **48** of which were first-time views.



ORPHE PLAN

In 2020, we promoted ORPHE DCP during open enrollment, added a new higher education site page and provided plan updates, including fee disclosure information to participants.

Higher Education Page

We created a new responsive site page for higher education plans, showcasing savings options for the COV 457 Plan. The page is accessible from the ORPHE landing page.

Site features included:

- · Savings Syllabus Brainshark video
- Learn More (COV 457 Plan website)
- Meet Your DC Plans Specialist (interactive tool)
- Enroll Now (Account Access)

Open Enrollment

We updated our materials to promote 2021 open enrollment.

Communications included:

- Presentation
- · Brainshark video
- ORPHE website resources and announcements

As a result, the ORPHE open enrollment video had 33 views in 2020.



EVENTS

In 2020, our virtual events encouraged employees to take a more active role in retirement. Our America Saves Week and National Retirement Security Month promotions included myVRS Financial Wellness resources for a holistic view of their personal finances.

America Saves Week (February 24-29, 2020)

National Retirement Security Month (October 1-31, 2020)

Communications included:

- Newsletter articles
- Website sliders
- · Account and statement messaging

EDUCATIONAL RESOURCES

In 2020, we created new educational resources, including targeted educational outreach and market volatility materials. We also updated our investment materials, forms, publications and presentations with the latest contribution limits, self-service transactions and in-service withdrawal features.

Targeted Outreach

- "Life in Retirement" targeted outreach email to separated participants to promote education presentations
- "Summertime and the Saving is Easy" targeted outreach to school districts to promote hybrid voluntary contributions and education presentations
- "Crossover Communications" targeted outreach to participants eligible to contribute to both the Hybrid and COV 457 Plans

Legislative Updates and the Markets

Informed employers and participants about evolving economic and financial markets, including impact from the pandemic and changes due to the SECURE Act legislative update.

Communications included:

- New RMD webpage to educate participants within Account Access
- RMD calculator, flyer, presentations and forms
- · Paycheck calculator tax update
- Market volatility video, website resources, slider and newsletter articles
- Market performance flyers and presentation materials
- · Coronavirus and the Markets handout
- Newsletter articles
- · Website sliders, announcements and account messages
- Employer emails with CARES Act updates and furlough resources
- Form revisions

As a result, the new RMD webpage had **10** views, RMD calculator had **11** views, and the Market Volatility video had **18** views in 2020.

Investment Changes and Notifications

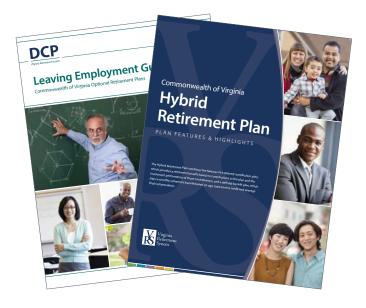
- Monthly Investment Option Performance
- Quarterly fund profiles
- Quarterly target date asset allocation flyer





Newsletters and Plan News

- FOCUS Newsletter (COV 457 and Hybrid inserts)
- · Employer Update
- · Member News
- VRS Facebook



Forms, Publications and Presentations

- Brochures and guides
- Employer guides
- Forms
- Plan features and highlights
- Presentations
- · Special tax notices



AWARDS

Thank you for the continued opportunity to partner with your hard-working and dedicated team. Once again, you have achieved outstanding results for your retirement plans, including a Communicator Award of Distinction! This 2020 award recognized the success of your Hybrid Retirement Plan Auto-Escalation campaign. The campaign featured an engaging "Let the Good Times Roll" theme and multichannel member and employer communications. As of January 31, 2020 (date of award entry submission), 99% of the targeted Hybrid members were saving with voluntary contributions, fewer than 1% of members opted out of the increase and 2.4% of members took active control and increased their contribution beyond the 0.5% baseline. The campaign also increased website page views by more than 10%.

Future Initiatives



Communications

Asset Retention

Target pre-retirees and retirees to promote the benefits of staying in the plan after separation from service.

- · Presentations
 - Distribution Strategies presentation for pre-retirees
 - Managing Retirement Income presentation for retirees and spouses
- · Distribution and rollover forms customization
- · Distribution kits or separation from service insert
- · Income distribution flyer
- Bridging the Gap retiree income brochure
- Emails, statement messages and account messages to promote retiree seminars and resources, including the Retirement Withdrawal and RMD calculators
- · Retiree event
- Direct mail postcards

Investment Education

Roll out new investment resources to make decisionmaking easier.

