**STATE OF RHODE ISLAND**
**INVESTMENT COMMISSION MEETING**

**DATA AT**
**July 31st, 2019**

**MEMBERS OF THE STATE INVESTMENT COMMISSION**

**Honorable Seth Magaziner, Chair**

**Mr. Robert K. Benson**
**Mr. Erik Carleton**
**Mr. J. Michael Costello**
**Mr. Thomas P. Fay**
**Ms. Karen Hammond**
**Ms. Karen Hazard**
**Mr. Frank Karpinski**
**Ms. Sylvia Maxfield**
**Mr. Thomas Mullaney**

# Section I.

## Staff Summary

State of Rhode Island and Providence Plantations
Office of the General Treasurer

Seth Magaziner
General Treasurer

August 23, 2019

State Investment Commission
State of Rhode Island, State House
Providence, Rhode Island

This is to certify that the amounts so listed below belong to the credit of the Employees' Retirement, Municipal Employees', State Police and Judicial Retirement Systems of the State of Rhode Island at the close of business on July 31, 2019

**Employees' Retirement System of Rhode Island**
**Composite Reporting Investment Valuation**
**July 31, 2019**

| Asset Class | | Base Market Value |
|---|---|---|
| **Grand Total** | | **8,486,663,073** |
| CASH EQUIVALENT* | | 444,583,322 |
| GLOBAL PUBLIC EQUTIY | | 3,789,345,785 |
| CREDIT | | 286,369,238 |
| INFLATION-LINKED BDS | | 110,580,457 |
| REIT _ US FOCUSED | | 81,099,043 |
| PRIVATE EQUITY** | | 828,756,527 |
| REAL ESTATE** | | 503,068,983 |
| HEDGE FUNDS** | | 563,763,394 |
| INFRASTRUCTURE** | | 277,490,249 |
| US TRADITIONAL FIXED | | 924,208,279 |
| CPC PROGRAM | | 677,397,796 |

| Plan Allocations | % | Base Market Value |
|---|---|---|
| **Grand Total** | **100.00%** | **8,486,663,073** |
| STATE EMP RET PLAN | 74.16% | 6,293,774,957 |
| MUNI EMP RET PLAN | 19.03% | 1,614,693,192 |
| TEACHER'S SURVIVOR BENEFIT | 3.98% | 337,450,503 |
| STATE POLICE RET PL | 1.73% | 147,195,520 |
| JUDICIAL RET PLAN | 0.91% | 77,429,714 |
| NON-CONTRIB JUD RET | 0.01% | 941,761 |
| NON-CONT ST POL RET | 0.18% | 15,177,425 |

* Cash & Short-Term Investments, as shown, also includes amounts available within specific active-manager mandates, and thus as aggregated will not tie directly to separate cash allocations as reported elsewhere.
** Alternative Investments – comprising the five components as indicated – have varying degrees of liquidity and may not have readily determinable market values. As such, they may be based on appraisals only.

Respectfully submitted,

Vincent Izzo
Investment Accounting Manager

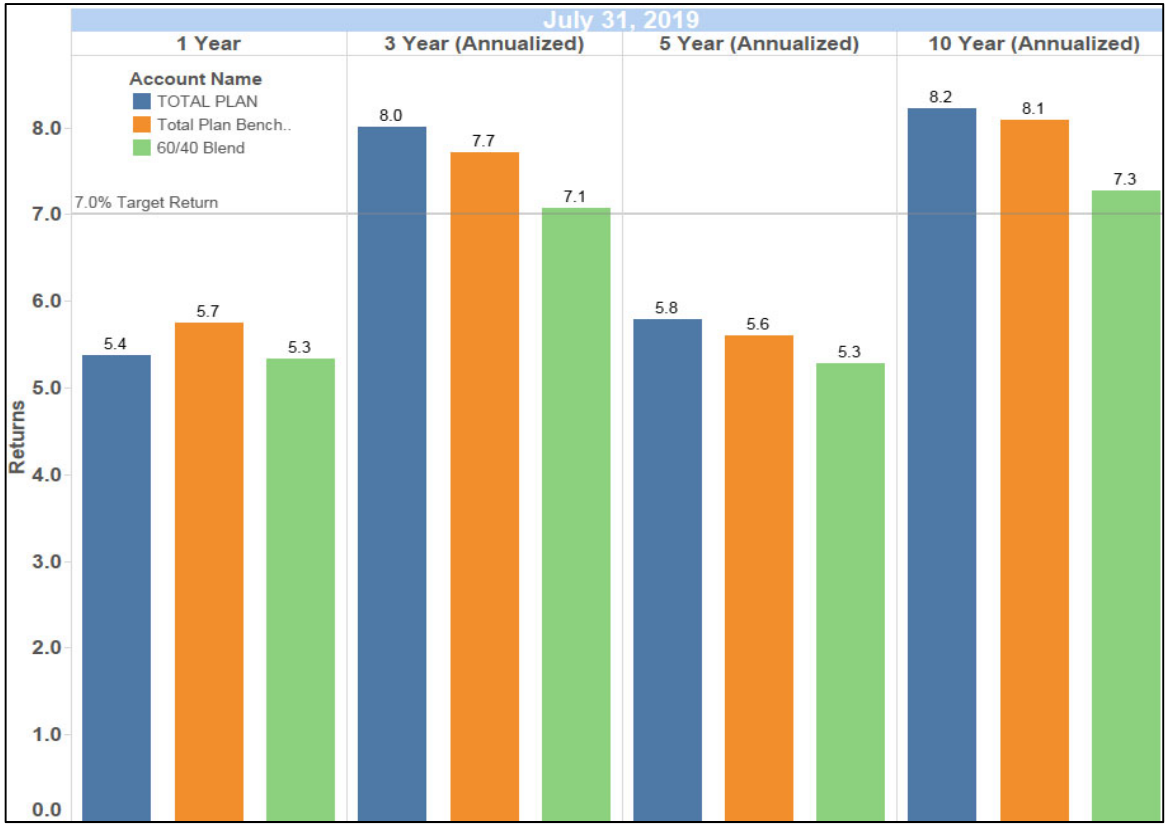
50 Service Avenue – Warwick, Rhode Island 02886-1021 – (401) 462–7650 / Fax 462–7695

**July 2019**

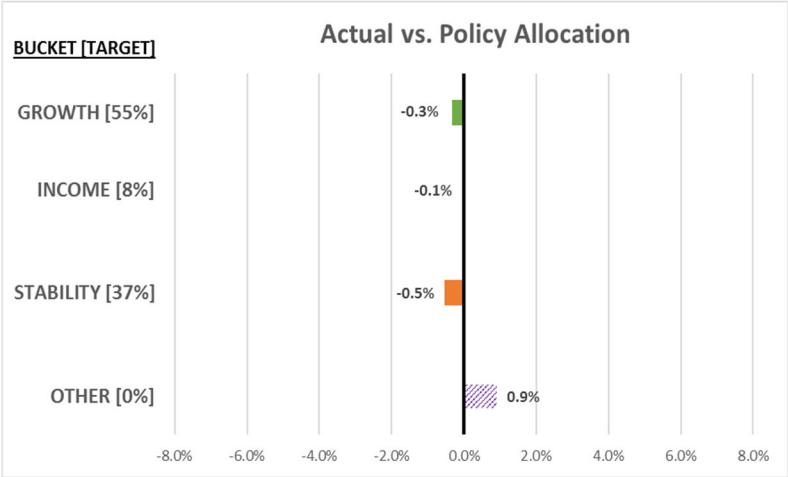
The Plan returned 0.39% during the month of July, outperforming the 60% global equity/40% fixed income benchmark of 0.26%. Total Plan benchmark returned 0.45%. The Plan's Total Stability Composite was one of the primary contributors to the Plan's positive performance, returning 0.77% as long duration fixed income rallied over the period. The total portfolio increased by approximately $18 million as the investment portfolio increased by roughly $35 million and about $17 million of net transfers out were made to meet pension payroll in excess of pension contributions.

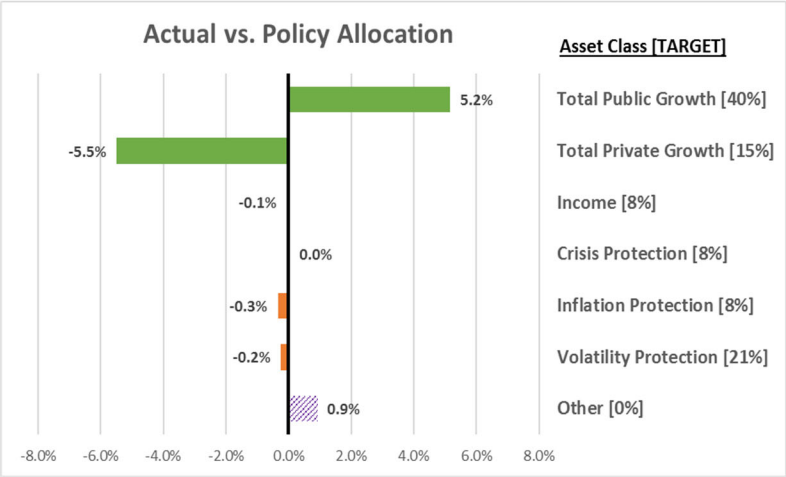
Calendar year-to-date the Plan returned 10.73% net of fees, outperforming the Total Plan benchmark return of 9.73%. The 60% global equity/40% fixed income benchmark returned 12.57%. A main contributor to the Total Plan's CYTD performance was its Growth bucket, which returned 13.75%.

# Total Plan - July 31, 2019




| | Jul-2019 | YTD | FYTD | 1 Year | Annualized 3 Years | Annualized 5 Years | ITD | Inception |
|---|---|---|---|---|---|---|---|---|
| **GROWTH** | **0.18** | **13.75** | **0.18** | **3.76** | | | **9.17** | **7/1/2017** |
| *GROWTH BM* | *0.28* | *12.84* | *0.28* | *5.15* | | | | |
| Public Growth | 0.19 | 15.88 | 0.19 | 2.32 | 10.28 | 6.64 | 4.84 | 7/1/2000 |
| *Public Growth BM* | *0.29* | *16.57* | *0.29* | *2.95* | *10.17* | *6.48* | | |
| Private Growth | 0.07 | 3.73 | 0.07 | 12.19 | | | 15.49 | 7/1/2017 |
| *Private Growth BM* | *0.25* | *2.77* | *0.25* | *9.78* | | | | |
| **INCOME** | **0.25** | **9.13** | **0.25** | **2.07** | | | **3.58** | **7/1/2017** |
| *INCOME BM* | *0.90* | *8.35* | *0.90* | *4.69* | | | *4.94* | *7/1/2017* |
| **STABILITY** | **0.77** | **6.68** | **0.77** | **7.84** | | | **4.91** | **7/1/2017** |
| *STABILITY BM* | *0.53* | *5.30* | *0.53* | *6.40* | | | | |
| CPC | 1.98 | 10.34 | 1.98 | 10.32 | | | 3.61 | 7/1/2017 |
| *CPC BM* | *1.39* | *5.50* | *1.39* | *10.69* | | | *2.05* | *7/1/2017* |
| Inflation Protection | 0.87 | 5.27 | 0.87 | 7.63 | | | 6.96 | 7/1/2017 |
| *Inflation Protection BM* | *0.48* | *3.88* | *0.48* | *4.98* | | | *5.23* | *7/1/2017* |
| Volatility Protection | 0.26 | 5.85 | 0.26 | 6.88 | | | 4.54 | 7/1/2017 |
| *Volatility Protection BM* | *0.22* | *5.69* | *0.22* | *5.15* | | | | |
| **TOTAL PLAN** | **0.39** | **10.73** | **0.39** | **5.37** | **8.00** | **5.78** | **5.14** | **7/1/2000** |
| *TOTAL PLAN BM* | *0.42* | *9.73* | *0.42* | *5.74* | *7.72* | *5.60* | | |
| *60/40* | *0.26* | *12.57* | *0.26* | *5.33* | *7.08* | *5.28* | | |




**Allocation reflects physical exposure; Russell Overlay rebalancing program classified as, "Other"*

# Section II.

## Asset Allocation

ERSRI Asset Allocation Tracking

| Functional Bucket | Aggregate Asset Class | Aggregate Allocation Weight | Asset Class | Strategic Benchmark Weight | (a) Target Asset Allocation | (b) Actual exposure as of 07/31/19 | (b) - (a) |
|---|---|---|---|---|---|---|---|
| GROWTH | Global Equity | 40.0% | US Equity | 22.1% | 22.1% | 25.5% | 3.4% |
| | | | International Developed Equity | 13.2% | 13.2% | 14.6% | 1.4% |
| | | | EM Equity | 4.7% | 4.7% | 5.1% | 0.4% |
| | Private Growth | 15.0% | PE | 11.0% | 11.25% | 7.2% | -4.0% |
| | | | Non-core RE | 2.5% | 2.25% | 1.7% | -0.6% |
| | | | Opp Private Credit | 1.5% | 1.5% | 0.6% | -0.9% |
| INCOME | Income | 8.0% | HY Infra | 1.5% | 1.0% | 1.4% | 0.4% |
| | | | REITs | 0.0% | 1.0% | 1.0% | 0.0% |
| | | | Liquid Credit | 3.5% | 2.8% | 3.7% | 0.9% |
| | | | Private Credit | 3.0% | 3.2% | 1.9% | -1.3% |
| STABILITY | CPC | 8.0% | Treasury Duration | 4.0% | 4.0% | 4.1% | 0.1% |
| | | | Systematic Trend | 4.0% | 4.0% | 4.0% | 0.0% |
| | Inflation Protection | 8.0% | Core RE | 4.0% | 3.6% | 4.3% | 0.7% |
| | | | Private Infra | 2.0% | 2.4% | 1.9% | -0.5% |
| | | | TIPs | 1.0% | 1.0% | 1.4% | 0.4% |
| | | | Nat' Resources | 1.0% | 1.0% | 0.0% | -1.0% |
| | Volatility Protection | 21.0% | IG Fixed Income | 11.5% | 11.5% | 11.1% | -0.4% |
| | | | Absolute Return | 6.5% | 6.5% | 6.6% | 0.1% |
| | | | Strategic Cash | 3.0% | 3.0% | 3.0% | 0.0% |
| OTHER | Short-term Tactical | - | Short-Term Cash | - | - | 0.6% | 0.6% |
| | | - | Russell Overlay | - | - | 0.2% | 0.2% |
| TOTAL | Total | 100.0% | | 100.0% | 100.0% | 100.0% | 0.0% |

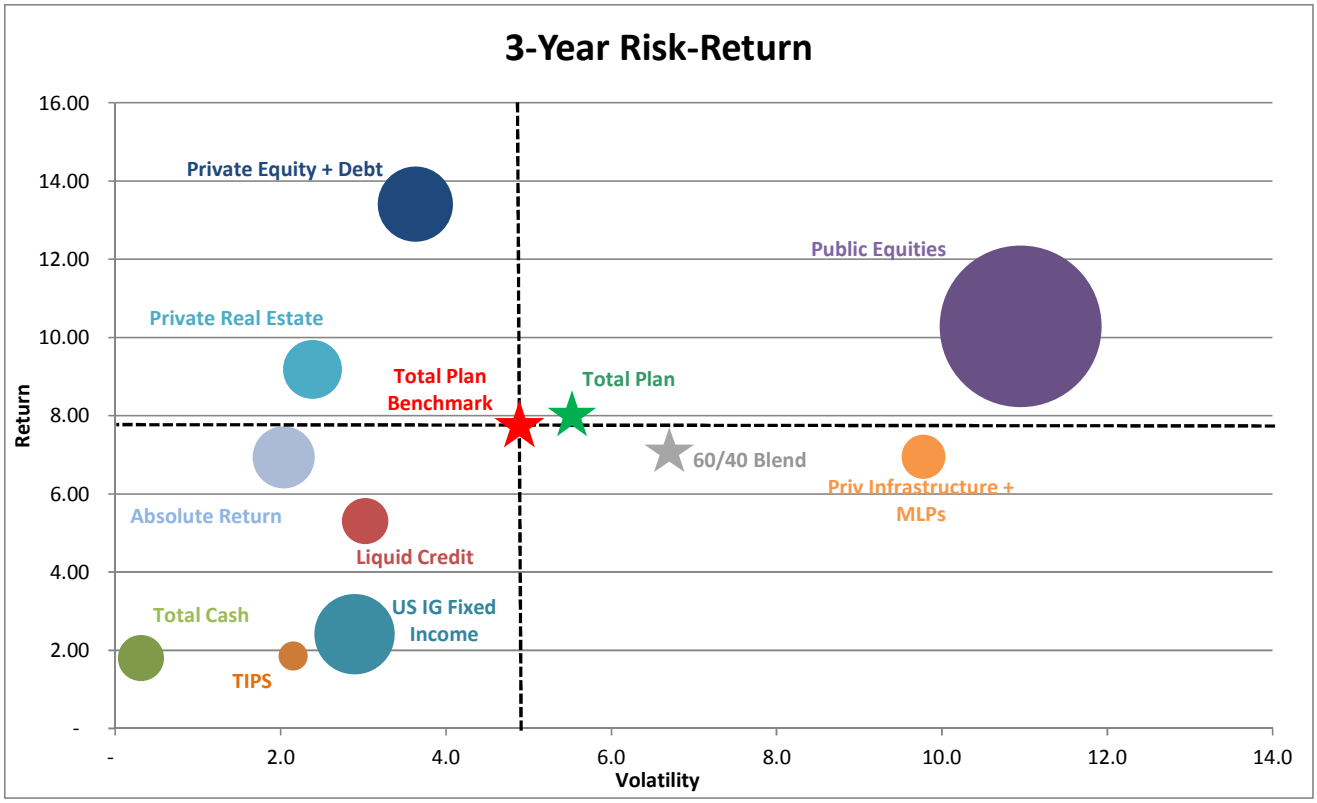
# Section III.

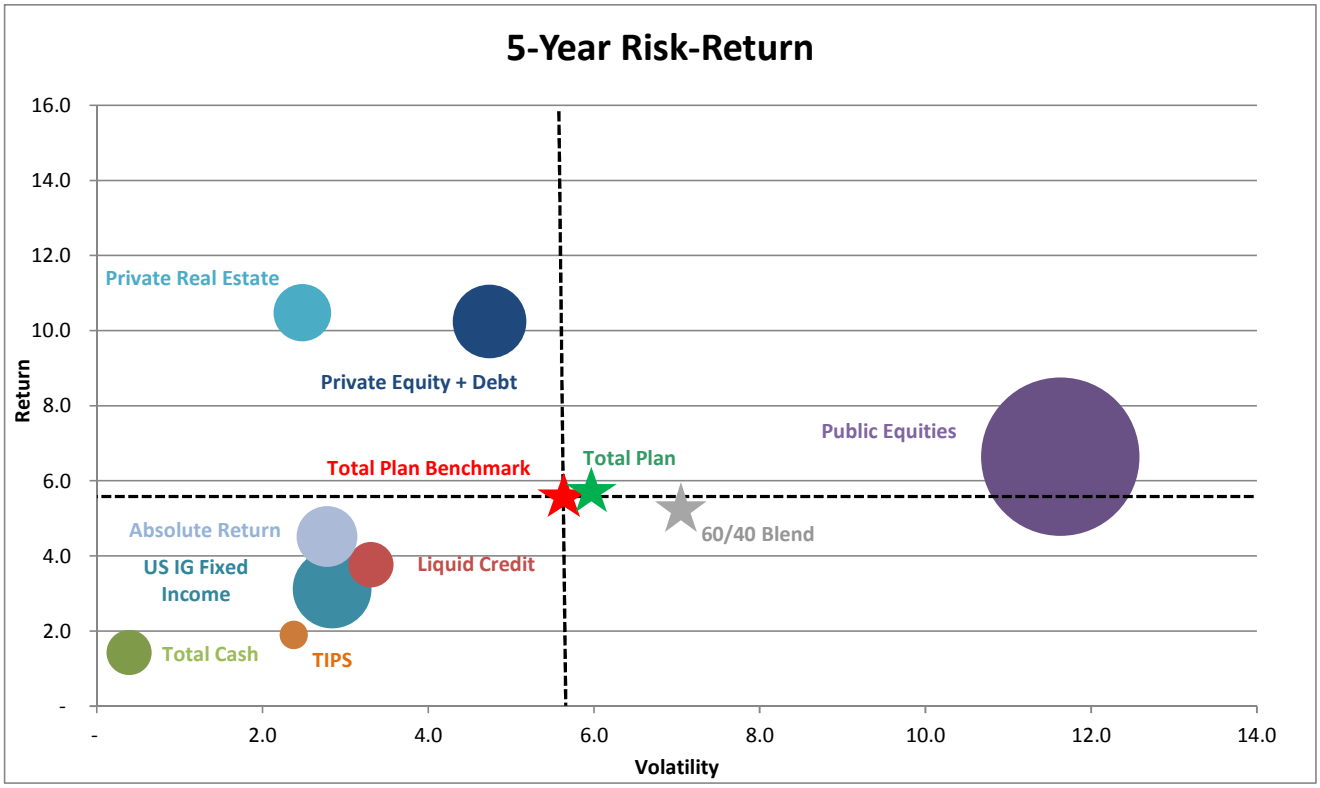
## Risk Overview

## ERSRI Portfolio

% - as of July 31st, 2019

***Bubble-Size Scaled based on Current Allocations***

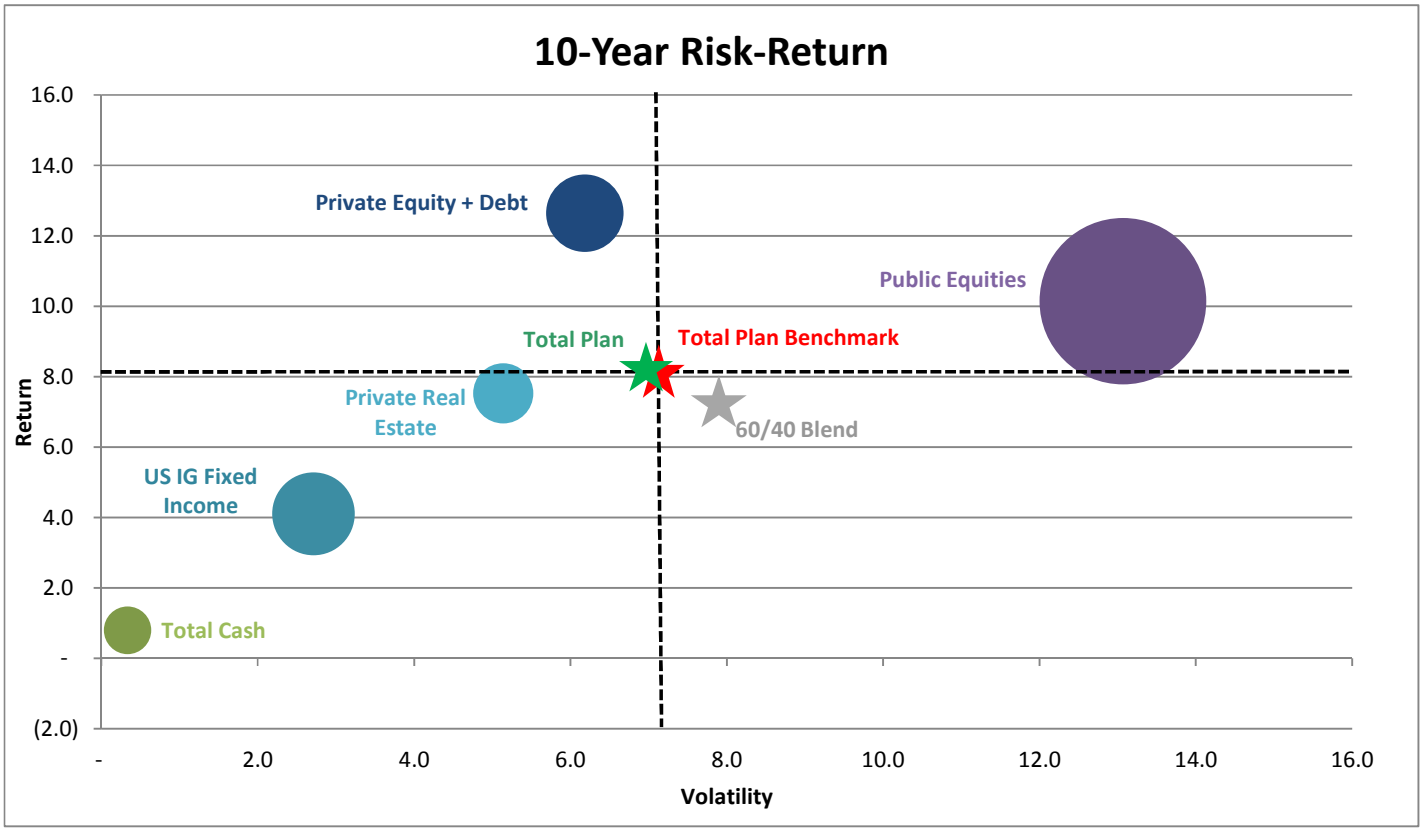


## ERSRI Portfolio

% - as of July 31st, 2019

***Bubble-Size Scaled based on Current Allocations***



# Section IV.

## Performance Overview

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name / *Benchmark Name* | Market Value | % of Total | Month | YTD | Fiscal YTD | 1 Year | Annualized 3 Years | Annualized 5 Years | Annualized 10 Years | Annualized ITD | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| US Public Equity | 1,354,424,484 | 16 | 1.54 | 20.66 | 1.54 | 7.30 | 13.20 | 11.05 | 13.72 | 8.48 | 8/1/2007 |
| *Russell 3000 Index* | | | *1.49* | *20.48* | *1.49* | *7.05* | *13.11* | *10.96* | *13.98* | *8.45* | *8/1/2007* |
| Non-US Public Equity | 1,194,189,753 | 14 | -1.21 | 11.94 | -1.21 | -1.96 | 7.44 | 2.32 | 5.66 | 7.69 | 5/1/2009 |
| *Total International Equity BM* | | | *-1.21* | *12.22* | *-1.21* | *-2.27* | *7.20* | *2.12* | *5.14* | *7.01* | *5/1/2009* |
| QVM Tilt | 1,284,255,287 | 15 | 0.07 | 14.63 | 0.07 | 1.48 | 10.17 | | | 10.80 | 10/1/2015 |
| *MSCI World Net Dividend Index* | | | *0.50* | *17.56* | *0.50* | *3.62* | *10.42* | | | *10.96* | *10/1/2015* |
| **Total Public Growth** | **3,832,869,524** | **45** | **0.19** | **15.88** | **0.19** | **2.32** | **10.28** | **6.64** | **10.15** | **4.84** | **7/1/2000** |
| ***MSCI All Country World Net Index*** | | | ***0.29*** | ***16.57*** | ***0.29*** | ***2.95*** | ***10.17*** | ***6.48*** | ***9.25*** | | ***7/1/2000*** |
| Private Equity | 613,851,051 | 7 | 0.06 | 3.86 | 0.06 | 12.91 | 14.90 | 11.11 | 13.09 | 9.63 | 2/1/1989 |
| *ILPA All Fds BM 1Q Lag 2* | | | *0.06* | *3.20* | *0.06* | *11.12* | *13.75* | *10.95* | *14.90* | | *2/1/1989* |
| Non Core Real Estate | 140,527,332 | 2 | 0.01 | 4.88 | 0.01 | 12.30 | | | | 18.58 | 7/1/2017 |
| Opportunistic Private Credit | 52,368,670 | 1 | 0.22 | -1.27 | 0.22 | 3.52 | | | | 10.39 | 7/1/2017 |
| *ILPA Distressed BM 1Q Lag* | | | *0.22* | *-3.42* | *0.22* | *0.39* | | | | *5.00* | *7/1/2017* |
| **Total Private Growth** | **806,747,053** | **10** | **0.07** | **3.73** | **0.07** | **12.19** | | | | **15.49** | **7/1/2017** |
| ***Private Growth Benchmark*** | | | ***0.25*** | ***2.77*** | ***0.25*** | ***9.78*** | | | | | ***7/1/2017*** |
| **TOTAL GROWTH COMPOSITE** | **4,639,616,577** | **55** | **0.18** | **13.75** | **0.18** | **3.76** | | | | **9.17** | **7/1/2017** |
| ***Total Growth Composite BM*** | | | ***0.28*** | ***12.84*** | ***0.28*** | ***5.15*** | | | | | ***7/1/2017*** |
| Harvest Fund Advisor | 117,136,419 | 1 | -1.55 | 19.85 | -1.55 | -5.03 | 1.10 | | | -4.24 | 1/1/2015 |
| *Alerian MLP Index* | | | *-0.19* | *16.73* | *-0.19* | *-3.46* | *-0.66* | | | *-5.75* | *1/1/2015* |
| Heitman US Focused | 81,475,067 | 1 | 1.16 | | 1.16 | | | | | 2.89 | 6/1/2019 |
| *MSCI US REIT Index* | | | *1.20* | | *1.20* | | | | | *2.32* | *6/1/2019* |
| Liquid Credit | 313,201,916 | 4 | 0.60 | 7.94 | 0.60 | 5.75 | 5.30 | 3.77 | | 3.74 | 5/1/2013 |
| *Liquid Credit BM (50% BoA US HY/50% CS LL)* | | | *0.65* | *8.48* | *0.65* | *5.53* | *5.26* | *4.42* | | *4.40* | *5/1/2013* |
| Private Credit | 162,536,716 | 2 | 0.46 | -0.64 | 0.46 | 1.29 | | | | 3.14 | 7/1/2017 |
| *S&P LSTA Lev Loans + 3%* | | | *1.75* | *3.87* | *1.75* | *7.24* | | | | *7.31* | *7/1/2017* |
| **TOTAL INCOME COMPOSITE** | **674,350,118** | **8** | **0.25** | **9.13** | **0.25** | **2.07** | | | | **3.58** | **7/1/2017** |
| ***Income Aggregate BM*** | | | ***0.90*** | ***8.35*** | ***0.90*** | ***4.69*** | | | | ***4.94*** | ***7/1/2017*** |
| CPC Long Duration | 346,542,187 | 4 | 0.16 | 11.19 | 0.16 | 14.37 | | | | 4.79 | 6/1/2017 |
| *Barclays US Treasury LT Index* | | | *0.16* | *11.16* | *0.16* | *14.16* | | | | *5.00* | *6/1/2017* |
| CPC Trend Following | 336,424,257 | 4 | 3.93 | 9.48 | 3.93 | 6.00 | | | | 1.62 | 6/1/2017 |
| *Credit Suisse Liquid Alt Beta* | | | *2.63* | *-0.16* | *2.63* | *6.91* | | | | *-1.55* | *6/1/2017* |
| **Total Crisis Protection** | **682,966,444** | **8** | **1.98** | **10.34** | **1.98** | **10.32** | | | | **3.61** | **6/1/2017** |
| ***50/50 CPC Custom BM*** | | | ***1.39*** | ***5.50*** | ***1.39*** | ***10.69*** | | | | ***2.05*** | ***6/1/2017*** |

Source: The Bank of New York Mellon Corporation

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name / *Benchmark Name* | Market Value | % of Total | Month | YTD | Fiscal YTD | 1 Year | Annualized 3 Years | Annualized 5 Years | Annualized 10 Years | Annualized ITD | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CPC Long Duration | 346,542,187 | 4 | 0.16 | 11.19 | 0.16 | 14.37 | | | | 4.79 | 6/1/2017 |
| *Barclays US Treasury LT Index* | | | *0.16* | *11.16* | *0.16* | *14.16* | | | | *5.00* | *6/1/2017* |
| CPC Trend Following | 336,424,257 | 4 | 3.93 | 9.48 | 3.93 | 6.00 | | | | 1.62 | 6/1/2017 |
| *Credit Suisse Liquid Alt Beta* | | | *2.63* | *-0.16* | *2.63* | *6.91* | | | | *-1.55* | *6/1/2017* |
| **Total Crisis Protection** | **682,966,444** | **8** | **1.98** | **10.34** | **1.98** | **10.32** | | | | **3.61** | **6/1/2017** |
| ***50/50 CPC Custom BM*** | | | ***1.39*** | ***5.50*** | ***1.39*** | ***10.69*** | | | | ***2.05*** | ***6/1/2017*** |
| Priv Listed Infrastructure | 164,558,863 | 2 | 1.29 | 9.89 | 1.29 | 14.08 | 13.98 | | | 10.15 | 3/1/2015 |
| *CPI + 4% 1 Mo Lag* | | | *0.36* | *3.93* | *0.36* | *5.65* | *6.05* | | | | *3/1/2015* |
| Core Real Estate | 362,541,651 | 4 | 0.92 | 3.27 | 0.92 | 6.14 | | | | 6.59 | 7/1/2017 |
| *NFI-ODCE BM 2* | | | *0.92* | *3.31* | *0.92* | *7.14* | | | | *6.83* | *7/1/2017* |
| Inflation-Linked Bonds | 122,989,268 | 1 | 0.20 | 5.46 | 0.20 | 5.36 | 1.85 | 1.89 | | 3.66 | 11/1/2009 |
| *Total Inflation Linked Custom* | | | *0.15* | *5.33* | *0.15* | *5.24* | *1.88* | *1.90* | | *3.65* | *11/1/2009* |
| **Total Inflation Protection** | **650,089,782** | **8** | **0.87** | **5.27** | **0.87** | **7.63** | | | | **6.96** | **7/1/2017** |
| ***Inflation Protection Custom BM*** | | | ***0.48*** | ***3.88*** | ***0.48*** | ***4.98*** | | | | ***5.23*** | ***7/1/2017*** |
| Absolute Return | 563,763,612 | 7 | 0.21 | 6.09 | 0.21 | 6.86 | | | | 6.94 | 7/1/2017 |
| *HFRI Fund of Funds Composite Index* | | | *0.26* | *6.43* | *0.26* | *1.20* | | | | *3.15* | *7/1/2017* |
| Traditional Fixed Income | 943,729,154 | 11 | 0.31 | 6.79 | 0.31 | 8.09 | 2.41 | 3.12 | 4.10 | 5.07 | 7/1/2000 |
| *Bloomberg Barclays U.S. Aggregate Bond Index* | | | *0.22* | *6.35* | *0.22* | *8.08* | *2.17* | *3.05* | *3.75* | *4.94* | *7/1/2000* |
| Strategic Cash | 253,821,806 | 3 | 0.21 | 1.89 | 0.21 | 2.69 | | | | 1.96 | 2/1/2017 |
| *ICE BofAML US Treasury Notes 0-1 Year* | | | *0.13* | *1.58* | *0.13* | *2.55* | | | | *1.70* | *2/1/2017* |
| **Total Volatility Protection** | **1,761,319,719** | **21** | **0.26** | **5.85** | **0.26** | **6.88** | | | | **4.54** | **7/1/2017** |
| ***Total Volitility Protection BM*** | | | ***0.22*** | ***5.69*** | ***0.22*** | ***5.15*** | | | | | ***7/1/2017*** |
| **TOTAL STABILITY COMPOSITE** | **3,094,375,945** | **36** | **0.77** | **6.68** | **0.77** | **7.84** | | | | **4.91** | **7/1/2017** |
| ***Total Stability Composite BM*** | | | ***0.53*** | ***5.30*** | ***0.53*** | ***6.40*** | | | | | ***7/1/2017*** |
| Short-Term Cash | 57,619,835 | 1 | 0.16 | 3.96 | 0.16 | 4.82 | | | | 3.06 | 7/1/2017 |
| Russell Overlay Fd | 20,408,516 | 0 | -0.01 | 0.19 | -0.01 | 0.22 | 0.05 | 0.04 | 0.01 | -0.03 | 9/1/2008 |
| **TOTAL PLAN** | **8,486,663,073** | **100** | **0.39** | **10.73** | **0.39** | **5.37** | **8.00** | **5.78** | **8.23** | **5.14** | **7/1/2000** |
| *Total Plan Benchmark* | | | *0.42* | *9.73* | *0.42* | *5.74* | *7.72* | *5.60* | *8.09* | | *7/1/2000* |
| *60/40 Blend* | | | *0.26* | *12.57* | *0.26* | *5.33* | *7.08* | *5.28* | *7.27* | | *7/1/2000* |
| **Total Plan ex PE,RE & Priv Inf** | **6,990,278,790** | **82** | **0.38** | **12.18** | **0.38** | **4.51** | **7.32** | **5.05** | **7.64** | **6.31** | **4/1/1996** |
| *Total Plan BM ex PE RE* | | | *0.28* | *11.94* | *0.28* | *3.78* | *6.87* | *4.72* | *7.55* | | *4/1/1996* |

Source: The Bank of New York Mellon Corporation

BNY MELLON

# Total Performance Summary

## END NOTES

**7/31/2019**

TOTAL PLAN

The current composition of the Total Plan Benchmark is as follows:

GROWTH

Total Public Growth

40% MSCI ACWI Net

Total Private Growth

11% ILPA All Funds Index

2.5% ODCE + 2.5%

1.5% ILPA/Cambridge Distressed Securities Index

INCOME

1.5% Alerian MLP Total Return

3.5% Liquid Credit Custom (50% BoA HY/50% CS LL)

3% S&P LSTA Lev Loans + 3%

STABILITY

Crisis Protection Class

4% CS Managed Futures 18% Vol Index

4% Barclays Long Duration US Treasury Index

Inflation Protection

2% CPI + 4%

4% NFI-ODCE Index

1% Barclays 1-10 Year TIPs Index

1% BB Commodity Index

Volatility Protection

11.5% Barclays Agg

6.5% HFRI FOF Composite

3.0% BofA Merrill Lynch US T-Notes 0-1 Yr

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name / *Benchmark Name* | Market Value | % of Total | Month | Cumulative 6/1/2019 - 6/30/2019 | Cumulative 5/1/2019 - 5/31/2019 | YTD | 2018 | 2017 | 2016 | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|
| US Public Equity | 1,354,424,484 | 16 | 1.54 | 7.02 | -6.45 | 20.66 | -5.17 | 21.14 | 12.84 | 8/1/2007 |
| *Russell 3000 Index* | | | *1.49* | *7.02* | *-6.47* | *20.48* | *-5.24* | *21.13* | *12.74* | *8/1/2007* |
| Non-US Public Equity | 1,194,189,753 | 14 | -1.21 | 6.05 | -5.57 | 11.94 | -13.85 | 27.76 | 5.01 | 5/1/2009 |
| *Total International Equity BM* | | | *-1.21* | *6.02* | *-5.37* | *12.22* | *-14.20* | *27.19* | *4.50* | *5/1/2009* |
| QVM Tilt | 1,284,255,287 | 15 | 0.07 | 6.51 | -6.16 | 14.63 | -7.96 | 23.36 | 7.58 | 10/1/2015 |
| *MSCI World Net Dividend Index* | | | *0.50* | *6.59* | *-5.77* | *17.56* | *-8.71* | *22.40* | *7.51* | *10/1/2015* |
| **Total Public Growth** | **3,832,869,524** | **45** | **0.19** | **6.54** | **-6.07** | **15.88** | **-9.20** | **24.11** | **8.78** | **7/1/2000** |
| ***MSCI All Country World Net Index*** | | | ***0.29*** | ***6.55*** | ***-5.93*** | ***16.57*** | ***-9.41*** | ***23.97*** | ***7.86*** | ***7/1/2000*** |
| Private Equity | 613,851,051 | 7 | 0.06 | 0.48 | 3.17 | 3.86 | 17.38 | 19.69 | 9.19 | 2/1/1989 |
| *ILPA All Fds BM 1Q Lag 2* | | | *0.06* | *0.48* | *3.17* | *3.20* | *15.96* | *15.70* | *8.04* | *2/1/1989* |
| Non Core Real Estate | 140,527,332 | 2 | 0.01 | 0.30 | 4.02 | 4.88 | 25.66 | | | 7/1/2017 |
| Opportunistic Private Credit | 52,368,670 | 1 | 0.22 | 0.14 | -0.99 | -1.27 | 11.81 | | | 7/1/2017 |
| *ILPA Distressed BM 1Q Lag* | | | *0.22* | *0.14* | *-0.99* | *-3.42* | *7.95* | | | *7/1/2017* |
| **Total Private Growth** | **806,747,053** | **10** | **0.07** | **0.42** | **3.05** | **3.73** | **18.83** | | | **7/1/2017** |
| ***Private Growth Benchmark*** | | | ***0.25*** | ***0.40*** | ***2.39*** | ***2.77*** | ***14.17*** | | | ***7/1/2017*** |
| **TOTAL GROWTH COMPOSITE** | **4,639,616,577** | **55** | **0.18** | **5.49** | **-4.61** | **13.75** | **-5.23** | | | **7/1/2017** |
| ***Total Growth Composite BM*** | | | ***0.28*** | ***4.87*** | ***-3.66*** | ***12.84*** | ***-3.24*** | | | ***7/1/2017*** |
| Harvest Fund Advisor | 117,136,419 | 1 | -1.55 | 3.70 | -1.83 | 19.85 | -13.27 | -5.26 | 20.64 | 1/1/2015 |
| *Alerian MLP Index* | | | *-0.19* | *2.64* | *-1.14* | *16.73* | *-12.42* | *-6.52* | *18.31* | *1/1/2015* |
| Heitman US Focused | 81,475,067 | 1 | 1.16 | 1.71 | | | | | | 6/1/2019 |
| *MSCI US REIT Index* | | | *1.20* | *1.10* | | | | | | *6/1/2019* |
| Liquid Credit | 313,201,916 | 4 | 0.60 | 1.29 | -0.68 | 7.94 | 0.78 | 3.54 | 9.59 | 5/1/2013 |
| *Liquid Credit BM (50% BoA US HY/50% CS LL)* | | | *0.65* | *1.34* | *-0.75* | *8.48* | *-0.57* | *4.60* | *9.63* | *5/1/2013* |
| Private Credit | 162,536,716 | 2 | 0.46 | -0.09 | 0.05 | -0.64 | 3.71 | | | 7/1/2017 |
| *S&P LSTA Lev Loans + 3%* | | | *1.75* | *0.05* | *1.77* | *3.87* | *8.19* | | | *7/1/2017* |
| **TOTAL INCOME COMPOSITE** | **674,350,118** | **8** | **0.25** | **1.47** | **-0.74** | **9.13** | **-2.47** | | | **7/1/2017** |
| ***Income Aggregate BM*** | | | ***0.90*** | ***1.10*** | ***0.12*** | ***8.35*** | ***0.57*** | | | ***7/1/2017*** |
| CPC Long Duration | 346,542,187 | 4 | 0.16 | 1.33 | 6.52 | 11.19 | -1.89 | | | 6/1/2017 |
| *Barclays US Treasury LT Index* | | | *0.16* | *1.34* | *6.54* | *11.16* | *-1.84* | | | *6/1/2017* |
| CPC Trend Following | 336,424,257 | 4 | 3.93 | 1.76 | 0.75 | 9.48 | -15.11 | | | 6/1/2017 |
| *Credit Suisse Liquid Alt Beta* | | | *2.63* | *1.31* | *1.26* | *-0.16* | *-10.01* | | | *6/1/2017* |
| **Total Crisis Protection** | **682,966,444** | **8** | **1.98** | **1.54** | **3.66** | **10.34** | **-7.99** | | | **6/1/2017** |
| ***50/50 CPC Custom BM*** | | | ***1.39*** | ***1.32*** | ***3.90*** | ***5.50*** | ***-5.45*** | | | ***6/1/2017*** |