- Investment cost website page
- Asset allocation outreach
- Presentations
 - Navigating Account Access
 - COV 457 Enrollment Post Plan Adoption/Conversion
 - Women in Investing
 - Budgeting Today for Tomorrow
 - Advanced Investing
- Communicate PENDVRSIP change

Coronavirus-Related Distribution Outreach

· Targeted letters to promote repayment with contributions

Hybrid Voluntary Contributions

- · Employer toolkit refresh (includes plan flyers)
- Maximizing Contributions milestone page for employer site (phase II changes)
- Onboarding checklist update
- Retiree milestone page

COV 457 Participation Initiative

Discuss new initiatives and outreach.

- Site ad promoting the new splash screen
- · Postcard for eligible employees
- · Employer toolkit and email communications
- · Brainshark video
- Interactive game or event
- Targeted initiative to auto-enrollees saving less than their match

National Retirement Security Month

Create new educational materials for employers using the latest NAGDCA campaign as a foundation for our efforts.

- Employer website (www.varetire.org/yourwholestory) refresh with new theme and resources
- E-flyer communications with tips and resources for employers to customize and share

Financial Planning

We will offer flexible, free 30-minute consultations with CFP® Professionals delivered via phone or video conferencing that focus on comprehensive financial planning needs beyond retirement savings. Outreach will include:

- Financial plans, if applicable
- Live webinars with CFP® Professionals

Social and Interactive Multimedia

Discuss new opportunities to promote campaigns on social media and utilize interactive multimedia technology.

-	
-	

NOTES:

Technology

Participant Resources

- Update auto-Increase confirm to display information only in situations where it is appropriate.
- Enhance SmartStep programing to increase a participant to 4% if the difference between the SmartStep and 4% is less than the elected SmartStep.
- Change PENDVRSIP from the Target Date 2025 Portfolio to the Target Date 2035 Portfolio to take into account the risk change to the Target Date portfolios over time.
- Update ICMA-RC to VRS VNAV file to include pre- and post-tax assets for the COV 457 plan for the Member Benefit Profile.
- Program, test and create training materials for the SS&C participant portal.
- Implement Single Sign On for VRS participants.

NOTES:		

Plan Sponsor & Employer Resources

- Extend forfeiture window into November to provide employers more time to use forfeitures at yearend.
- Align VRS and ICMA-RC systems to provide the most accurate vesting details for member forfeitures.
- Enhance the VRS Quarterly Deferral Report to capture additional participant scenarios on the report, including situations when:
 - Multiple deferral changes are made by a participant after a division change.
 - Multiple deferral changes are made by a participant before a division change takes place and then again, another deferral change is made after a division change in the same or different quarter.
 - More than two deferral changes were made within the original division, then the division was changed more than two times with multiple deferral changes made within each of the divisions.
 - Multiple division changes take place in the same quarter, but the participant ultimately returns to the original division and elects original deferral amount.
- Update Hybrid Recon Report process to remove the rolling 36-month historical lookback with a since inception lookback and modify programming to prevent negative corrections from appearing on the report.
- Update the GL-Munis report to only provide a .XLS file and re-categorize the value in the "ORG CODE" column by splitting into two separate columns: "FUND" and "EN/PN".
- Program, test and create training materials for the SS&C employer portal.
- Continue to adhere to VRS security standards in our SS&C partnership.
- Program and test single employer code for VDOT and assist with other testing as needed.
- Continue testing with Cardinal for the upcoming change to the new payroll/personnel system for the state agencies.

-	

NOTES:

SPST

- Collaborate with VRS to identify deceased participants with an account balance in DCP plans but no beneficiary on file with ICMA-RC.
- Establish audit process for stale-dated participant and employer checks.
- Partner with VRS on future adjustment policy changes.

Defined Contribution Plans Retirement Specialists

 Conduct regional workshops in each of the seven geographical territories, focusing on plan investments and market volatility.

NOTES:

Enhanced Rollover In Process

- Launch enhanced Rollin Support Services to VRS participants via Account Access.
 - Auto-generated Letter of Acceptance to accompany other recordkeepers' rollover/rollout paperwork.
 - Email reminders for participants who started the rollover/rollin process and have not completed it.
 - Outbound calls to current recordkeepers with the participant and ICMA-RC team member on the phone.
- Continued assistance available from local service team and the Contact Center.

NOTES:		