Source: The Bank of New York Mellon Corporation

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name<br>*Benchmark Name* | Market Value | % of Total | Month | Cumulative<br>6/1/2019 - 6/30/2019 | Cumulative<br>5/1/2019 - 5/31/2019 | YTD | 2018 | 2017 | 2016 | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|
| Priv Listed Infrastructure | 164,558,863 | 2 | 1.29 | 1.66 | 1.16 | 9.89 | 13.32 | 12.45 | 13.35 | 3/1/2015 |
| *CPI + 4% 1 Mo Lag* | | | *0.36* | *0.53* | *0.84* | *3.93* | *6.18* | *6.20* | *5.69* | *3/1/2015* |
| Core Real Estate | 362,541,651 | 4 | 0.92 | 0.00 | 0.83 | 3.27 | 7.22 | | | 7/1/2017 |
| *NFI-ODCE BM 2* | | | *0.92* | *0.00* | *0.83* | *3.31* | *7.71* | | | *7/1/2017* |
| Inflation-Linked Bonds | 122,989,268 | 1 | 0.20 | 0.98 | 1.14 | 5.46 | -0.23 | 1.73 | 3.91 | 11/1/2009 |
| *Total Inflation Linked Custom* | | | *0.15* | *0.99* | *1.09* | *5.33* | *-0.25* | *1.90* | *4.01* | *11/1/2009* |
| **Total Inflation Protection** | **650,089,782** | **8** | **0.87** | **0.61** | **0.96** | **5.27** | **6.30** | | | **7/1/2017** |
| ***Inflation Protection Custom BM*** | | | ***0.48*** | ***0.59*** | ***0.34*** | ***3.88*** | ***3.84*** | | | ***7/1/2017*** |
| Absolute Return | 563,763,612 | 7 | 0.21 | 1.98 | -0.23 | 6.09 | 4.48 | | | 7/1/2017 |
| *HFRI Fund of Funds Composite Index* | | | *0.26* | *1.56* | *-0.96* | *6.43* | *-4.02* | | | *7/1/2017* |
| Traditional Fixed Income | 943,729,154 | 11 | 0.31 | 1.29 | 1.65 | 6.79 | -0.50 | 3.99 | 3.15 | 7/1/2000 |
| *Bloomberg Barclays U.S. Aggregate Bond Index* | | | *0.22* | *1.26* | *1.78* | *6.35* | *0.01* | *3.54* | *2.65* | *7/1/2000* |
| Strategic Cash | 253,821,806 | 3 | 0.21 | 0.23 | 0.28 | 1.89 | 1.88 | | | 2/1/2017 |
| *ICE BofAML US Treasury Notes 0-1 Year* | | | *0.13* | *0.30* | *0.24* | *1.58* | *1.92* | | | *2/1/2017* |
| **Total Volatility Protection** | **1,761,319,719** | **21** | **0.26** | **1.37** | **0.85** | **5.85** | **1.41** | | | **7/1/2017** |
| ***Total Volitility Protection BM*** | | | ***0.22*** | ***1.21*** | ***0.71*** | ***5.69*** | ***-0.95*** | | | ***7/1/2017*** |
| **TOTAL STABILITY COMPOSITE** | **3,094,375,945** | **36** | **0.77** | **1.25** | **1.46** | **6.68** | **0.57** | | | **7/1/2017** |
| ***Total Stability Composite BM*** | | | ***0.53*** | ***1.10*** | ***1.32*** | ***5.30*** | ***-0.79*** | | | ***7/1/2017*** |
| Short-Term Cash | 57,619,835 | 1 | 0.16 | 1.29 | -0.18 | 3.96 | 1.76 | | | 7/1/2017 |
| Russell Overlay Fd | 20,408,516 | 0 | -0.01 | 0.00 | 0.05 | 0.19 | 0.06 | -0.09 | 0.06 | 9/1/2008 |
| **TOTAL PLAN** | **8,486,663,073** | **100** | **0.39** | **3.56** | **-2.05** | **10.73** | **-2.69** | **14.48** | **7.35** | **7/1/2000** |
| *Total Plan Benchmark* | | | *0.42* | *3.18* | *-1.52* | *9.73* | *-1.94* | *14.30* | *6.42* | *7/1/2000* |
| *60/40 Blend* | | | *0.26* | *4.43* | *-2.85* | *12.57* | *-5.52* | *15.41* | *5.92* | *7/1/2000* |
| **Total Plan ex PE,RE & Priv Inf** | **6,990,278,790** | **82** | **0.38** | **4.22** | **-2.85** | **12.18** | **-5.64** | **14.66** | **6.97** | **4/1/1996** |
| *Total Plan BM ex PE RE* | | | *0.28* | *4.10* | *-3.06* | *11.94* | *-5.82* | *14.46* | *6.13* | *4/1/1996* |

BNY MELLON

# Total Performance Summary

## END NOTES

**7/31/2019**

TOTAL PLAN

Month - Current Month

Cumulative Months - Prior Month and Second Prior Month

Monthly Reporting for Private Equity and Real Estate skew performance on an actual and benchmark basis due to nature of valuations

The current composition of the Total Plan Benchmark is as follows:

GROWTH

- Total Public Growth
  - 40% MSCI ACWI Net
- Total Private Growth
  - 11% ILPA All Funds Index
  - 2.5% ODCE + 2.5%
  - 1.5% ILPA/Cambridge Distressed Securities Index

INCOME

- 1.5% Alerian MLP Total Return
- 3.5% Liquid Credit Custom (50% BoA HY/50% CS LL)
- 3% S&P LSTA Lev Loans + 3%

STABILITY

- Crisis Protection Class
  - 4% CS Managed Futures 18% Vol Index
  - 4% Barclays Long Duration US Treasury Index
- Inflation Protection
  - 2% CPI + 4%
  - 4% NFI-ODCE Index
  - 1% Barclays 1-10 Year TIPs Index
  - 1% BB Commodity Index
- Volatility Protection
  - 11.5% Barclays Agg
  - 6.5% HFRI FOF Composite
  - 3.0% BofA Merrill Lynch US T-Notes 0-1 Yr

# Section V.

## Private Equity & Private Credit

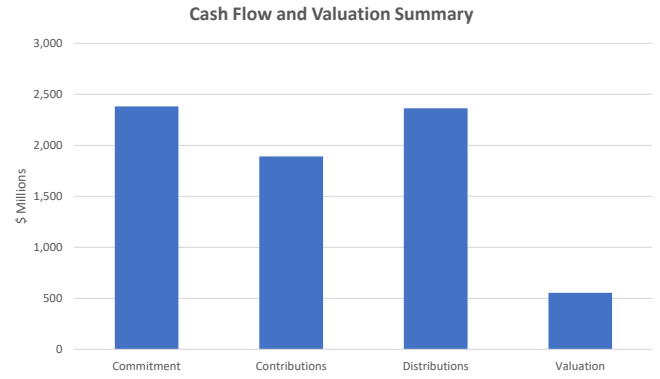
# Portfolio Summary

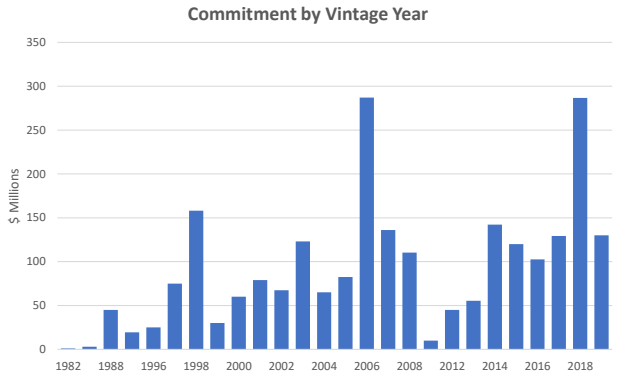
3/31/2019

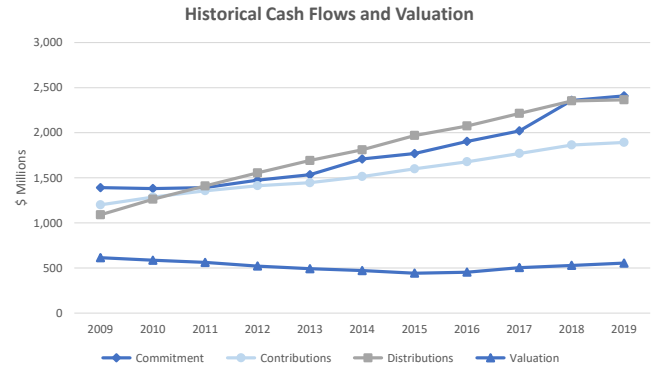
All Investments

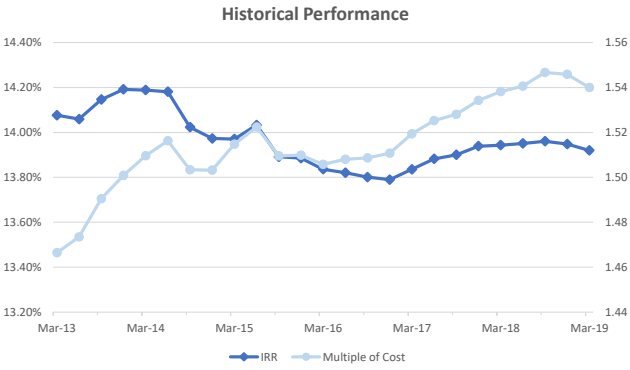
**Performance Summary**

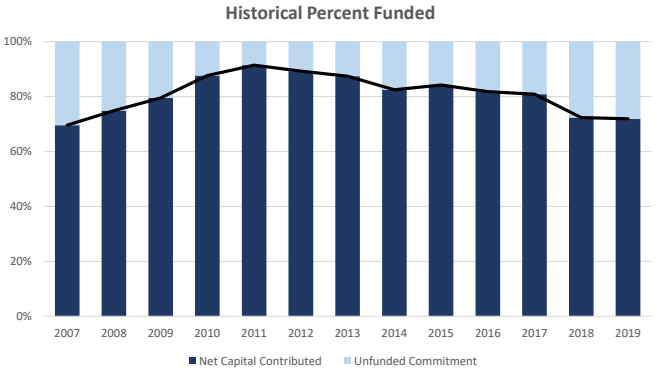
| Asset Class | Investment Type | Number of Investments | Commitment | Contributions | Distributions | Valuation | Multiple of Cost | IRR | TWR |
|---|---|---|---|---|---|---|---|---|---|
| Private Equity Funds | | | | | | | | | |
| | Buyout Total | 100 | 1,949,224,225 | 1,515,098,442 | 1,920,767,021 | 431,642,563 | 1.55 | 13.90% | 12.91% |
| | Fund of Funds Total | 1 | 45,000,000 | 45,000,000 | 106,748,821 | - | 2.37 | 19.94% | |
| | Secondary Total | 4 | 60,000,000 | 55,009,798 | 65,139,543 | 2,263,188 | 1.23 | 5.80% | 2.92% |
| | Venture Capital Total | 24 | 328,750,000 | 277,262,426 | 272,070,835 | 120,764,322 | 1.42 | 6.36% | 4.41% |
| **Total: Private Equity Funds** | | **129** | **2,382,974,225** | **1,892,370,665** | **2,364,726,221** | **554,670,073** | **1.54** | **13.92%** | **11.75%** |

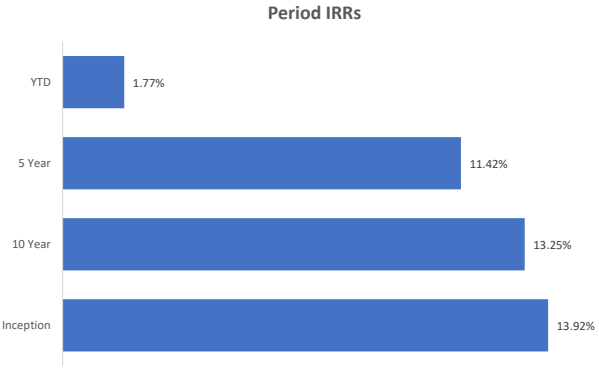


## Employees' Retirement System of Rhode Island Private Equity Performance
## 3/31/2019

| | | | | Cumulative Cash Flows ($) | | | | Cumulative Performance* | |
|---|---|---|---|---|---|---|---|---|---|
| Current Partnerships | Vintage Year | Type | Amount Committed (In $ unless otherwise noted) | Amount Drawn | Amount Distributed | Amount Unfunded | Valuation ($) | Net IRR (%) | Net Multiple of Investment |
| Nautic Partners V | 2000 | Buyout | 20,000,000 | 20,331,229 | 40,426,893 | 600,000 | 1,558,420 | 17.10 | 2.07 |
| CVC European Equity Partners III | 2001 | Buyout | € 20,000,000 | 23,760,732 | 59,551,716 | 200,000 | 1,368,763 | 41.03 | 2.56 |
| Parthenon Investors II | 2001 | Buyout | 23,960,000 | 23,409,381 | 37,415,960 | 1,916,800 | 573,090 | 12.30 | 1.62 |
| Nordic Capital V | 2003 | Buyout | € 14,615,550 | 18,765,999 | 49,480,701 | - | 303,752 | 20.21 | 2.65 |
| TPG Partners IV | 2003 | Buyout | 15,000,000 | 16,672,684 | 31,655,907 | - | 430,633 | 15.43 | 1.92 |
| Birch Hill Equity Partners III | 2005 | Buyout | CAD 18,000,000 | 15,351,618 | 27,561,124 | 134,811 | 3,335,814 | 13.04 | 2.01 |
| CVC Equity Partners IV | 2005 | Buyout | € 16,500,000 | 18,243,877 | 35,674,827 | 2,224,728 | 18,718 | 16.64 | 1.96 |
| Providence Equity Partners V | 2005 | Buyout | 25,000,000 | 31,142,133 | 36,171,706 | 2,250,000 | 417,013 | 3.08 | 1.17 |
| Fenway III | 2006 | Buyout | 15,000,000 | 17,230,534 | 14,757,733 | 1,050,000 | 12,625,693 | 7.30 | 1.59 |
| First Reserve Fund XI | 2006 | Buyout | 20,000,000 | 22,125,580 | 15,232,221 | - | 1,078,286 | -7.23 | 0.74 |
| Nordic Capital VI | 2006 | Buyout | € 15,000,000 | 18,303,741 | 31,390,519 | - | 284,646 | 8.63 | 1.73 |
| TPG Partners V | 2006 | Buyout | 20,000,000 | 20,697,887 | 26,822,109 | 400,000 | 1,664,872 | 4.94 | 1.38 |
| Green Equity V | 2007 | Buyout | 20,000,000 | 20,422,420 | 36,096,493 | 1,800,000 | 11,665,281 | 18.87 | 2.34 |
| Kayne Anderson IV | 2007 | Buyout | 15,000,000 | 16,605,519 | 17,447,153 | - | 457,630 | 2.53 | 1.08 |
| Nautic Partners VI | 2007 | Buyout | 20,000,000 | 24,233,473 | 50,881,593 | 600,000 | 4,444,755 | 17.44 | 2.28 |
| Providence Equity Partners VI | 2007 | Buyout | 25,000,000 | 29,513,869 | 30,733,812 | 1,250,000 | 7,626,728 | 5.19 | 1.30 |
| Trilantic Capital Partners IV | 2007 | Buyout | 11,098,351 | 11,609,004 | 17,225,336 | 1,442,786 | 1,387,546 | 13.77 | 1.60 |
| Bain Capital X | 2008 | Buyout | 25,000,000 | 24,300,000 | 34,805,799 | 750,000 | 6,486,571 | 10.14 | 1.70 |
| CVC Equity Partners V | 2008 | Buyout | € 20,000,000 | 24,599,133 | 45,513,478 | 224,720 | 8,196,807 | 20.06 | 2.18 |
| Nordic Capital VII | 2008 | Buyout | € 15,000,000 | 17,377,372 | 26,141,316 | 842,700 | 1,467,856 | 8.21 | 1.59 |
| TPG Partners VI | 2008 | Buyout | 10,000,000 | 13,924,603 | 16,373,879 | 400,000 | 2,742,181 | 8.69 | 1.37 |
| Advent International GPE VII-C | 2012 | Buyout | 20,000,000 | 18,800,000 | 14,905,218 | 1,200,000 | 18,668,793 | 16.69 | 1.79 |
| Providence Equity Partners VII | 2012 | Buyout | 25,000,000 | 30,519,012 | 24,790,996 | 5,250,000 | 23,490,158 | 21.33 | 1.58 |
| EnCap Energy IX | 2013 | Buyout | 18,000,000 | 20,073,861 | 14,046,872 | 1,080,000 | 12,972,971 | 13.32 | 1.35 |
| Nordic Capital VIII | 2013 | Buyout | € 15,000,000 | 17,969,655 | 11,360,325 | 10,112,400 | 15,656,111 | 16.47 | 1.50 |
| Riverside Capital Appreciation Fund VI | 2013 | Buyout | 20,000,000 | 17,830,110 | 8,942,472 | 2,800,000 | 17,224,212 | 13.93 | 1.47 |
| Carlyle Asia Partners IV | 2014 | Buyout | 30,000,000 | 33,101,492 | 11,240,310 | 3,300,000 | 28,432,668 | 8.07 | 1.20 |
| CVC Capital Partners VI | 2014 | Buyout | € 15,000,000 | 19,094,506 | 5,497,807 | 337,080 | 17,506,416 | 9.84 | 1.20 |
| Nautic Partners VII | 2014 | Buyout | 20,000,000 | 16,832,318 | 24,594,724 | 4,400,000 | 9,051,879 | 43.51 | 2.00 |
| Riverside Micro-Cap III | 2014 | Buyout | 20,000,000 | 20,016,076 | 14,135,671 | 4,200,000 | 34,961,753 | 27.46 | 2.45 |
| Sorenson Capital Partners III | 2014 | Buyout | 30,000,000 | 25,293,600 | 45,271 | 12,900,000 | 30,938,559 | 8.01 | 1.22 |
| Baring Asia VI | 2015 | Buyout | 15,000,000 | 13,716,435 | 2,868,159 | 3,450,000 | 15,120,412 | 15.89 | 1.31 |
| Centerbridge Capital Partners III | 2015 | Buyout | 25,000,000 | 13,982,509 | 5,224,192 | 15,750,000 | 14,038,361 | 13.75 | 1.38 |
| EnCap Energy X | 2015 | Buyout | 25,000,000 | 20,851,739 | 4,017,159 | 5,750,000 | 21,449,461 | 12.27 | 1.22 |
| Paine & Partners Capital IV | 2015 | Buyout | 30,000,000 | 21,049,724 | 6,305,447 | 9,900,000 | 20,508,868 | 11.10 | 1.27 |
| Advent International GPE VIII | 2016 | Buyout | 20,000,000 | 16,000,000 | - | 4,000,000 | 18,702,915 | 13.52 | 1.17 |
| Nautic Partners VIII | 2016 | Buyout | 20,000,000 | 10,623,443 | 11,217,232 | 10,400,000 | 4,064,873 | 69.06 | 1.44 |
| Southvest Partners VII | 2016 | Buyout | 37,500,000 | 12,131,321 | 1,492,471 | 25,875,000 | 6,445,418 | -60.84 | 0.65 |
| Tenex Capital Partners II | 2016 | Buyout | 25,000,000 | 14,282,669 | 867,395 | 11,250,000 | 15,346,806 | 8.41 | 1.14 |
| CVC Capital Partners VII | 2017 | Buyout | € 35,000,000 | 6,249,485 | 58,616 | 33,033,840 | 7,692,732 | N/M | 1.24 |
| EnCap Energy XI | 2017 | Buyout | 50,000,000 | 7,217,395 | - | 43,000,000 | 5,936,205 | N/M | 0.82 |
| RLH IV | 2017 | Buyout | 40,000,000 | 5,378,250 | - | 34,800,000 | 4,176,241 | N/M | 0.78 |
| Altaris Constellation Partners IV | 2018 | Buyout | 6,000,000 | 1,848,514 | - | 4,140,000 | 2,236,484 | N/M | 1.21 |
| Altaris IV | 2018 | Buyout | 24,000,000 | 6,326,439 | - | 17,760,000 | 7,287,445 | N/M | 1.15 |
| Carlyle Asia V | 2018 | Buyout | 50,000,000 | 4,201,587 | - | 46,000,000 | 3,696,673 | N/M | 0.88 |
| German Equity Partners V | 2018 | Buyout | € 21,500,000 | 434,946 | - | 23,674,252 | (9,211) | N/M | -0.02 |
| Level Equity Opportunities | 2018 | Buyout | 15,000,000 | 1,861,828 | - | 13,200,000 | 2,104,901 | N/M | 1.13 |
| Siris Partners IV | 2018 | Buyout | 50,000,000 | 7,629,044 | - | 42,500,000 | 7,061,562 | N/M | 0.93 |

*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the “J-Curve”, because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

## Employees' Retirement System of Rhode Island Private Equity Performance
## 3/31/2019

| Current Partnerships | Vintage Year | Type | Amount Committed (In $ unless otherwise noted) | Cumulative Cash Flows ($) Amount Drawn | Amount Distributed | Amount Unfunded | Valuation ($) | Cumulative Performance* Net IRR (%) | Net Multiple of Investment |
|---|---|---|---|---|---|---|---|---|---|
| Coller V | 2006 | Secondary | 15,000,000 | 12,620,912 | 16,688,507 | 3,300,000 | 1,462,492 | 8.20 | 1.44 |
| W Capital II | 2007 | Secondary | 15,000,000 | 14,896,718 | 19,924,585 | 1,650,000 | 800,696 | 10.28 | 1.39 |
| Granite Global Ventures II | 2004 | Venture Capital | 15,000,000 | 14,333,510 | 22,180,375 | 600,000 | 1,285,831 | 6.31 | 1.64 |
| Leapfrog II | 2005 | Venture Capital | 10,000,000 | 9,640,000 | 6,811,564 | 400,000 | 4,127,796 | 2.02 | 1.13 |
| Alta VIII | 2006 | Venture Capital | 15,000,000 | 15,000,000 | 26,908,151 | - | 11,869,077 | 17.72 | 2.59 |
| Castile Ventures III | 2006 | Venture Capital | 5,000,000 | 5,009,730 | 1,396,371 | - | 416,791 | -19.46 | 0.36 |
| Focus Ventures III | 2006 | Venture Capital | 15,000,000 | 15,000,000 | 7,303,561 | - | 1,138,143 | -9.22 | 0.56 |
| Granite Global Ventures III | 2006 | Venture Capital | 15,000,000 | 14,625,748 | 41,675,138 | 300,000 | 526,972 | 18.40 | 2.89 |
| Point 406 Ventures I | 2006 | Venture Capital | 10,000,000 | 11,197,207 | 9,439,777 | 400,000 | 8,119,829 | 7.38 | 1.57 |
| Point Judith Venture II | 2006 | Venture Capital | 5,000,000 | 6,282,046 | 7,923,814 | 100,000 | 1,226,328 | 5.76 | 1.46 |
| Lighthouse VI | 2007 | Venture Capital | 15,000,000 | 14,250,000 | 19,832,947 | 750,000 | 471,220 | 6.83 | 1.42 |
| Paladin III | 2008 | Venture Capital | 10,000,000 | 13,239,040 | 9,114,371 | 300,000 | 11,790,684 | 9.24 | 1.58 |
| Industry Ventures III | 2014 | Venture Capital | 25,000,000 | 24,624,401 | 4,725,803 | 1,750,000 | 34,964,968 | 19.00 | 1.61 |
| Industry Ventures III Co-Inv. | 2015 | Venture Capital | 15,000,000 | 10,395,765 | 181,258 | 4,650,000 | 14,721,997 | 20.71 | 1.43 |
| Industry Ventures IV | 2015 | Venture Capital | 10,000,000 | 4,425,396 | 87,701 | 5,600,000 | 5,479,972 | 15.47 | 1.26 |
| Level Equity Growth Partners IV | 2018 | Venture Capital | 17,500,000 | 1,573,531 | - | 15,925,000 | 1,352,133 | N/A | 0.86 |
| Industry Ventures V | 2019 | Venture Capital | 30,000,000 | 1,350,000 | - | 28,500,000 | 2,052,749 | N/A | 1.52 |
| Other funds in aggregate** | | | 205,000,000 | 57,666,735 | 47,030,814 | 151,400,000 | 19,687,933 | | |
| **Total** | | | **$ 1,563,384,283** | **$ 1,058,067,483** | **$ 1,084,195,349** | **$ 621,774,117** | **$ 554,394,332** | | |

*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the “J-Curve”, because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

**Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Braemar Energy Ventures III, Constellation Ventures III,Thomas, McNerney & Partners and Thomas McNerney & Partners II.“ In addition, other funds in aggregate includes commitments to funds where no capital has been drawn, as well as funds in final liquidation.

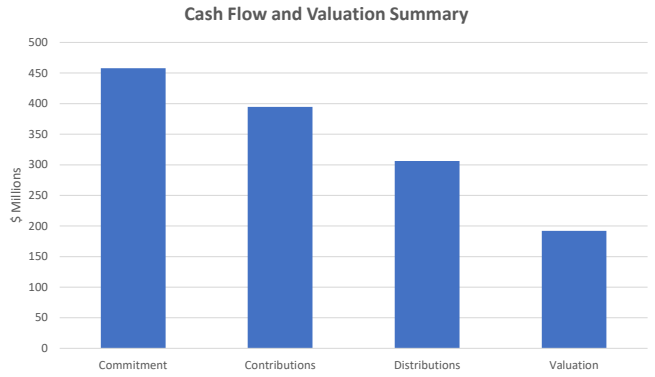
# Portfolio Summary

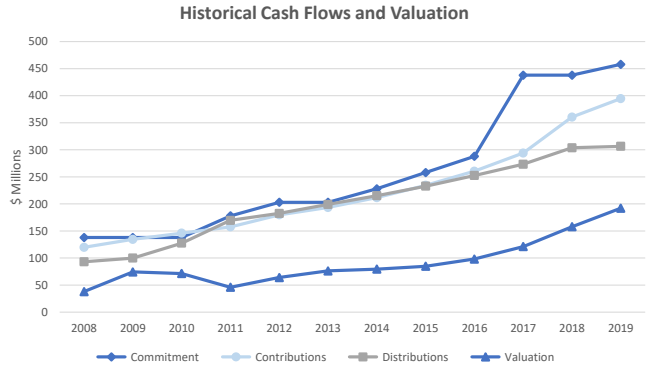
3/31/2019

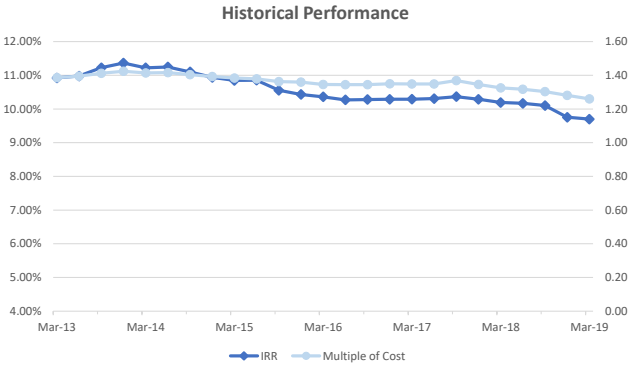
All Investments

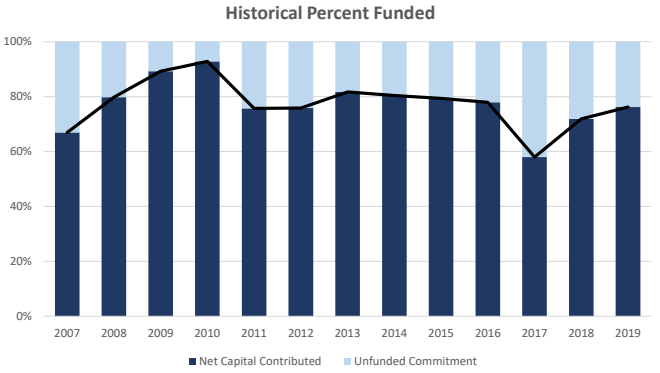
**Performance Summary**

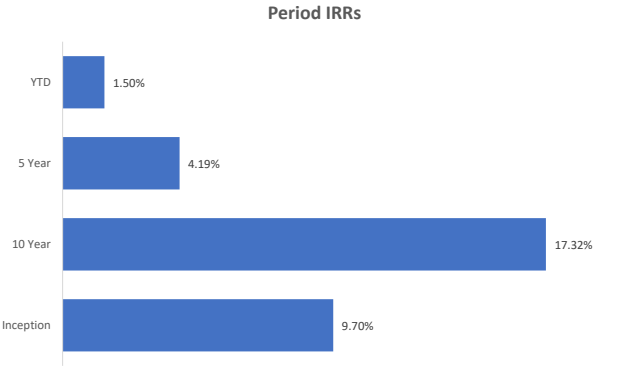
| Asset Class | Investment Type | Number of Investments | Commitment | Contributions | Distributions | Valuation | Multiple of Cost | IRR | TWR |
|---|---|---|---|---|---|---|---|---|---|
| Private Credit Funds | | | | | | | | | |
| | Distressed Debt Total | 14 | 233,000,000 | 224,215,764 | 253,878,307 | 59,173,531 | 1.40 | 10.26% | 9.74% |
| | Private Credit Total | 7 | 225,000,000 | 170,500,384 | 52,490,896 | 132,989,433 | 1.09 | 5.54% | 6.47% |
| **Total: Private Credit Funds** | | **21** | **458,000,000** | **394,716,148** | **306,369,203** | **192,162,964** | **1.26** | **9.70%** | **9.64%** |





## Employees' Retirement System of Rhode Island Private Credit Performance
## 3/31/2019

| | | | | Cumulative Cash Flows ($) | | | | Cumulative Performance* | |
|---|---|---|---|---|---|---|---|---|---|
| Current Partnerships | Vintage Year/Initial Investment | Type | Amount Committed (In $ unless otherwise noted) | Amount Drawn | Amount Distributed | Amount Unfunded | Valuation ($) | Net IRR (%) | Net Multiple of Investment |
| GOF IV | 2014 | Private Credit | $30,000,000 | $28,374,000 | $5,428,000 | - | $25,726,000 | 3.40 | 1.10 |
| CSIP V | 2016 | Private Credit | $30,000,000 | $23,545,000 | $3,445,000 | $8,100,000 | $22,367,000 | 7.40 | 1.10 |
| Virgo Societas Partnership IV | 2017 | Private Credit | $50,000,000 | $32,092,000 | - | $18,500,000 | $29,992,000 | N/A | 0.93 |
| Owl Rock Capital Corporation | 2018 | Private Credit | $50,000,000 | $35,549,000 | $1,895,000 | $14,500,000 | $35,181,000 | N/A | 1.04 |
| MHR III | 2006 | Opportunistic Private Credit | $20,000,000 | $20,800,000 | $21,109,000 | $7,000,000 | $7,451,000 | 6.03 | 1.37 |
| WLR Recovery IV | 2007 | Opportunistic Private Credit | $8,000,000 | $7,277,000 | $9,374,000 | $240,000 | $453,000 | 7.50 | 1.35 |
| OCM EPF III | 2011 | Opportunistic Private Credit | $20,000,000 | $17,150,000 | $13,136,000 | $5,800,000 | $14,317,000 | 10.55 | 1.60 |
| Centerbridge Sp. Credit II | 2012 | Opportunistic Private Credit | $25,000,000 | $22,500,000 | $19,351,000 | $2,500,000 | $5,439,000 | 2.46 | 1.10 |
| DK L-T Opps. IV | 2018 | Opportunistic Private Credit | $50,000,000 | $27,500,000 | - | $22,500,000 | $29,239,000 | N/A | 1.06 |
| Other funds in aggregrate** | | | $45,000,000 | $50,941,000 | $41,722,000 | $9,200,000 | $19,724,000 | | |
| **Total** | | | **$ 328,000,000** | **$ 265,728,000** | **$ 115,460,000** | **$ 88,340,000** | **$ 189,889,000** | | |

*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private equity where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the “J-Curve”, because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

**Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Summit Credit Partners I and Summit Credit Partners II.

# Section VI.

## Crisis Protection Class

## CPC Returns

CPC Program, July 31, 2019, %

| Account Name | MTD Return | Annualized Return (Since Inception) | Annualized Std. Dev (July '19) | Annualized Std. Dev (Since Inception) |
|---|---|---|---|---|
| Total CPC Program | 1.98 | 3.61 | 9.80 | 8.82 |
| CPC Trend | 3.93 | 1.62 | 11.31 | 15.02 |
| CPC Long Duration | 0.16 | 4.79 | 10.26 | 8.84 |

## Transitive Risk

CPC Program, 07/31/2019, USD

| Account Name | SPX +10% (No Decay) - P&L % MV | FTSE 100 +10% (No Decay) - P&L % MV | MSCI EM +10% (No Decay) - P&L % MV | Gold +10% (No Decay) - P&L % MV | Oil +10% (No Decay) - P&L % MV | 20+ Year Treasury +10% (No Decay) - P&L % MV | DXY +10% (No Decay) - P&L % MV | MSCI All Country -20% (No Decay) - P&L % MV |
|---|---|---|---|---|---|---|---|---|
| Total CPC Program | -0.23% | 0.64% | -0.11% | 2.01% | -0.44% | 8.22% | 2.69% | 0.67% |
| CPC Trend | 1.22% | 2.51% | 0.39% | 1.10% | -0.39% | 6.93% | 6.80% | -2.06% |
| CPC Long Duration | -1.65% | -1.18% | -0.60% | 2.90% | -0.49% | 9.48% | -1.32% | 3.34% |

## Return Correlation (Since Inception)

| | Total CPC Program | CPC Trend | CPC Long Duration |
|---|---|---|---|
| Total CPC Program | 1.00 | 0.86 | 0.55 |
| CPC Trend | 0.86 | 1.00 | 0.05 |
| CPC Long Duration | 0.55 | 0.05 | 1.00 |

## Return Correlation (JUL '19)

| | Total CPC Program | CPC Trend | CPC Long Duration |
|---|---|---|---|
| Total CPC Program | 1.00 | 0.91 | 0.90 |
| CPC Trend | 0.91 | 1.00 | 0.65 |
| CPC Long Duration | 0.90 | 0.65 | 1.00 |

# Section VII.

## Absolute Return

CLIFFWATER

**Employees' Retirement System of the State of Rhode Island**

Absolute Return Portfolio

Portfolio Performance Summary

Estimated as of July 31, 2019

| Fund | Market Value | Actual % | Returns Jul | QTD | YTD | FYTD | 1 Year | 3 Year | 5 Year | Incep | Std Dev | LTD Beta | Sharpe Ratio | Incep Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Absolute Return Portfolio** | | | | | | | | | | | | | | |
| Capula Global Relative Value Fund Ltd. | 77,129,775 | 13.5% | | 0.72% | 4.51% | 0.72% | 6.43% | 5.90% | 6.61% | 5.82% | 1.74% | -0.03 | 2.68 | Dec-11 |
| Davidson Kempner Institutional Partners, L.P. | 91,989,976 | 16.1% | 0.48% | 0.48% | 4.81% | 0.48% | 4.40% | 5.57% | 4.05% | 5.67% | 2.02% | 0.10 | 2.24 | Nov-11 |
| DE Shaw Composite Fund LLC | 125,782,622 | 22.0% | | 1.10% | 6.85% | 1.10% | 11.62% | 10.31% | 11.31% | 12.64% | 4.20% | 0.04 | 2.63 | Nov-11 |
| Elliott Associates, L.P. | 113,316,665 | 19.8% | -0.30% | -0.30% | 4.42% | -0.30% | 4.16% | 7.91% | 7.17% | 8.55% | 3.58% | 0.08 | 2.04 | Nov-11 |
| Graham Absolute Return Trading Ltd. | 53,831,108 | 9.4% | -1.82% | -1.82% | 6.13% | -1.82% | 4.32% | 3.93% | 3.80% | 3.02% | 5.71% | 0.08 | 0.39 | Jan-12 |
| Viking Global Equities, LP | 69,414,515 | 12.1% | -0.87% | -0.87% | 16.30% | -0.87% | 9.43% | 9.29% | 8.22% | 10.56% | 7.43% | 0.35 | 1.27 | Dec-11 |
| Winton Fund Limited | 39,418,449 | 6.9% | 2.57% | 2.57% | 2.70% | 2.57% | 1.25% | 1.90% | 4.50% | 3.63% | 8.23% | 0.12 | 0.36 | Dec-11 |
| Absolute Return Portfolio - Total | 570,883,110 | 99.8% | 0.22% | 0.22% | 6.40% | 0.22% | 6.48% | 7.23% | 5.01% | 6.14% | 3.06% | 0.17 | 1.66 | Nov-11 |
| HFRI Fund of Funds Composite Index | | | 0.72% | 0.72% | 6.91% | 0.72% | 1.66% | 3.98% | 2.41% | 3.32% | 3.58% | | 0.67 | Nov-11 |
| MSCI AC World Index Free - Net | | | 0.29% | 0.29% | 16.57% | 0.29% | 2.95% | 10.17% | 6.48% | 9.23% | 11.46% | | 0.75 | Nov-11 |
| ML 3-month T-Bills | | | 0.18% | 0.18% | 1.42% | 0.18% | 2.33% | 1.43% | 0.91% | 0.61% | 0.24% | | - | Nov-11 |
| 25% MSCI ACWI/75% Barclays Aggregate | | | 0.24% | 0.24% | 8.97% | 0.24% | 7.07% | 4.26% | 4.04% | 4.54% | 3.54% | | 1.01 | Nov-11 |
| **Liquidating Portfolio** | | | | | | | | | | | | | | |
| Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series (liquidating trust) | 322,630 | 0.1% | 0.00% | 0.00% | -1.45% | 0.00% | -5.47% | 1.91% | -16.17% | -10.10% | 17.94% | 0.36 | -0.55 | Jan-12 |
| Luxor Capital Partners, LP - Liquidating SPV | 808,487 | 0.1% | -0.01% | -0.01% | -16.98% | -0.01% | -16.30% | 3.55% | - | 2.97% | 19.09% | -0.40 | 0.16 | Jul-16 |
| Liquidating/Redeeming - Total | 1,131,118 | 0.2% | -0.01% | -0.01% | -13.07% | -0.01% | -13.09% | -2.20% | -3.08% | -1.06% | 7.49% | -0.08 | -0.23 | Nov-11 |
| Total Absolute Return Portfolio | 572,014,227 | 100.0% | 0.22% | 0.22% | 6.35% | 0.22% | 6.43% | 6.83% | 4.50% | 5.54% | 2.91% | 0.16 | 1.55 | Nov-11 |
| HFRI Fund of Funds Composite Index | | | 0.72% | 0.72% | 6.91% | 0.72% | 1.66% | 3.98% | 2.41% | 3.32% | 3.58% | | - | Nov-11 |
| **Market Indices** | | | | | | | | | | | | | | |
| Libor3Month | | | 0.19% | 0.19% | 1.45% | 0.19% | 2.54% | 1.83% | 1.26% | 0.93% | 0.24% | | - | Nov-11 |
| Bloomberg Barclays US Aggregate Bond Index | | | 0.22% | 0.22% | 6.36% | 0.22% | 8.10% | 2.18% | 3.05% | 2.84% | 2.83% | | 0.68 | Nov-11 |
| Bloomberg Barclays US High Yield Bond Index | | | 0.56% | 0.56% | 10.55% | 0.56% | 6.91% | 6.77% | 5.10% | 6.82% | 5.21% | | 1.12 | Nov-11 |
| S&P 500 TR | | | 1.44% | 1.44% | 20.24% | 1.44% | 7.99% | 13.36% | 11.34% | 14.20% | 11.07% | | 1.18 | Nov-11 |
| MSCI EAFE - Net | | | -1.27% | -1.27% | 12.58% | -1.27% | -2.60% | 6.87% | 2.39% | 5.99% | 12.77% | | 0.45 | Nov-11 |
| MSCI EMF (Emerging Markets Free) - Net | | | -1.22% | -1.22% | 9.24% | -1.22% | -2.18% | 8.42% | 1.84% | 3.01% | 15.57% | | 0.21 | Nov-11 |

*LTD Beta is calculated with Holding Level Returns. The market benchmark is MSCI AC World Index Free - Net Index

Most recent month returns are based on manager estimates; prior months use final market values.

Hedge Fund Research, Inc. ("HFR") is the source and owner of the HFR data contained or reflected in this report. The HFR indices included in this report are revised by HFR for up to three months following their initial release. The revisions are reflected in the trailing period returns.

This report reflects information only through the date hereof. Our due diligence and reporting rely upon the accuracy and completeness of financial information (which may or may not be audited by the fund manager) and other information publicly available or provided to us by the fund manager, its professional staff, and references we have contacted and other third parties. We have not conducted an independent verification of the information provided other than as described in this report. Our conclusions do not reflect an audit of the investment nor should they be construed as providing legal advice. Past performance does not guarantee future performance. The information contained herein is confidential commercial or financial information, the disclosure of which would cause substantial competitive harm to you, Cliffwater LLC, or the person or entity from whom the information was obtained, and may not be disclosed except as required by applicable law.

CLIFFWATER

**Employees' Retirement System of the State of Rhode Island**

Absolute Return Portfolio

Fund Level Performance Report

Estimated as of July 31, 2019

| | | | | | | Trailing Returns | | | Calendar Year Returns | | | | | 5 Yr | ITD Beta to | Sharpe Ratio | | | Start |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fund | QTD | YTD | Jul | Jun | May | 1 Year | 3 Year | 5 Year | 2018 | 2017 | 2016 | 2015 | 2014 | Std Dev | MSCI ACWI[1] | 3 yr | 5 yr | Incep. | Date |
| **Absolute Return** | | | | | | | | | | | | | | | | | | | |
| Capula Global Relative Value Fund Ltd. | 0.72% | 4.62% | | | | 6.50% | 5.93% | 6.63% | 4.63% | 3.79% | 8.37% | 7.54% | 8.14% | 1.58% | -0.03 | 2.43 | 3.14 | 1.83 | Oct-05 |
| Davidson Kempner Institutional Partners, L.P. | 0.48% | 4.59% | 0.48% | 0.69% | -0.33% | 4.03% | 5.24% | 3.81% | 1.81% | 6.11% | 6.71% | 1.51% | 4.45% | 2.01% | 0.10 | 1.70 | 1.25 | 1.54 | Mar-96 |
| DE Shaw Composite Fund LLC | 1.10% | 6.81% | | | | 11.47% | 10.09% | 10.78% | 11.38% | 10.41% | 6.12% | 13.68% | 15.57% | 4.23% | 0.03 | 1.99 | 2.15 | 1.60 | Mar-01 |
| Elliott Associates, L.P. | -0.30% | 4.33% | -0.30% | 2.70% | -0.10% | 3.81% | 7.53% | 6.75% | 2.91% | 8.80% | 12.98% | 2.51% | 8.24% | 3.69% | 0.08 | 1.73 | 1.45 | 1.87 | Jan-90 |
| Graham Absolute Return Trading Ltd. | -1.82% | 5.85% | -1.82% | 1.89% | -0.68% | 3.91% | 3.79% | 5.62% | 2.36% | -7.01% | 11.78% | 1.50% | 10.42% | 8.05% | 0.09 | 0.30 | 0.56 | 0.89 | Jan-05 |
| Viking Global Equities, LP | -0.90% | 16.06% | -0.90% | 6.20% | -0.60% | 12.79% | 10.77% | 9.09% | 4.64% | 13.01% | -3.92% | 8.27% | 13.47% | 7.89% | 0.33 | 1.27 | 0.99 | 1.42 | Oct-99 |
| Winton Fund Limited | 2.59% | 2.69% | 2.59% | -0.67% | -0.71% | 1.23% | 1.87% | 4.49% | -0.56% | 7.88% | -3.01% | 0.95% | 13.88% | 8.65% | 0.12 | 0.04 | 0.41 | 0.64 | Oct-97 |
| **Liquidating Portfolio** | | | | | | | | | | | | | | | | | | | |
| Indus Asia Pacific Fund, LP | 0.44% | -1.01% | 0.44% | -0.59% | -0.30% | -5.05% | 2.06% | -16.10% | -11.10% | 9.70% | -26.00% | -33.23% | -15.60% | 21.52% | 0.37 | 0.09 | -0.76 | 0.00 | Dec-00 |
| Luxor Capital Partners, LP | -0.01% | -16.98% | -0.01% | -20.13% | -0.17% | -16.30% | 14.84% | 1.16% | 1.19% | 54.38% | 7.80% | -19.05% | -9.83% | 17.17% | -0.39 | 0.71 | 0.08 | 0.71 | Apr-02 |
| **Benchmark** | | | | | | | | | | | | | | | | | | | |
| HFRI Fund of Funds Composite Index | 0.72% | 6.91% | 0.72% | 1.55% | -0.97% | 1.66% | 3.98% | 2.41% | -4.02% | 7.77% | 0.51% | -0.27% | 3.37% | 8.96% | | | | | Apr-90 |
| HFRI Fund Weighted Composite Index | 0.70% | 8.00% | 0.70% | 2.28% | -1.88% | 1.58% | 4.54% | 3.19% | -4.75% | 8.59% | 5.44% | -1.12% | 2.98% | 9.13% | | | | | Apr-90 |
| **Market Indices** | | | | | | | | | | | | | | | | | | | |
| 3 Month Libor - BOM | 0.19% | 1.45% | 0.19% | 0.19% | 0.21% | 2.54% | 1.83% | 1.26% | 2.36% | 1.29% | 0.76% | 0.33% | 0.23% | 0.25% | | | | | Apr-87 |
| Barclays Aggregate Bond Index | 0.22% | 6.36% | 0.22% | 1.26% | 1.78% | 8.10% | 2.18% | 3.05% | 0.02% | 3.55% | 2.66% | 0.57% | 5.94% | 2.93% | | | | | Apr-76 |
| Barclays High Yield Credit Bond Index | 0.56% | 10.55% | 0.56% | 2.28% | -1.19% | 6.91% | 6.77% | 5.10% | -2.08% | 7.50% | 17.14% | -4.46% | 2.46% | 5.49% | | | | | Oct-83 |
| S&P 500 (TR) | 1.44% | 20.24% | 1.44% | 7.05% | -6.35% | 7.99% | 13.36% | 11.34% | -4.38% | 21.83% | 11.96% | 1.38% | 13.69% | 11.99% | | | | | Sep-88 |
| MSCI EAFE - Net - USD | -1.27% | 12.58% | -1.27% | 5.93% | -4.80% | -2.60% | 6.87% | 2.39% | -13.79% | 25.03% | 1.00% | -0.81% | -4.90% | 12.26% | | | | | Mar-70 |
| MSCI EMF (EMERGING MARKETS FREE) - Net - USD | -1.22% | 9.24% | -1.22% | 6.24% | -7.26% | -2.18% | 8.42% | 1.84% | -14.58% | 37.28% | 11.19% | -14.92% | -2.19% | 15.77% | | | | | Mar-88 |

*LTD Beta is calculated with Fund Level Returns. The market benchmark is MSCI AC World Index Free - Net Index

Note: The above is manager composite history.

1. The inception date for this calculation is equivalent to the inception date of ERSRI's initial investment into the relevant fund.

# Section VIII.

## Real Estate

## PORTFOLIO SUMMARY

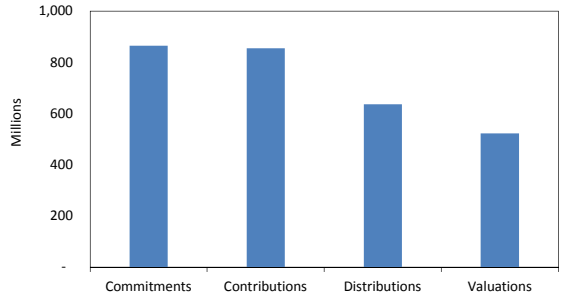
3/31/2019

All Portfolio Investments - Real Estate [1]

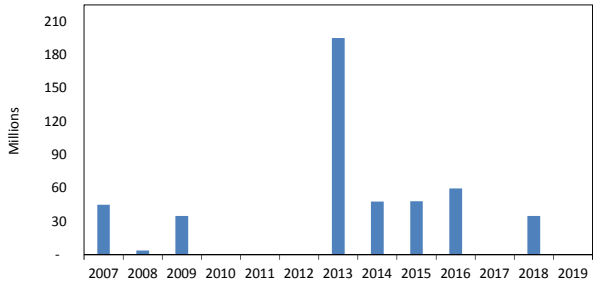
### Performance Summary

| Asset Class | Investment Type | Number of Investments [4] | Commitment | Contributions [2], [3] | Distributions [3] | Adjusted Valuation | Multiple of Cost | IRR | TWR |
|---|---|---|---|---|---|---|---|---|---|
| Real Estate Funds | Core | 8 | 414,873,660 | 483,006,182 | 401,543,062 | 365,450,699 | 1.6x | 5.5% | 5.7% |
| | Non-Core | 22 | 450,260,817 | 371,816,906 | 235,237,593 | 156,631,435 | 1.1x | 1.1% | 3.5% |
| **Total**: Real Estate Funds | | 30 | 865,134,477 | 854,823,088 | 636,780,655 | 522,082,134 | 1.4x | 4.6% | 5.1% |
| **Total:** | | **30** | **865,134,477** | **854,823,088** | **636,780,655** | **522,082,134** | **1.4x** | **4.6%** | **5.1%** |

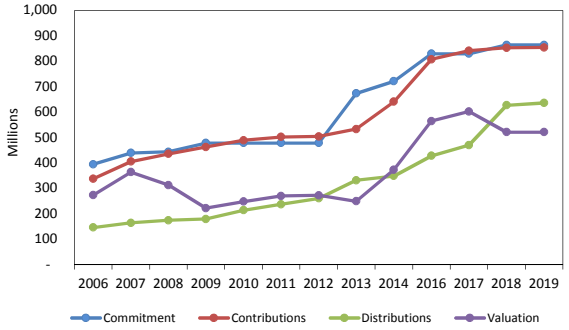
### Cash Flow and Valuation Summary



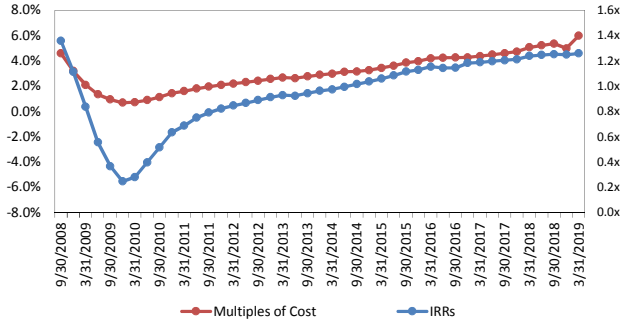

### Commitment by Vintage Year



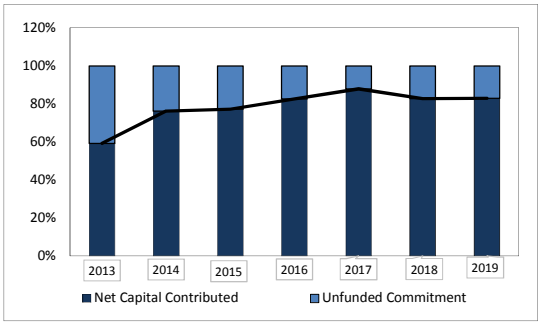

### Historical Cash Flows and Valuation



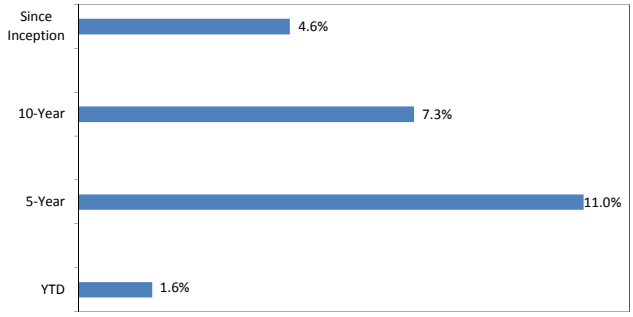

### Historical Performance




### Historical Percent Funded




### Period IRRs [5]




[1] Investment information listed as of March 31, 1989 through March 31, 2019 and includes those investments which have been liquidated.
[2] Contributions are based on cash activity and are higher than commitments primarily due to reinvestments and contributions for management fees in some of the core open-end funds.
[3] Contributions and Distributions each include activity in the amount of $33.5 million related to a simultaneous sale and purchase of shares in a core open-end fund.
[4] As of March 31, 2019 there are four core funds and eleven non-core funds.
[5] The YTD IRR presented is an unannualized percentage.

## Employees' Retirement System of Rhode Island Real Estate Performance
## 3/31/2019

| Current Partnerships | Vintage Year/Initial Investment | Type | Amount Committed (In $ unless otherwise noted) | Cumulative Cash Flows ($) | | | | Cumulative Performance* | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Amount Drawn | Amount Distributed | Amount Unfunded | Valuation ($) | Net IRR (%) | Net Multiple of Investment |
| Morgan Stanley Prime Property Fund | 2005 | Core | 35,000,000 | 35,000,000 | 24,946,857 | - | 65,749,484 | 7.3% | 2.2 |
| JP Morgan Strategic Property Fund | 2006 | Core | 75,000,000 | 75,000,000 | 33,241,056 | - | 110,485,829 | 6.2% | 1.7 |
| AEW Core Property Trust | 2010 | Core | 69,873,660 | 69,873,660 | 56,026,372 | - | 106,910,570 | 10.7% | 1.6 |
| Heitman America Real Estate Trust | 2014 | Core | 60,000,000 | 60,000,000 | 13,632,869 | - | 82,304,816 | 9.3% | 1.4 |
| TriCon Capital Fund VII | 2005 | Non-Core | 15,000,000 | 14,571,533 | 4,764,094 | 428,467 | 508,434 | -16.1% | 0.3 |
| Magna Hotel Fund III | 2008 | Non-Core | 4,000,000 | 3,426,573 | 5,752,069 | 573,427 | 22,767 | 14.4% | 1.7 |
| IC Berkeley Partners III | 2013 | Non-Core | 18,000,000 | 16,038,326 | 23,180,613 | 1,961,674 | 1,565,761 | 20.0% | 1.5 |
| GEM Realty Fund V | 2013 | Non-Core | 50,000,000 | 39,874,323 | 13,044,378 | 10,125,677 | 46,103,746 | 12.2% | 1.4 |
| Exeter Industrial Value Fund III | 2014 | Non-Core | 30,000,000 | 29,099,454 | 40,258,332 | 900,546 | 15,378,979 | 29.5% | 1.9 |
| Waterton Fund XII | 2014 | Non-Core | 35,000,000 | 34,265,141 | 9,659,455 | - | 41,873,415 | 14.5% | 1.4 |
| Crow Holdings Retail Fund | 2015 | Non-Core | 24,000,000 | 20,935,313 | 3,184,374 | 3,064,687 | 23,807,952 | 11.0% | 1.3 |
| Lone Star Real Estate Fund IV | 2015 | Non-Core | 24,260,817 | 19,056,195 | 14,184,323 | 5,204,622 | 12,956,163 | 19.7% | 1.4 |
| IC Berkeley Partners IV | 2016 | Non-Core | 30,000,000 | 11,541,818 | 1,783,071 | 18,458,182 | 12,402,276 | 4.9% | 1.1 |
| GEM Realty Fund VI | 2017 | Non-Core | 20,000,000 | 1,604,599 | 1,200,000 | 18,395,401 | 1,130,910 | 2.2% | 1.0 |
| Raith Real Estate II | 2018 | Non-Core | 35,000,000 | 905,699 | - | 34,094,301 | 881,032 | N/A | N/A |
| **Total** | | | **$ 525,134,477** | **$ 431,192,634** | **$ 244,857,863** | **$ 93,206,984** | **$ 522,082,134** | | |

*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private real estate where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the “J-Curve”, because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

# Section IX.

## Infrastructure

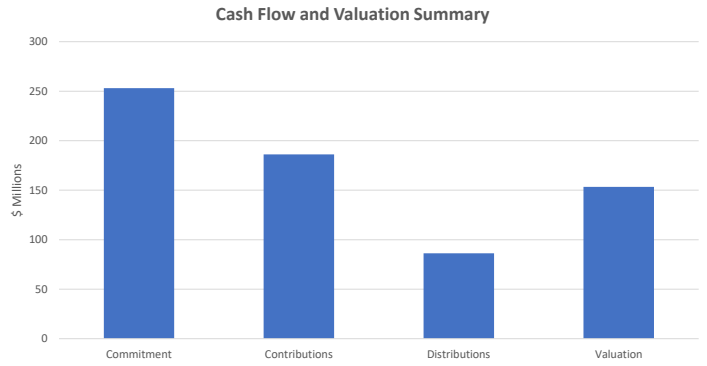
# Portfolio Summary

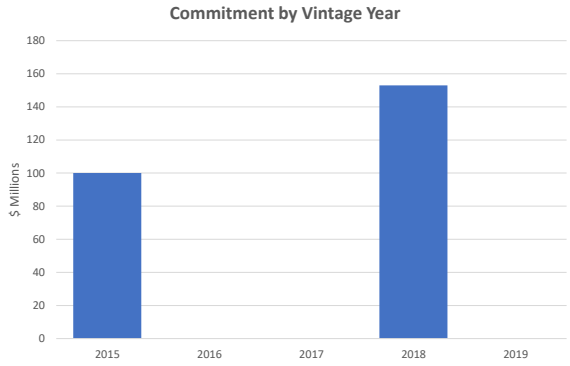
3/31/2019

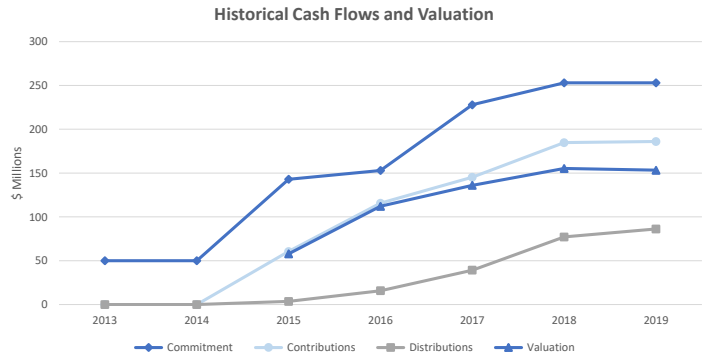
All Investments

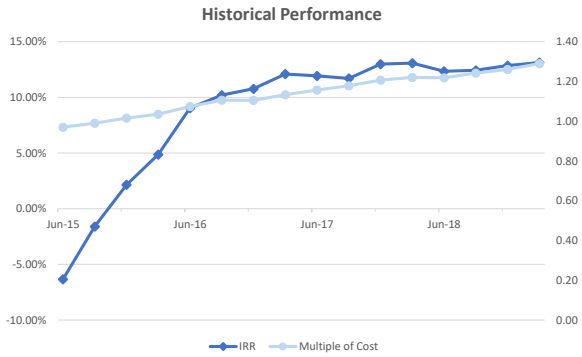
**Performance Summary**

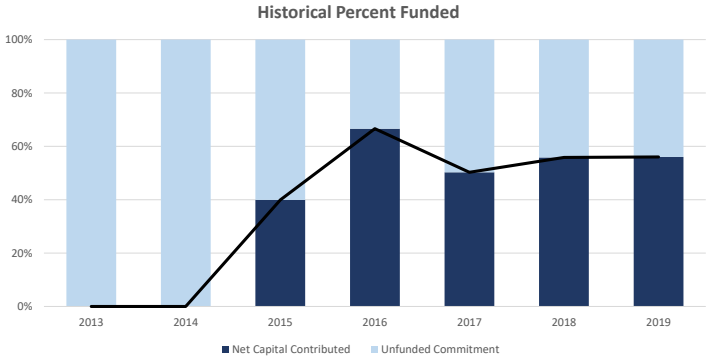
| Asset Class | Investment Type | Commitment | Contributions | Distributions | Valuation | Multiple of Cost | IRR |
|---|---|---|---|---|---|---|---|
| Infrastructure Funds | | | | | | | |
| | Homestead Capital USA Farmland Fund III, L.P. | 25,000,000 | - | - | - | - | |
| | IFM Global Infrastructure Fund | 50,032,902 | 50,032,902 | 20,776,714 | 53,450,279 | 1.48 | 11.65% |
| | ISQ Global Infrastructure Fund (UST), L.P. | 50,000,000 | 63,929,349 | 36,767,189 | 43,461,865 | 1.25 | 14.97% |
| | ISQ Global Infrastructure Fund II (UST), L.P. | 40,000,000 | 10,771,131 | 895,179 | 10,626,919 | 1.07 | 15.86% |
| | Stonepeak Infrastructure Fund II - Master Co- Investment Partners LP | 10,000,000 | 9,152,453 | 624,544 | 9,787,064 | 1.14 | 10.45% |
| | Stonepeak Infrastructure Fund II Cayman (G AIV) LP | 43,000,000 | 47,878,289 | 26,359,318 | 31,988,731 | 1.22 | 15.11% |
| | Stonepeak Infrastructure Fund III LP | 35,000,000 | 4,299,316 | 822,809 | 3,985,405 | 1.12 | 15.35% |
| **Total: Infrastructure Funds** | | **253,032,902** | **186,063,440** | **86,245,753** | **153,300,263** | **1.29** | **13.12%** |

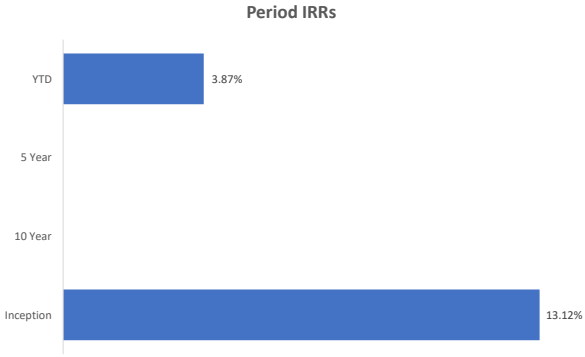


## Employees' Retirement System of Rhode Island Private Infrastructure Performance
## 3/31/2019

| Current Partnerships | Vintage Year/Initial Investment | Type | Cumulative Cash Flows ($) | | | | | Cumulative Performance* | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Amount Committed (In $ unless otherwise noted) | Amount Drawn | Amount Distributed | Amount Unfunded | Valuation ($) | Net IRR (%) | Net Multiple of Investment |
| IFM Global Infrastructure, L.P. | 2015 | Core | 50,000,000 | 50,033,000 | 20,777,000 | - | 53,450,000 | 11.7 | 1.5 |
| ISQ Global Infrastructure Fund, L.P. | 2015 | Value-Add | 50,000,000 | 63,929,000 | 36,767,000 | 12,500,000 | 43,462,000 | 15.0 | 1.3 |
| ISQ Global Infrastructure Fund II, L.P. | 2017 | Value-Add | 40,000,000 | 10,771,000 | 895,000 | 30,000,000 | 10,627,000 | N/A | 1.1 |
| Stonepeak Infrastructure Fund II, L.P. | 2016 | Opportunistic | 43,000,000 | 47,878,000 | 26,359,000 | 11,610,000 | 31,989,000 | 15.1 | 1.2 |
| Stonepeak Infrastructure Fund II-C | 2016 | Opportunistic | 10,000,000 | 9,152,000 | 625,000 | 1,300,000 | 9,787,000 | 10.5 | 1.1 |
| Stonepeak Infrastrucutre Fund III | 2018 | Opportunistic | 35,000,000 | 4,299,000 | 823,000 | 31,500,000 | 3,985,000 | N/A | 1.1 |
| **Total** | | | **$ 228,000,000** | **$ 186,062,000** | **$ 86,246,000** | **$ 86,910,000** | **$ 153,300,000** | | |

*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private real estate where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that the fund's current value plus any cash distributions are greater than the cash value contributed and management fees paid. Typically a fund will have a negative IRR during the first few years of its life, a period referred to as the “J-Curve”, because cash is invested upfront and it takes time to generate value. It is important to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

# Section X.

## Cash Flow

**CASH FLOW ANALYSIS - INCOME & EXPENSES**

**Employees Retirement System**

| **FISCAL YEAR 2020** | FY 2019-20 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | Projected June | Projected May | Projected April | Projected March | Projected February | Projected January 2019 | Projected December | Projected November | Projected October | Projected September | Projected August | Actual July 2019 |
| MEMBER BENEFITS | **833,163,777** | **69,132,324** | **69,155,407** | **69,178,465** | **69,266,687** | **69,343,077** | **69,424,081** | **69,501,214** | **69,654,074** | **69,729,526** | **69,703,524** | **69,681,837** | **69,393,560** |
| ADMINISTRATIVE EXPENSES | **8,669,915** | **1,245,040.43** | **610,799** | **594,437** | **861,267** | **801,556** | **610,285** | **912,931** | **777,303** | **684,123** | **733,118** | **483,861** | **355,195** |
| INVESTMENT EXPENSES | **46,492,790** | **10,037,448** | **17,681** | **18,470** | **10,062,340** | **20,460** | **18,168** | **13,124,115** | **19,955** | **18,146** | **13,138,426** | **0** | **17,581** |
| TOTAL OUTFLOW | **888,326,482** | **80,414,813** | **69,783,888** | **69,791,371** | **80,190,294** | **70,165,093** | **70,052,534** | **83,538,260** | **70,451,332** | **70,431,795** | **83,575,068** | **70,165,698** | **69,766,336** |
| CONTRIBUTIONS | **558,155,925** | **50,184,219** | **62,786,062** | **44,874,628** | **55,109,606** | **36,090,355** | **54,923,714** | **34,863,860** | **55,191,655** | **43,359,980** | **27,337,674** | **31,357,169** | **62,077,003** |
| OTHER INCOME* | **98,976,173** | **3,294,658** | **8,361,789** | **(926,666)** | **683,544** | **10,162,489** | **5,717,704** | **1,540,773** | **19,157,026** | **(2,560,631)** | **30,034,164** | **18,350,593** | **5,160,730** |
| TOTAL INCOME | **657,132,098** | **53,478,877** | **71,147,851** | **43,947,962** | **55,793,150** | **46,252,844** | **60,641,418** | **36,404,633** | **74,348,681** | **40,799,349** | **57,371,838** | **49,707,762** | **67,237,733** |
| DIFFERENCE | **(231,194,384)** | **(26,935,936)** | **1,363,964** | **(25,843,409)** | **(24,397,144)** | **(23,912,249)** | **(9,411,116)** | **(47,133,628)** | **3,897,349** | **(29,632,446)** | **(26,203,230)** | **(20,457,936)** | **(2,528,602)** |

**Municipal Employees Retirement System**

| | TOTAL | Projected June | Projected May | Projected April | Projected March | Projected February | Projected January 2019 | Projected December | Projected November | Projected October | Projected September | Projected August | Actual July 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEMBER BENEFITS | **100,705,482** | **8,492,798** | **8,506,904** | **8,490,720** | **8,451,729** | **8,415,263** | **8,384,093** | **8,351,832** | **8,338,550** | **8,310,615** | **8,246,506** | **8,185,416** | **8,531,056** |
| ADMINISTRATIVE EXPENSES | **2,097,411** | **303,272** | **148,540** | **144,781** | **209,053** | **194,360** | **147,562** | **220,523** | **186,896** | **164,492** | **175,891** | **115,551** | **86,489** |
| INVESTMENT EXPENSES | **11,241,358** | **2,444,966** | **4,300** | **4,499** | **2,442,403** | **4,961** | **4,393** | **3,170,198** | **4,798** | **4,363** | **3,152,198** | **0** | **4,281** |
| TOTAL OUTFLOW | **114,044,251** | **11,241,036** | **8,659,743** | **8,640,000** | **11,103,185** | **8,614,584** | **8,536,047** | **11,742,553** | **8,530,245** | **8,479,470** | **11,574,595** | **8,300,967** | **8,621,827** |
| CONTRIBUTIONS | **74,547,424** | **6,431,212** | **5,735,660** | **9,706,407** | **6,695,695** | **5,748,136** | **6,227,640** | **6,054,796** | **6,104,213** | **5,723,536** | **5,286,222** | **4,903,739** | **5,930,168** |
| OTHER INCOME* | **23,830,371** | **802,527** | **2,033,494** | **(225,699)** | **165,915** | **2,464,179** | **1,382,494** | **372,182** | **4,606,150** | **(615,683)** | **7,205,857** | **4,382,324** | **1,256,630** |
| TOTAL INCOME | **98,377,795** | **7,233,739** | **7,769,154** | **9,480,708** | **6,861,610** | **8,212,315** | **7,610,134** | **6,426,978** | **10,710,363** | **5,107,853** | **12,492,079** | **9,286,063** | **7,186,798** |
| DIFFERENCE | **(15,666,456)** | **(4,007,297)** | **(890,589)** | **840,707** | **(4,241,575)** | **(402,268)** | **(925,913)** | **(5,315,576)** | **2,180,119** | **(3,371,616)** | **917,484** | **985,097** | **(1,435,029)** |

**CASH FLOW ANALYSIS - INCOME & EXPENSES**

**State Police**
Retirement System

| | TOTAL | Projected June | Projected May | Projected April | Projected March | Projected February | Projected January 2019 | Projected December | Projected November | Projected October | Projected September | Projected August | Actual July 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEMBER BENEFITS | 6,000,550 | 499,445 | 499,445 | 499,445 | 499,003 | 508,193 | 499,263 | 499,263 | 499,263 | 499,263 | 499,263 | 499,263 | 499,445 |
| ADMINISTRATIVE EXPENSES | 189,230 | 27,589 | 13,497 | 13,113 | 18,896 | 17,553 | 13,297 | 19,845 | 16,748 | 14,740 | 15,742 | 10,327 | 7,884 |
| INVESTMENT EXPENSES | 1,013,440 | 222,419 | 391 | 407 | 220,762 | 448 | 396 | 285,288 | 430 | 391 | 282,118 | 0 | 390 |
| TOTAL OUTFLOW | 7,203,219 | 749,453 | 513,332 | 512,965 | 738,660 | 526,194 | 512,955 | 804,396 | 516,440 | 514,393 | 797,122 | 509,589 | 507,719 |
| CONTRIBUTIONS | 6,042,078 | 446,796 | 643,522 | 418,874 | 517,636 | 553,816 | 464,517 | 381,166 | 668,195 | 473,748 | 511,035 | 444,510 | 518,267 |
| OTHER INCOME* | 2,141,651 | 73,006 | 184,770 | -20,442 | 14,997 | 222,547 | 124,577 | 33,493 | 412,753 | (55,171) | 644,915 | 391,653 | 114,554 |
| TOTAL INCOME | 8,183,728 | 519,802 | 828,291 | 398,432 | 532,632 | 776,363 | 589,093 | 414,658 | 1,080,947 | 418,577 | 1,155,949 | 836,162 | 632,821 |
| DIFFERENCE | 980,509 | (229,651) | 314,959 | (114,534) | (206,028) | 250,169 | 76,138 | (389,737) | 564,507 | (95,817) | 358,827 | 326,573 | 125,102 |

**Judicial**
**Retirement System**

| | TOTAL | Projected June | Projected May | Projected April | Projected March | Projected February | Projected January 2019 | Projected December | Projected November | Projected October | Projected September | Projected August | Actual July 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEMBER BENEFITS | 3,615,912 | 307,623 | 307,623 | 307,623 | 305,669 | 303,954 | 304,022 | 303,781 | 303,781 | 288,071 | 288,071 | 288,071 | 307,623 |
| ADMINISTRATIVE EXPENSES | 99,853 | 14,526 | 7,110 | 6,912 | 9,960 | 9,255 | 7,016 | 10,482 | 8,859 | 7,797 | 8,326 | 5,463 | 4,147 |
| INVESTMENT EXPENSES | 534,871 | 117,108 | 206 | 215 | 116,360 | 236 | 209 | 150,694 | 227 | 207 | 149,204 | 0 | 205 |
| TOTAL OUTFLOW | 4,250,636 | 439,256 | 314,939 | 314,749 | 431,989 | 313,445 | 311,247 | 464,958 | 312,868 | 296,075 | 445,601 | 293,534 | 311,976 |
| CONTRIBUTIONS | 2,979,127 | 241,159 | 365,766 | 241,379 | 242,261 | 221,422 | 219,459 | 212,730 | 310,382 | 219,155 | 218,491 | 240,520 | 246,403 |
| OTHER INCOME* | 1,169,345 | 38,439 | 97,335 | (10,775) | 7,904 | 155,323 | 65,732 | 17,692 | 218,340 | (29,185) | 341,078 | 207,202 | 60,259 |
| TOTAL INCOME | 4,148,471 | 279,598 | 463,101 | 230,604 | 250,166 | 376,745 | 285,191 | 230,421 | 528,722 | 189,971 | 559,569 | 447,722 | 306,662 |
| DIFFERENCE | (102,164) | (159,659) | 148,162 | (84,145) | (181,823) | 63,300 | (26,056) | (234,536) | 215,854 | (106,105) | 113,968 | 154,188 | (5,313) |

*includes income from Real Estate Investments, Private Equity, and Cash Accounts

**FISCAL YEAR 2019** **INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES**

**ERSRI Pooled Trust** **ACCRUAL BASIS**

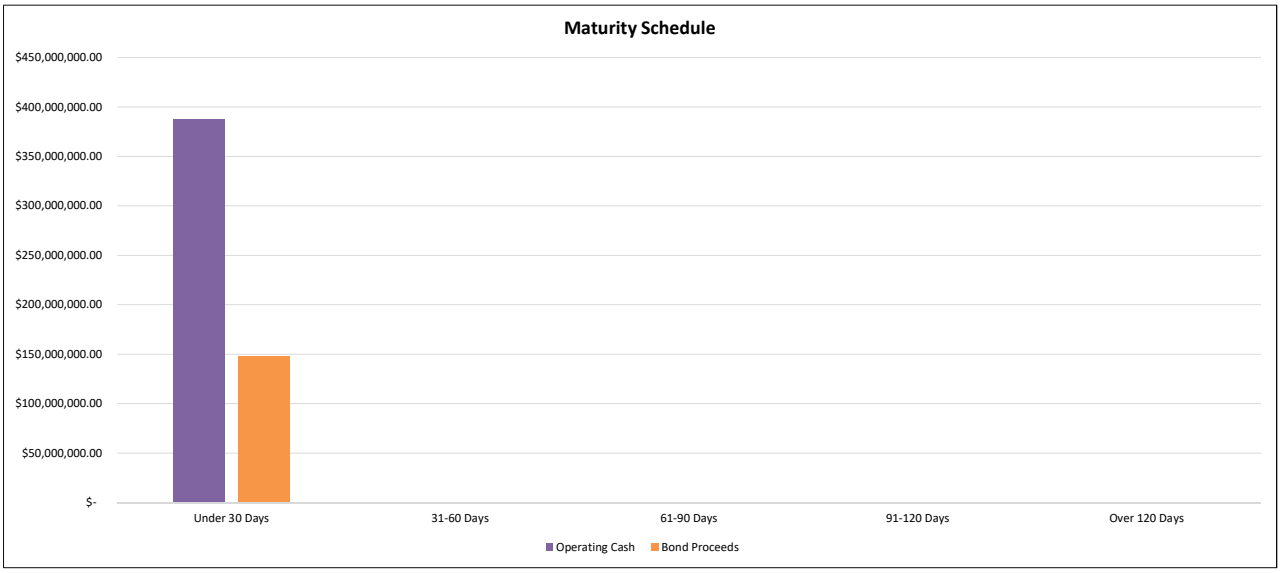
| | Actual Jul 18 | Actual Aug | Actual Sept | Actual Oct | Actual Nov | Actual Dec | Actual Jan 19 | Actual Feb | Actual Mar | Actual Apr | Projected May | Projected June | Projected TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***EQUITIES US*** | | | | | | | | | | | | | |
| *SSGA Russell 3000* | | | **43,255** | | | **39,306** | | | **41,382** | | | 39,443 | 163,387 |
| *Shott Capital/Hamilton Lane* | | | **415** | | | **433** | | | **397** | | | **411** | 1,655 |
| *SSGA QVM Tilt* | | | **191,631** | | | **176,942** | | | **184,413** | | | 123,000 | 675,986 |
| | | | 235,301 | | | 216,681 | | | 226,192 | | | 169,654 | 171,842 |
| ***FIXED INCOME*** | | | | | | | | | | | | | |
| *Fidelity* | | | **154,815** | | | **154,702** | | | **156,378** | | | 156,000 | 621,895 |
| *Mackay Shields* | | | **142,952** | | | **141,668** | | | **143,021** | | | 156,000 | 583,641 |
| *Brown Bros.TIPS/GILB* | | | **62,949** | | | **62,713** | | | **58,201** | | | 65,000 | 248,864 |
| | | | 360,716 | | | 359,083 | | | 357,600 | | | 377,000 | 1,454,400 |
| ***INT'L EQUITIES*** | | | | | | | | | | | | | |
| *SSGA MSCI EAFE* | | | **57,473** | | | **48,673** | | | **51,137** | | | **52,643** | 209,926 |
| *SSGA MSCI CAD* | | | **7,206** | | | **4,475** | | | **4,857** | | | **5,000** | 21,538 |
| *SSGA MSCI Emerg Mkts* | | | **108,247** | | | **99,109** | | | **107,615** | | | **106,956** | 421,926 |
| | | | 172,925 | | | 152,257 | | | 163,610 | | | 164,599 | 653,391 |
| ***CREDIT*** | | | | | | | | | | | | | |
| *WAMCO* | | | **108,676** | | | **26,024** | | | 0 | | | 0 | 134,701 |
| *Loomis* | | | **0** | | | **98,149** | | | **135,471** | | | **139,585** | 373,204 |
| *PIMCO* | | | **117,474** | | | **110,540** | | | **95,752** | | | 117,000 | 440,766 |
| | | | 226,150 | | | 234,713 | | | 231,223 | | | 256,585 | 948,671 |
| ***Infrastructure*** | | | | | | | | | | | | | |
| *Harvest Partners* | | | **302,413** | | | **262,883** | | | **278,016** | | | **252,085** | 1,095,398 |
| ***Systematic Trend Followers*** | **202,916** | **210,203** | **203,143** | **205,889** | **186,893** | **209,195** | **201,311** | **174,376** | **193,353** | **197,917** | **209,964** | **189,352** | 2,384,511 |
| ***Long Duration*** | | | | | | | | | | | | | |
| *WAMCO* | | | **30,519** | | | **29,694** | | | **30,230** | | | **31,939** | 122,381 |
| *Mackay Shields* | | | **30,563** | | | **29,948** | | | **30,391** | | | 32,000 | 122,901 |
| | | | 61,081 | | | 59,642 | | | 60,620 | | | 63,939 | 245,282 |
| ***REAL ESTATE*** | 0 | 0 | **2,268,181** | 0 | 0 | **1,316,299** | 0 | 0 | **6,013,911** | 0 | 0 | 3,900,000 | 13,498,391 |
| ***ALTERNATIVE INVESTMENTS*** | | | | | | | | | | | | | |
| *Private Infrastructure* | | | **1,526,570** | | | **1,962,839** | | | **1,707,969** | | | 2,250,000 | 7,447,378 |
| *Hedge Funds* | | | **4,907,979** | | | **2,549,827** | | | **7,307,576** | | | 5,500,000 | 20,265,382 |
| *Private Equity* | | | **5,786,256** | | | **2,143,095** | | | **9,861,859** | | | 5,000,000 | 22,791,210 |
| | 0 | 0 | 12,220,805 | 0 | 0 | 6,655,761 | 0 | 0 | 18,877,404 | 0 | 0 | 12,750,000 | 50,503,970 |
| ***Other*** | | | | | | | | | | | | | |
| *Russell Overlay* | | | **48,690** | | | **49,978** | | | **50,441** | | | 75,000 | 224,109 |
| *Payden & Rygel* | **22,355** | **21,954** | **19,940** | **19,222** | **20,880** | **21,487** | **22,168** | **24,378** | **22,361** | **22,792** | **21,054** | 23,400 | 261,991 |
| | 22,355 | 21,954 | 68,630 | 19,222 | 20,880 | 71,465 | 22,168 | 24,378 | 72,802 | 22,792 | 21,054 | 98,400 | 486,100 |
| ***SUB TOTAL-INV MGMT FEES*** | 225,271 | 232,157 | 16,119,347 | 225,111 | 207,773 | 9,537,980 | 223,479 | 198,754 | 26,474,732 | 220,709 | 231,018 | 18,221,613 | 71,441,956 |
| ***PROFESSIONAL FEES*** | | | | | | | | | | | | | |
| *Legal* | **8,276** | **11,982** | **10,063** | **12,274** | **4,470** | **4,919** | **4,881** | **6,374** | **15,521** | **16,633** | **14,961** | **12,081** | 122,435 |
| *BNY Mellon - Custodial* | **52,464** | **41,456** | **52,175** | **45,409** | **43,050** | **47,847** | **46,421** | **47,520** | **46,224** | **42,213** | 42,000 | 42,000 | 548,779 |
| *Cliffwater* | **33,333** | **33,333** | **33,334** | **33,333** | **33,333** | **33,334** | **33,333** | **33,333** | **33,334** | **33,333** | **33,333** | **33,333** | 400,000 |
| *PCA General & Infrastructure* | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | **6,250** | 75,000 |
| *NEPC* | 0 | 0 | **91,250** | 0 | 0 | **91,250** | 0 | 0 | **91,250** | 0 | 0 | **91,250** | 365,000 |
| *Aberdeen* | **26,494** | **26,564** | **25,723** | **25,746** | **24,308** | **25,677** | **25,931** | **23,031** | **26,163** | **26,092** | **27,514** | **27,313** | 310,555 |
| *PCA Real Estate* | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | **10,417** | 125,004 |
| | 137,234 | 130,001 | 229,211 | 133,429 | 121,827 | 219,694 | 127,233 | 126,925 | 229,160 | 134,938 | 134,475 | 222,645 | 1,946,772 |
| ***OPERATING EXPENSE*** | | | | | | | | | | | | | |
| *Retirement Transfers* | **319,579** | **913,890** | **551,642** | **720,898** | **1,057,736** | **553,937** | **968,951** | **780,086** | **630,965** | **630,113** | **719,889** | **1,714,037** | 9,561,722 |
| *Other Expense* | 0 | 0 | **19,000** | 0 | | **29,250** | **6,098** | **2,005** | **25,394** | **96** | **3,080** | **6,420** | 91,343 |
| | 319,579 | 913,890 | 570,642 | 720,898 | 1,057,736 | 583,187 | 975,048 | 782,091 | 656,359 | 630,209 | 722,969 | 1,720,457 | 9,653,065 |
| ***TOTAL:*** | **682,084** | **1,276,048** | **16,919,200** | **1,079,438** | **1,387,336** | **10,340,860** | **1,325,759** | **1,107,770** | **27,360,251** | **985,856** | **1,088,462** | **20,164,715** | **83,041,794** |

Note: Numbers in bold are actual.

# Section XII.

## Short-Term Investments

## Short-Term Investment Maturity Schedule & SIC Compliance Report at July 31, 2019




| SHORT-TERM INVESTMENT OPERATING PORTFOLIO BALANCES | | | | | | |
|---|---|---|---|---|---|---|
| Vendor | CD | CDARS | Money Mkt | CoD | OSIP | Total ($) |
| Guidelines-Total/Vendor | 50%/20% | 50%/20% | 75%/35% | 75%/35% | 50%/50% | |
| OSIP | - | - | - | - | 118,981,942 | $ 118,981,941.89 |
| | 0% | 0% | 0% | 0% | 31% | 30.7% |
| Bank RI | - | - | 10,275,107 | - | - | $ 10,275,106.71 |
| | 0% | 0% | 3% | 0% | 0% | 2.6% |
| Santander Bank | - | - | - | 29,077,681 | - | $ 29,077,680.62 |
| | 0% | 0% | 0% | 7% | 0% | 7.5% |
| People's Credit Union Comm Dep. | - | 2,701,648 | - | - | - | $ 2,701,647.52 |
| | 0% | 1% | 0% | 0% | 0% | 0.70% |
| Navigant Credit Union Comm Dep | - | 6,282,248 | - | - | - | $ 6,282,248.13 |
| | 0% | 2% | 0% | 0% | 0% | 1.62% |
| Fidelity | - | - | - | - | - | - |
| | 0% | 0% | 0% | 0% | 0% | 0.00% |
| Bristol County Savings Bk Comm Dep | - | - | - | 4,853,857 | - | $ 4,853,856.61 |
| | 0% | 0% | 0% | 1% | 0% | 1.25% |
| Centreville Bank | | 15,175,424 | - | - | - | $ 15,175,423.86 |
| Community Deposit | - | 7,357,949 | - | - | - | $ 7,357,949.07 |
| | 0% | 2% | 0% | 0% | 0% | 5.81% |
| Citizens Bank | - | - | - | 58,861,612 | - | $ 58,861,612.01 |
| | 0% | 0% | 0% | 15% | 0% | 15.2% |
| Webster Bank | - | - | - | 53,389,232 | - | $ 53,389,231.92 |
| | 0% | 0% | 0% | 14% | 0% | 13.8% |
| Customers Bank | - | - | - | 31,798,808 | - | $ 31,798,808.12 |
| | 0% | 0% | 0% | 8% | 0% | 8.2% |
| Washington Trust | - | 21,598,819 | - | - | - | $ 21,598,818.99 |
| Community Deposit | - | 2,862,868 | - | - | - | $ 2,862,867.66 |
| | 0% | 6% | 0% | 0% | 0% | 6.3% |
| Freedom National Community Dep. | - | - | - | 2,053,228 | - | $ 2,053,228.00 |
| | 0% | 0% | 0% | 1% | 0% | 0.5% |
| TD Bank | - | - | - | 22,889,113 | - | $ 22,889,113.11 |
| | 0% | 0% | 0% | 6% | 0% | 5.9% |
| BankNewport Community Deposit | - | - | - | - | - | $ - |
| | 0% | 0% | 0% | 0% | 0% | 0.0% |
| | | | | | | |
| **TOTALS** | **$ -** | **$ 37,940,663.71** | **$ 10,275,106.71** | **$ 200,870,302.39** | **$ 118,981,941.89** | **$ 388,159,534.22** |
| **(%) PORTFOLIO** | **0.0%** | **9.8%** | **2.6%** | **51.7%** | **30.7%** | **100.0%** |

| BOND PROCEED BALANCE | | | | | | |
|---|---|---|---|---|---|---|
| Vendor | CD | CDARS | Money Mkt | CoD | OSIP | Total ($) |
| Guidelines-Total/Vendor | 50%/20% | 50%/20% | 75%/35% | 75%/35% | 50%/50% | |
| OSIP - BOND PROCEEDS | - | - | - | - | 148,549,192 | $ 148,549,192.02 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 27.7% | 27.7% |
| **TOTALS WITH BONDS** | **$ -** | **$ 37,940,663.71** | **$ 10,275,106.71** | **$ 200,870,302.39** | **$ 267,531,133.91** | **$ 536,708,726.24** |

| | |
|---|---|
| CD | = Certificate of Deposit |
| CDARS | = Cert.of Dep.Acct Registry Svc |
| MMKT | = Money Market |
| CoD | = Collateralized Deposit |
| OSIP | = Ocean State Investment Pool |

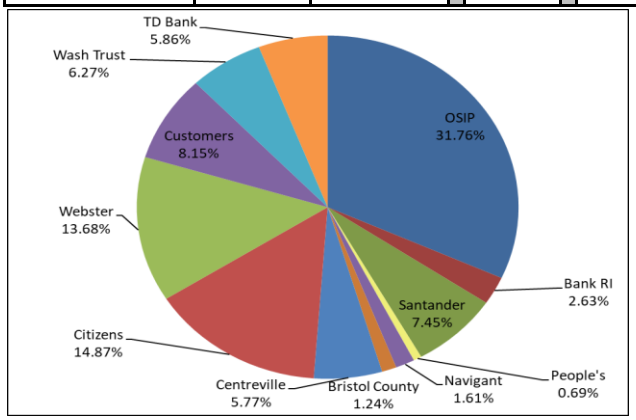
**State of Rhode Island**
**Short Term Cash Monthly Performance**
**Performance for**
**July 01, 2019 to July 31, 2019**

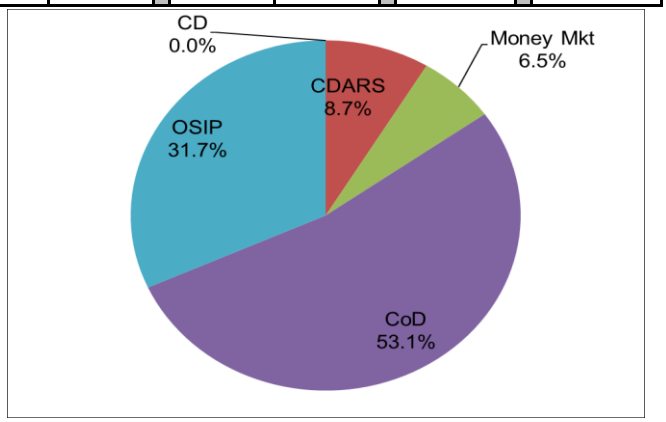
| Fund Name | Beginning Balance | Ending Balance | Average Daily Balance | Earnings | Yield(Annual) |
|---|---|---|---|---|---|
| GENERAL FUND | $ 163,604,857.55 | $ 61,987,799.79 | $ 167,646,229.21 | $ 288,688.00 | 2.0275% |
| H.A.V.A | $ 2,322,089.25 | $ 2,325,228.77 | $ 2,325,101.36 | $ 3,949.70 | 2.0001% |
| GENERAL FUND (HIST PRES) | $ 564,302.34 | $ 565,422.07 | $ 565,385.12 | $ 1,145.50 | 2.3855% |
| HISTORIC TAX CREDITS | $ 9,871,647.82 | $ 9,892,470.18 | $ 9,891,823.68 | $ 20,041.37 | 2.3855% |
| HIGHWAY FUND | $ 108,896,591.31 | $ 95,572,973.68 | $ 104,244,033.93 | $ 197,132.18 | 2.2266% |
| T.D.I. RESERVE (DET) | $ 108,600,614.15 | $ 103,667,562.30 | $ 103,566,838.63 | $ 104,989.95 | 1.1936% |
| RICAP GL FUND 21 | $ 391,664.57 | $ 2,392,143.73 | $ 2,053,309.43 | $ 3,863.36 | 2.2153% |
| BOND CAPITAL FUND | $ 2,103,478.82 | $ 8,305,870.02 | $ 14,363,077.69 | $ 26,562.04 | 2.1774% |
| R.I. CLEAN WATER ACT | $ 2,929,648.50 | $ 2,935,259.02 | $ 2,935,075.76 | $ 5,681.22 | 2.2790% |
| STATE LOTTERY FUND | $ 26,781,248.87 | $ 58,119,842.45 | $ 44,104,432.93 | $ 77,695.23 | 2.0742% |
| ASSESSED FRINGE BEN ADM | $ 1,426,915.92 | $ 1,430,074.31 | $ 1,429,980.92 | $ 2,895.24 | 2.3839% |
| AUTO EQUIPMENT SERVICE | $ 4,061.66 | $ 4,232.72 | $ 4,232.49 | $ 7.19 | 2.0002% |
| HEALTH INSURANCE FUND | $ 23,352,018.00 | $ 23,893,323.23 | $ 21,504,870.04 | $ 42,048.85 | 2.3022% |
| FLEET REVOLVING LOAN FUND | $ 3,939,510.52 | $ 3,944,737.36 | $ 3,944,517.18 | $ 6,825.68 | 2.0374% |
| EMPLOYEES RETIREMENT | $ 669,005.39 | $ 5,082,246.16 | $ 15,384,560.42 | $ 28,258.02 | 2.1627% |
| MUNICIPAL EMPLOYEES RET. | $ 49,317.62 | $ 653,808.20 | $ 2,940,743.65 | $ 5,001.39 | 2.0025% |
| RETIREE HEALTH FUND | $ 1,261,454.73 | $ 2,765,610.95 | $ 1,894,520.13 | $ 3,815.60 | 2.3713% |
| BOG RETIREE FUND | $ 1,656.08 | $ 2,151.95 | $ 2,151.83 | $ 3.66 | 2.0026% |
| RIPTA HEALTH FUND | $ 2,908,615.74 | $ 2,114,701.13 | $ 3,411,288.39 | $ 5,794.83 | 2.0001% |
| PERMANENT SCHOOL FUND | $ 1,725,844.96 | $ 729,269.50 | $ 1,132,421.18 | $ 2,297.97 | 2.3893% |
| TEACHER RETIREE HEALTH FUND | $ 723,427.95 | $ 724,630.12 | $ 724,590.01 | $ 1,243.37 | 2.0204% |
| RI ST POL RETIREE HEALTH | $ 431,840.66 | $ 432,550.53 | $ 432,526.83 | $ 734.74 | 2.0001% |
| RI LEG RETIREE HEALTH | $ 854.86 | $ 856.27 | $ 856.22 | $ 1.45 | 1.9939% |
| RI JUDICIAL RETIREE HEALTH | $ 41,755.66 | $ 41,824.30 | $ 41,822.01 | $ 71.04 | 2.0000% |
| UNIVERSITY COLLEGE | $ 1,038,852.69 | $ 1,941,934.91 | | $ - | |
| INDUS. BLDG. & MTG. INS. | $ 755,906.81 | $ 757,406.73 | | $ - | |
| **Operating Funds Totals** | **$ 464,397,182.43** | **$ 390,283,930.38** | **$ 504,544,389.04** | **$ 828,747.58** | **1.934%** |
| BOND CCDL 2006 SERIES C | $ 492,149.70 | $ 479,015.13 | $ 483,220.50 | $ 979.09 | 2.3857% |
| GO BND-NTAX 2007 SERIES A | $ 124,237.53 | $ 124,237.53 | $ 124,229.41 | $ 251.70 | 2.3856% |
| CCDL10B BOND CAPITAL COMPONENT | $ 950,000.00 | $ 950,000.00 | $ 949,937.92 | $ 1,924.63 | 2.3855% |
| CCDL10C | $ 167,021.06 | $ 167,352.47 | $ 167,341.53 | $ 339.04 | 2.3855% |
| CCDL2011A | $ 3,154,023.12 | $ 2,117,898.28 | $ 2,451,971.69 | $ 4,972.71 | 2.3879% |
| CCDL2012B | $ 5,100,077.27 | $ 5,100,077.27 | $ 5,099,743.97 | $ 10,332.36 | 2.3855% |
| GO CCDL 2013A | $ 2,590,915.50 | $ 2,590,915.50 | $ 2,590,746.18 | $ 5,248.99 | 2.3855% |
| GO CCDL 2014A | $ 94,193.10 | $ 94,193.10 | $ 94,186.94 | $ 190.83 | 2.3855% |
| GO CCDL 2014B | $ 40,664.27 | $ 40,664.27 | $ 40,661.61 | $ 82.38 | 2.3854% |
| GO CCDL 2016A | $ 2,893,348.39 | $ 2,492,316.02 | $ 2,621,509.91 | $ 5,313.21 | 2.3864% |
| GO CCDL 2016B | $ 3,199,015.03 | $ 3,186,395.03 | $ 3,190,257.49 | $ 6,463.69 | 2.3855% |
| GO CCDL 2017 | $ 1,278,972.32 | $ 969,266.43 | $ 1,069,101.64 | $ 2,167.52 | 2.3871% |
| CCDL99A 1999A | $ 206,569.39 | $ 206,569.39 | $ 206,555.89 | $ 418.49 | 2.3855% |
| CLEAN WATER 2007 SERIES A | $ 198,130.34 | $ - | | $ - | 0.0000% |
| CCDL2011A CLEAN WATER COMPONENT | $ 1,236,000.00 | $ 4,157.58 | $ 918,044.96 | $ 1,867.02 | 2.3945% |
| GO CCDL 2018A | $ 7,948,233.82 | $ 7,409,208.52 | $ 7,582,581.50 | $ 15,690.73 | 2.4364% |
| GO CCDL 2018B | $ 13,593,099.78 | $ 13,593,099.78 | $ 13,592,211.44 | $ 27,538.56 | 2.3855% |
| GO CCDL 2019A | $ 99,388,691.35 | $ 81,909,793.96 | $ - | $ 177,122.63 | 2.3822% |
| GO CCDL 2019B | $ 24,989,336.66 | $ 24,989,336.66 | $ - | $ 50,626.45 | 2.3855% |
| **Bond Proceeds Fund Totals** | **$ 167,644,678.63** | **$ 146,424,496.92** | **$ 41,182,302.58** | **$ 311,530.03** | **2.395%** |
| TANS PROCEEDS | $ - | $ - | $ - | $ - | |
| **Grand Totals** | **$ 632,041,861.06** | **$ 536,708,427.30** | **$ 545,726,691.62** | **$ 1,140,277.61** | **2.039%** |

**State of Rhode Island**
**Office of the General Treasurer**
**Short Term Investments**

**Issuer Credit Rating**
**July 31, 2019**

| Issuer | Type of Instrument* | M/E % Portfolio | Issuer Ratings Moody's | S-T Debt Rating Moody's | S-T Debt Rating S&P | L-T Debt Rating Moody's | L-T Debt Rating S&P | Credit Outlook S&P | Rating Veribanc |
|---|---|---|---|---|---|---|---|---|---|
| Bank of America | - | 0.0% | Baa1 | P-2 | A-2 | A3 | A- | Stable | GREEN/* |
| Bank RI | 3,4 | 2.6% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Bristol County Sav. Bank | 4 | 1.2% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Centreville Bank | 4 | 5.8% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/***/BB |
| Citizens Bank | 4 | 14.9% | Baa1 | P-2 | A-2 | A1 | BBB+ | Stable | GREEN/* |
| Customers Bank | 4 | 8.2% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/* |
| Home Loan Inv. Bank | - | 0.0% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Navigant Credit Union | 4 | 1.6% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Ocean State Inv. Pool | 6 | 31.8% | N/R | N/R | N/R | N/R | N/R | N/R | N/R |
| People's Credit Union | 4 | 0.7% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Santander Bank | 4 | 7.5% | A3 | P-2 | A-2 | A3 | A- | Stable | GREEN/* |
| TD Bank | 4 | 5.9% | Aa2 | P-1 | A-1+ | Aa2 | AA- | Stable | GREEN/*** |
| Washington Trust | 4,7 | 6.3% | N/R | N/R | N/R | N/R | N/R | N/R | GREEN/*** |
| Webster Bank | 4 | 13.7% | Baa1 | P-1 | A-2 | A1 | BBB+ | Stable | GREEN/*** |




| | | |
|---|---|---|
| CD | = Certificate of Deposit | 1* |
| CDARS | = Cert.of Dep.Acct Registry Svc | 2* |
| MMKT | = Money Market | 3* |
| CoD | = Collateralized Deposit | 4* |
| OSIP | = Ocean State Investment Pool | 5* |

## Ratings Definitions

**Moody's Short-Term Debt Ratings:**
**P-1** - Prime-1 have a superior ability for repayment of sr. S-T debt
**P-2** - Prime-1 have a strong ability for repayment of sr. S-T debt
**P-3** - Prime-1 have acceptable ability for repayment of sr. S-T debt
**NP** - Not Prime

**Moody's Issuer Rating Symbols:**
**Aaa** - Offer exceptional financial security (high-grade)
**Aa** - Offer excellent financial security (high-grade)
**A** - Offer good financial security
**Baa** - Offer adequate financial security
**Ba** - Offer questionable financial security
**B** - Offer poor financial security
**Caa** - Offer very poor financial security
**Ca** - Offer extremely poor financial security
**C** - Lowest rated class, usually in default

**Moody's Long-Term Debt Ratings:**
**Aaa** - Best Quality
**Aa** - High Quality
**A** - Posess many favorable investment attributes
**Baa** - Medium-grade obligations
**Ba** - Posess speculative elements
**B** - Generally lack characteristics of desirable investments
**Caa** - Poor standing
**Ca** - Speculative in a high degree
**C** - Lowest rated class of bonds

**Modifiers:**
**1** - Higher end of letter rating category
**2** - Mid-range of letter rating category
**3** - Lower end of letter rating category

**S&P Short -Term Credit Ratings:**
**A-1** - Highest rated, strong capacity to meet obligations
**A-2** - Somewhat more susceptibleto adverse effects of changes infinancial conditions; satisfactory
**A-3** - Exhibits adequate protection parameters
**B** - Significant speculative characteristics, faces major ongoing uncertainties
**C** - Vulnerable to non-payment
**D** - Payment default
Modifiers: + or - show relative standing within the category.

**S&P Outlook Definitions:**
**Positive** - A rating may be raised
**Negative** - A rating may be lowered
**Stable** - A rating is not likely to change
**Developing** - May be raised or lowered
**NM** - Not meaningful

**S&P Long-Term Debt Ratings:**
**AAA** - Highest rating, extremely strong
**AA** - Differs slightly from highest rating, very strong
**A** - More susceptible to adverse effects of change in economic condition, strong
**BBB** - Exhibits adequate protection parameters
**BB, B,** - Have significant speculative characteristics. BB least speculative
**CCC, CC, C** - C highest degree
**D** - Payment default
Modifiers: + or - show relative standing within the category.

**VERIBANC Ratings:**
**GREEN** The institution's equity exceeds a modest percentage of its assets and had positive net income during the most recent reporting period.
**YELLOW** The institution's equity is at a minimal percentage of its assets or it incurred a net loss during the most recent reporting period.
**RED** The institution's equity is less than a minimal percentage of its assets or it incurred a significant net loss during the most recent reporting period (or both).
**BB** Blue Ribbon Bank
**Modifiers:** ***-Very Strong, **-Strong, *-Moderate, No Stars-Poor

# Section XIII.

## Defined Contribution Plan

# State of Rhode Island
# 401(a) Performance Summary

TIAA

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep. Date |
| **STABLE VALUE / GUARANTEED** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Stable Value** | | | | | | | | | | | | | | | | | | | | | | | | |
| TIAA Stable Value**** | Current crediting rate = 2.40 | | | | | | | | 0.20 | 1.29 | 2.15 | | | 2.03 | | | 1.97 | | | | | | 1.94 | 3/31/2012 |
| **FIXED INCOME** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Intermediate Core Bond** | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanguard Total Bond Market Index I | VBTIX | US Fund Intermediate Core Bond | 6.42 | 229,333 | 0.04 | 0.04 | 5 | 0.00 | 0.24 | 6.37 | 7.87 | 87 | 25 | 2.23 | 140 | 43 | 2.90 | 66 | 25 | 3.84 | 113 | 51 | 5.12 | 9/18/1995 |
| *BBgBarc US Agg Float Adj TR USD* | | | | | | | | | *0.21* | *6.46* | *7.97* | | | *2.32* | | | *2.96* | | | *3.93* | | | | |
| *Intermediate Core Bond Median* | | | | | | *0.57* | | | *0.24* | *6.26* | *7.45* | | | *2.14* | | | *2.60* | | | *3.96* | | | | |
| *Intermediate Core Bond Number of Funds* | | | | | | *397* | | | | | *393* | | | *369* | | | *353* | | | *320* | | | | |
| **Inflation-Protected Bond** | | | | | | | | | | | | | | | | | | | | | | | | |
| PIMCO Real Return Instl | PRRIX | US Fund Inflation-Protected Bond | 11.58 | 9,429 | 0.88 | 0.88 | 64 | 0.00 | 0.35 | 6.70 | 4.50 | 59 | 37 | 2.36 | 35 | 18 | 1.44 | 39 | 34 | 3.96 | 4 | 5 | 5.70 | 1/29/1997 |
| *BBgBarc US Treasury US TIPS TR USD* | | | | | | | | | *0.36* | *6.53* | *4.84* | | | *2.08* | | | *1.76* | | | *3.64* | | | | |
| *Inflation-Protected Bond Median* | | | | | | *0.67* | | | *0.26* | *6.05* | *4.08* | | | *1.82* | | | *1.14* | | | *3.08* | | | | |
| *Inflation-Protected Bond Number of Funds* | | | | | | *215* | | | | | *215* | | | *207* | | | *203* | | | *143* | | | | |
| **EQUITY** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Large Cap Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanguard Institutional Index I | VINIX | US Fund Large Blend | 18.58 | 228,885 | 0.04 | 0.04 | 2 | 0.00 | 1.43 | 20.24 | 10.39 | 369 | 27 | 14.15 | 197 | 18 | 10.68 | 87 | 12 | 14.68 | 68 | 10 | 9.87 | 7/31/1990 |
| *S&P 500 TR USD* | | | | | | | | | *1.44* | *20.24* | *10.42* | | | *14.19* | | | *10.71* | | | *14.70* | | | | |
| Vanguard FTSE Social Index Inv | VFTSX | US Fund Large Blend | 3.58 | 5,942 | 0.18 | 0.18 | 6 | 0.00 | 2.09 | 21.43 | 11.27 | 278 | 20 | 15.97 | 27 | 3 | 11.46 | 31 | 5 | 15.47 | 19 | 3 | 4.97 | 5/31/2000 |
| *Spliced Social Index*****| | | | | | | | | *2.10* | *21.53* | *11.37* | | | *16.14* | | | *11.66* | | | *15.72* | | | | |
| *FTSE4Good US Select TR USD* | | | | | | | | | *1.99* | *20.27* | *11.37* | | | *16.14* | | | *11.66* | | | *15.72* | | | | |
| *Russell 3000 TR USD* | | | | | | | | | *1.49* | *20.48* | *8.98* | | | *14.02* | | | *10.19* | | | *14.67* | | | | |
| *Large Blend Median* | | | | | | *0.87* | | | *1.44* | *19.56* | *8.59* | | | *12.92* | | | *8.95* | | | *13.39* | | | | |
| *Large Blend Number of Funds* | | | | | | *1,348* | | | | | *1,311* | | | *1,232* | | | *1,167* | | | *1,027* | | | | |
| **Mid-Cap Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanguard Mid Cap Index Institutional | VMCIX | US Fund Mid-Cap Blend | 21.17 | 105,461 | 0.04 | 0.04 | 2 | 0.00 | 1.31 | 23.48 | 7.85 | 61 | 18 | 12.34 | 75 | 23 | 8.83 | 23 | 11 | 15.23 | 8 | 5 | 9.91 | 5/21/1998 |
| *Spliced Mid Cap Index** | | | | | | | | | *1.32* | *23.51* | *7.85* | | | *12.36* | | | *8.85* | | | *15.26* | | | | |
| *CRSP US Mid Cap TR USD* | | | | | | | | | *1.32* | *23.51* | *7.85* | | | *12.36* | | | *8.85* | | | *15.16* | | | | |
| *Mid-Cap Blend Median* | | | | | | *1.00* | | | *1.17* | *19.21* | *2.18* | | | *10.18* | | | *6.08* | | | *12.83* | | | | |
| *Mid-Cap Blend Number of Funds* | | | | | | *406* | | | | | *402* | | | *370* | | | *346* | | | *296* | | | | |
| **Small Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| Vanguard Small Cap Index I | VSCIX | US Fund Small Blend | 3.25 | 92,923 | 0.04 | 0.04 | 2 | 0.00 | 1.27 | 21.05 | 2.27 | 94 | 13 | 12.39 | 103 | 16 | 7.73 | 74 | 14 | 14.81 | 18 | 5 | 8.92 | 7/7/1997 |
| *Spliced Small Cap Index*** | | | | | | | | | *1.26* | *21.04* | *2.29* | | | *12.37* | | | *7.70* | | | *14.76* | | | | |
| *CRSP US Small Cap TR USD* | | | | | | | | | *1.26* | *21.04* | *2.29* | | | *12.37* | | | *7.70* | | | *15.14* | | | | |
| *Small Blend Median* | | | | | | *1.10* | | | *0.70* | *17.08* | *(3.74)* | | | *10.37* | | | *5.96* | | | *12.95* | | | | |
| *Small Blend Number of Funds* | | | | | | *712* | | | | | *708* | | | *682* | | | *616* | | | *512* | | | | |
| **Foreign Large Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| Schwab International Index | SWISX | US Fund Foreign Large Blend | 2.25 | 5,167 | 0.06 | 0.06 | 3 | 0.00 | (2.10) | 11.69 | 1.40 | 212 | 30 | 8.98 | 139 | 27 | 2.25 | 164 | 38 | 6.91 | 113 | 34 | 4.34 | 5/19/1997 |
| *MSCI EAFE NR USD* | | | | | | | | | *(1.27)* | *12.58* | *1.08* | | | *9.11* | | | *2.25* | | | *6.90* | | | | |
| *Foreign Large Blend Median* | | | | | | *0.98* | | | *(1.98)* | *11.54* | *(0.10)* | | | *8.08* | | | *1.94* | | | *6.61* | | | | |
| *Foreign Large Blend Number of Funds* | | | | | | *712* | | | | | *686* | | | *645* | | | *576* | | | *497* | | | | |

# State of Rhode Island
# 401(a) Performance Summary

TIAA

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep. Date |
| **EQUITY** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Diversified Emerging Mkts** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Emerging Mkts Stock Idx Adm** | **VEMAX** | **US Fund Diversified Emerging Mkts** | **10.92** | **87,848** | **0.14** | **0.14** | **1** | **0.00** | **(1.13)** | **10.84** | **3.22** | **261** | **30** | **9.25** | **354** | **50** | **2.26** | **247** | **43** | **5.55** | **131** | **53** | **5.34** | **6/23/2006** |
| *Spliced Emerging Markets Index***** | | | | | | | | | *(0.43)* | *11.69* | *3.01* | | | *9.42* | | | *2.24* | | | *5.62* | | | | |
| *MSCI EM NR USD* | | | | | | | | | *(1.22)* | *9.23* | *1.21* | | | *10.66* | | | *2.49* | | | *5.81* | | | | |
| *FTSE Emerging NR USD* | | | | | | | | | *(0.55)* | *11.12* | *4.02* | | | *10.28* | | | *2.87* | | | *6.00* | | | | |
| *FTSE EMs AC China A Inclusion (US RIC) NR USD* | | | | | | | | | *(0.43)* | *11.70* | *3.01* | | | *9.40* | | | *2.70* | | | *5.99* | | | | |
| *Diversified Emerging Mkts Median* | | | | | | *1.27* | | | *(1.35)* | *11.14* | *0.89* | | | *9.37* | | | *2.13* | | | *5.86* | | | | |
| *Diversified Emerging Mkts Number of Funds* | | | | | | *816* | | | | | *786* | | | *731* | | | *630* | | | *342* | | | | |
| **ALLOCATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Target-Date** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Target Retire Inc Trust I** | | **US SA Target-Date Retirement** | | | **0.07** | **0.07** | | | **0.35** | **9.07** | **6.62** | | **25** | **5.29** | | **32** | **4.24** | | **19** | **6.44** | | **30** | **5.11** | **6/22/2007** |
| *Vanguard Target Retirement Income Composite* | | | | | | | | | *0.42* | *9.27* | *6.69* | | | *5.42* | | | *4.35* | | | *6.50* | | | | |
| *Target-Date Retirement Median* | | | | | | *0.68* | | | *0.32* | *9.24* | *5.85* | | | *4.92* | | | *3.50* | | | *6.09* | | | | |
| *Target-Date Retirement Number of Funds* | | | | | | | | | | | *188* | | | *175* | | | *149* | | | *124* | | | | |
| **Vanguard Target Retire 2015 Trust I** | | **US SA Target-Date 2015** | | | **0.07** | **0.07** | | | **0.33** | **10.11** | **6.50** | | **36** | **6.70** | | **42** | **4.97** | | **21** | **8.40** | | **21** | **5.13** | **6/28/2007** |
| *Vanguard Target Retirement 2015 Composite* | | | | | | | | | *0.43* | *10.35* | *6.65* | | | *6.86* | | | *5.08* | | | *8.46* | | | | |
| *Target-Date 2015 Median* | | | | | | *0.65* | | | *0.28* | *10.33* | *5.83* | | | *6.47* | | | *4.51* | | | *8.15* | | | | |
| *Target-Date 2015 Number of Funds* | | | | | | | | | | | *137* | | | *118* | | | *94* | | | *78* | | | | |
| **Vanguard Target Retire 2020 Trust I** | | **US SA Target-Date 2020** | | | **0.07** | **0.07** | | | **0.30** | **11.69** | **6.59** | | **28** | **7.89** | | **18** | **5.64** | | **1** | **9.24** | | **8** | **5.42** | **6/22/2007** |
| *Vanguard Target Retirement 2020 Composite* | | | | | | | | | *0.45* | *11.95* | *6.71* | | | *8.05* | | | *5.75* | | | *9.38* | | | | |
| *Target-Date 2020 Median* | | | | | | *0.70* | | | *0.30* | *11.02* | *5.89* | | | *6.90* | | | *4.64* | | | *8.29* | | | | |
| *Target-Date 2020 Number of Funds* | | | | | | | | | | | *248* | | | *225* | | | *191* | | | *141* | | | | |
| **Vanguard Target Retire 2025 Trust I** | | **US SA Target-Date 2025** | | | **0.07** | **0.07** | | | **0.30** | **12.87** | **6.70** | | **24** | **8.77** | | **20** | **6.04** | | **2** | **9.87** | | **11** | **5.49** | **6/28/2007** |
| *Vanguard Target Retirement 2025 Composite* | | | | | | | | | *0.47* | *13.15* | *6.79* | | | *8.94* | | | *6.15* | | | *10.02* | | | | |
| *Target-Date 2025 Median* | | | | | | *0.68* | | | *0.28* | *12.26* | *5.99* | | | *7.88* | | | *5.12* | | | *9.23* | | | | |
| *Target-Date 2025 Number of Funds* | | | | | | | | | | | *232* | | | *204* | | | *177* | | | *113* | | | | |
| **Vanguard Target Retire 2030 Trust I** | | **US SA Target-Date 2030** | | | **0.07** | **0.07** | | | **0.26** | **13.60** | **6.53** | | **24** | **9.48** | | **29** | **6.32** | | **12** | **10.44** | | **14** | **5.55** | **6/28/2007** |
| *Vanguard Target Retirement 2030 Composite* | | | | | | | | | *0.46* | *13.92* | *6.60* | | | *9.65* | | | *6.44* | | | *10.59* | | | | |
| *Target-Date 2030 Median* | | | | | | *0.71* | | | *0.27* | *13.39* | *5.78* | | | *8.71* | | | *5.54* | | | *9.67* | | | | |
| *Target-Date 2030 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *131* | | | | |
| **Vanguard Target Retire 2035 Trust I** | | **US SA Target-Date 2035** | | | **0.07** | **0.07** | | | **0.22** | **14.34** | **6.32** | | **27** | **10.18** | | **29** | **6.59** | | **16** | **10.98** | | **9** | **5.73** | **6/28/2007** |
| *Vanguard Target Retirement 2035 Composite* | | | | | | | | | *0.45* | *14.70* | *6.40* | | | *10.31* | | | *6.71* | | | *11.13* | | | | |
| *Target-Date 2035 Median* | | | | | | *0.69* | | | *0.27* | *14.32* | *5.60* | | | *9.58* | | | *5.86* | | | *10.19* | | | | |
| *Target-Date 2035 Number of Funds* | | | | | | | | | | | *227* | | | *199* | | | *172* | | | *108* | | | | |
| **Vanguard Target Retire 2040 Trust I** | | **US SA Target-Date 2040** | | | **0.07** | **0.07** | | | **0.18** | **15.06** | **6.09** | | **27** | **10.88** | | **21** | **6.83** | | **18** | **11.27** | | **11** | **5.99** | **6/28/2007** |
| *Vanguard Target Retirement 2040 Composite* | | | | | | | | | *0.44* | *15.47* | *6.19* | | | *11.08* | | | *6.98* | | | *11.44* | | | | |
| *Target-Date 2040 Median* | | | | | | *0.74* | | | *0.26* | *15.02* | *5.42* | | | *10.00* | | | *6.11* | | | *10.42* | | | | |
| *Target-Date 2040 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *131* | | | | |

# State of Rhode Island
# 401(a) Performance Summary

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep. Date |
| **ALLOCATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Target-Date** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Target Retire 2045 Trust I** | | **US SA Target-Date 2045** | | | **0.07** | **0.07** | | | **0.15** | **15.61** | **5.94** | | **31** | **11.11** | | **21** | **6.94** | | **13** | **11.34** | | **13** | **6.01** | **6/28/2007** |
| *Vanguard Target Retirement 2045 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | *11.51* | | | | |
| *Target-Date 2045 Median* | | | | | | *0.71* | | | *0.22* | *15.55* | *5.41* | | | *10.36* | | | *6.21* | | | *10.63* | | | | |
| *Target-Date 2045 Number of Funds* | | | | | | | | | | | *227* | | | *199* | | | *172* | | | *107* | | | | |
| **Vanguard Target Retire 2050 Trust I** | | **US SA Target-Date 2050** | | | **0.07** | **0.07** | | | **0.15** | **15.60** | **5.96** | | **32** | **11.12** | | **27** | **6.94** | | **20** | **11.34** | | **10** | **6.06** | **6/28/2007** |
| *Vanguard Target Retirement 2050 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | *11.51* | | | | |
| *Target-Date 2050 Median* | | | | | | *0.74* | | | *0.23* | *15.64* | *5.36* | | | *10.34* | | | *6.28* | | | *10.67* | | | | |
| *Target-Date 2050 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *106* | | | | |
| **Vanguard Target Retire 2055 Trust I** | | **US SA Target-Date 2055** | | | **0.07** | **0.07** | | | **0.15** | **15.61** | **5.96** | | **29** | **11.12** | | **32** | **6.91** | | **21** | | | | **9.78** | **10/5/2010** |
| *Vanguard Target Retirement 2055 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | | | | | |
| *Target-Date 2055 Median* | | | | | | *0.72* | | | *0.20* | *15.76* | *5.35* | | | *10.62* | | | *6.34* | | | | | | | |
| *Target-Date 2055 Number of Funds* | | | | | | | | | | | *227* | | | *196* | | | *164* | | | | | | | |
| **Vanguard Target Retire 2060 Trust I** | | **US SA Target-Date 2060+** | | | **0.07** | **0.07** | | | **0.13** | **15.59** | **5.96** | | **30** | **11.13** | | **36** | **6.92** | | **42** | | | | **9.52** | **3/1/2012** |
| *Vanguard Target Retirement 2060 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | | | | | |
| *Target-Date 2060+ Median* | | | | | | *0.71* | | | *0.22* | *15.98* | *5.45* | | | *10.88* | | | *6.65* | | | | | | | |
| *Target-Date 2060+ Number of Funds* | | | | | | | | | | | *214* | | | *131* | | | *16* | | | | | | | |
| **Vanguard Target Retire 2065 Trust I** | | **US SA Target-Date 2060+** | | | **0.07** | **0.07** | | | **0.17** | **15.66** | **6.06** | | **26** | | | | | | | | | | **9.66** | **7/21/2017** |
| *Vanguard Target Retirement 2060 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | | | | | | | | | | | |
| *Target-Date 2060+ Median* | | | | | | *0.71* | | | *0.22* | *15.98* | *5.45* | | | | | | | | | | | | | |
| *Target-Date 2060+ Number of Funds* | | | | | | | | | | | *214* | | | | | | | | | | | | | |

Source: Morningstar & TIAA

1 Mo & YTD as of 7/31/2019. All other data as of 6/30/2019.

Since Incep. = Since Inception Date

%-ile --> Percentile Ranking in Morningstar Category.

Vanguard Index Information available at http://www.vanguard.com

* = S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter

** = Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter

*** = Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; FTSE Emerging Markets All Cap China A Transition Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index thereafter.

**** = The TIAA Stable Value Inception Date represents the date that the plan's TIAA Stable Value record was initiated on TIAA's recordkeeping system which may be earlier than the date of first deposit to the contract.

"Since Inception" performance is calculated from this date.

For definitions please visit www.tiaa.org/public/assetmanagement

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio is calculated by TIAA and may differ based on calculation methods

Accumulations in mutual funds not managed by TIAA may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.

***** Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter

The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.

You cannot invest directly in an index.

# Disclosures

TIAA

As of 07/31/2019

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is a guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

**Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.**

Morningstar Ranking/Number of Funds in Category displays the Fund's actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Morningstar Percentile Rankings are the Fund's total return rank relative to all funds in the same Morningstar category, where 1 is the highest percentile and 100 is the lowest percentile.

# Disclosures

TIAA

As of 07/31/2019

**Prospectus Gross Expense Ratio**
The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.
--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
--Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

**Prospectus Net Expense Ratio**
The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.
--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
--Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
--TIAA, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees. --Prospectus Net Expense Ratio % - ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s).TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

# State of Rhode Island - Plan Balance Summary

401(a)/414(h)(2)
State of Rhode Island Defined Contribution Retirement Plan

TIAA

As of 07/31/2019

| *Ticker* | *Investment Name* | *Asset Class Description* | *7/31/2019 Account Balance* |
|---|---|---|---|
| PRRIX | PIMCO Real Return Inst Class | Fixed Income | $6,863,272.42 |
| SWISX | Schwab International Index Fd | Equities | $7,717,467.61 |
| TSVX# | TIAA STABLE VALUE | Guaranteed | $14,225,550.71 |
| VBTIX | Vanguard Ttl Bd Mkt Idx Inst | Fixed Income | $7,766,811.80 |
| VEMAX | Vanguard Emr Mkts Stk Idx Adm | Equities | $5,742,990.34 |
| VFTAX | Vanguard FTSE Social Index Adm | Equities | $3,871,232.44 |
| VINIX | Vanguard Inst Idx Inst | Equities | $32,676,198.50 |
| VMCIX | Vanguard Mid-Cap Idx Inst | Equities | $12,794,795.51 |
| VSCIX | Vanguard Small-Cap Idx Inst | Equities | $13,153,524.24 |
| VT15# | Vanguard Tgt Rtmt 2015 Tr I | Multi-Asset | $41,162,961.01 |
| VT20# | Vanguard Tgt Rtmt 2020 Tr I | Multi-Asset | $105,540,828.14 |
| VT25# | Vanguard Tgt Rtmt 2025 Tr I | Multi-Asset | $136,005,201.81 |
| VT30# | Vanguard Tgt Rtmt 2030 Tr I | Multi-Asset | $145,953,851.06 |
| VT35# | Vanguard Tgt Rtmt 2035 Tr I | Multi-Asset | $162,383,151.60 |
| VT40# | Vanguard Tgt Rtmt 2040 Tr I | Multi-Asset | $131,062,442.86 |
| VT45# | Vanguard Tgt Rtmt 2045 Tr I | Multi-Asset | $99,624,569.73 |
| VT50# | Vanguard Tgt Rtmt 2050 Tr I | Multi-Asset | $59,870,996.75 |
| VT55# | Vanguard Tgt Rtmt 2055 Tr I | Multi-Asset | $25,425,806.16 |
| VT60# | Vanguard Tgt Rtmt 2060 Tr I | Multi-Asset | $4,629,400.42 |
| VT65# | Vanguard Target Rtmt 2065 Tr I | Multi-Asset | $314,017.06 |
| VTIN# | Vanguard Tgt Rtmt Income Tr I | Multi-Asset | $11,196,381.78 |
| | **STATE OF RHODE ISLAND DEFINED CONTRIBUTION RETIREMENT PLAN TOTAL** | | **$1,027,981,451.95** |

# State of Rhode Island - Plan Balance Summary

401(a)

Rhode Island FICA 406403 Alternative Retirement Income Security Program

As of 07/31/2019

| *Ticker* | *Investment Name* | *Asset Class Description* | *7/31/2019 Account Balance* |
|---|---|---|---|
| TSVX# | TIAA STABLE VALUE | Guaranteed | $3,290.00 |
| VT15# | Vanguard Tgt Rtmt 2015 Tr I | Multi-Asset | $13,459.83 |
| VT20# | Vanguard Tgt Rtmt 2020 Tr I | Multi-Asset | $1,408,428.02 |
| VT25# | Vanguard Tgt Rtmt 2025 Tr I | Multi-Asset | $176,915.42 |
| VT30# | Vanguard Tgt Rtmt 2030 Tr I | Multi-Asset | $180,151.25 |
| VT35# | Vanguard Tgt Rtmt 2035 Tr I | Multi-Asset | $104,429.38 |
| VT40# | Vanguard Tgt Rtmt 2040 Tr I | Multi-Asset | $86,086.62 |
| VT45# | Vanguard Tgt Rtmt 2045 Tr I | Multi-Asset | $110,056.39 |
| VT50# | Vanguard Tgt Rtmt 2050 Tr I | Multi-Asset | $120,971.03 |
| VT55# | Vanguard Tgt Rtmt 2055 Tr I | Multi-Asset | $233,948.55 |
| VT60# | Vanguard Tgt Rtmt 2060 Tr I | Multi-Asset | $606,384.02 |
| VT65# | Vanguard Target Rtmt 2065 Tr I | Multi-Asset | $146,070.08 |
| VTIN# | Vanguard Tgt Rtmt Income Tr I | Multi-Asset | $13,150.43 |
| | **RHODE ISLAND FICA ALTERNATIVE RET INCOME SECURITY PROGRAM Total** | | **$3,203,341.02** |

# Disclosures

TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA reported performance may differ from Morningstar source returns for the same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by $1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

**Investment products may be subject to market and other risk factors. See the applicable product literature or visit tiaa.org for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or go to www.TIAA.org/prospectuses for current product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.**

TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distribute securities products. Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association (TIAA) of America and College Retirement Equities Fund (CREF), New York, NY. Each is solely responsible for its own financial condition and contractual obligations.

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# Section XIV.

## 457 Plans

# State of Rhode Island
# 457(b) Performance Summary

TIAA

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep Date |
| **STABLE VALUE / GUARANTEED** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Guaranteed** | | | | | | | | | | | | | | | | | | | | | | | | |
| **TIAA Traditional RCP** | **Current crediting rate = 2.75** | | | | | | | | **0.27** | **1.89** | **3.34** | | | **3.38** | | | **3.45** | | | **3.47** | | | **3.69** | **6/1/2006** |
| **FIXED INCOME** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Intermediate Core Bond** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Total Bond Market Index I** | **VBTIX** | **US Fund Intermediate Core Bond** | **6.42** | **229,333** | **0.04** | **0.04** | **5** | **0.00** | **0.24** | **6.37** | **7.87** | **87** | **25** | **2.23** | **140** | **43** | **2.90** | **66** | **25** | **3.84** | **113** | **51** | **5.12** | **9/18/1995** |
| *BBgBarc US Agg Float Adj TR USD* | | | | | | | | | *0.21* | *6.46* | *7.97* | | | *2.32* | | | *2.96* | | | *3.93* | | | | |
| *Intermediate Core Bond Median* | | | | | | *0.57* | | | *0.24* | *6.26* | *7.45* | | | *2.14* | | | *2.60* | | | *3.96* | | | | |
| *Intermediate Core Bond Number of Funds* | | | | | | *397* | | | | | *393* | | | *369* | | | *353* | | | *320* | | | | |
| **Intermediate Core-Plus Bond** | | | | | | | | | | | | | | | | | | | | | | | | |
| **PIMCO Total Return Instl** | **PTTRX** | **US Fund Intermediate Core-Plus Bond** | **4.83** | **66,013** | **0.55** | **0.55** | **35** | **0.00** | **(0.01)** | **6.07** | **7.64** | **282** | **46** | **3.18** | **178** | **34** | **3.02** | **173** | **42** | **4.69** | **179** | **55** | **7.16** | **5/11/1987** |
| *BBgBarc US Agg Bond TR USD* | | | | | | | | | *0.22* | *6.35* | *7.87* | | | *2.31* | | | *2.95* | | | *3.90* | | | | |
| *Intermediate Core-Plus Bond Median* | | | | | | *0.70* | | | *0.31* | *6.93* | *7.53* | | | *2.93* | | | *2.90* | | | *4.87* | | | | |
| *Intermediate Core-Plus Bond Number of Funds* | | | | | | *629* | | | | | *616* | | | *580* | | | *532* | | | *474* | | | | |
| **Inflation-Protected Bond** | | | | | | | | | | | | | | | | | | | | | | | | |
| **American Century Inflation-Adjs Bond R6** | **AIADX** | **US Fund Inflation-Protected Bond** | **17.67** | **2,544** | **0.22** | **0.22** | **10** | **0.00** | **0.26** | **6.51** | **4.29** | **84** | **50** | **1.86** | | **52** | **1.34** | | **38** | **3.21** | | **53** | **2.87** | **7/28/2017** |
| *BBgBarc US Treasury US TIPS TR USD* | | | | | | | | | *0.36* | *6.53* | *4.84* | | | *2.08* | | | *1.76* | | | *3.64* | | | | |
| *Inflation-Protected Bond Median* | | | | | | *0.67* | | | *0.26* | *6.05* | *4.08* | | | *1.82* | | | *1.14* | | | *3.08* | | | | |
| *Inflation-Protected Bond Number of Funds* | | | | | | *215* | | | | | *215* | | | *207* | | | *203* | | | *143* | | | | |
| **EQUITY** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Large Cap Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Institutional Index I** | **VINIX** | **US Fund Large Blend** | **18.58** | **228,885** | **0.04** | **0.04** | **2** | **0.00** | **1.43** | **20.24** | **10.39** | **369** | **27** | **14.15** | **197** | **18** | **10.68** | **87** | **12** | **14.68** | **68** | **10** | **9.87** | **7/31/1990** |
| *S&P 500 TR USD* | | | | | | | | | *1.44* | *20.24* | *10.42* | | | *14.19* | | | *10.71* | | | *14.70* | | | | |
| **Vanguard FTSE Social Index Inv** | **VFTSX** | **US Fund Large Blend** | **3.58** | **5,942** | **0.18** | **0.18** | **6** | **0.00** | **2.09** | **21.43** | **11.27** | **278** | **20** | **15.97** | **27** | **3** | **11.46** | **31** | **5** | **15.47** | **19** | **3** | **4.97** | **5/31/2000** |
| Spliced Social Index | | | | | | | | | 2.10 | 21.53 | 11.37 | | | 16.14 | | | 11.66 | | | 15.72 | | | | |
| FTSE4Good US Select TR USD | | | | | | | | | 1.99 | 20.27 | 11.37 | | | 16.14 | | | 11.66 | | | 15.72 | | | | |
| *Russell 3000 TR USD* | | | | | | | | | *1.49* | *20.48* | *8.98* | | | *14.02* | | | *10.19* | | | *14.67* | | | | |
| *Large Blend Median* | | | | | | *0.87* | | | *1.44* | *19.56* | *8.59* | | | *12.92* | | | *8.95* | | | *13.39* | | | | |
| *Large Blend Number of Funds* | | | | | | *1,348* | | | | | *1,311* | | | *1,232* | | | *1,167* | | | *1,027* | | | | |
| **Mid-Cap Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Mid Cap Index Institutional** | **VMCIX** | **US Fund Mid-Cap Blend** | **21.17** | **105,461** | **0.04** | **0.04** | **2** | **0.00** | **1.31** | **23.48** | **7.85** | **61** | **18** | **12.34** | **75** | **23** | **8.83** | **23** | **11** | **15.23** | **8** | **5** | **9.91** | **5/21/1998** |
| Spliced Mid Cap Index | | | | | | | | | 1.32 | 23.51 | 7.85 | | | 12.36 | | | 8.85 | | | 15.26 | | | | |
| *CRSP US Mid Cap TR USD* | | | | | | | | | *1.32* | *23.51* | *7.85* | | | *12.36* | | | *8.85* | | | *15.16* | | | | |
| *Mid-Cap Blend Median* | | | | | | *1.00* | | | *1.17* | *19.21* | *2.18* | | | *10.18* | | | *6.08* | | | *12.83* | | | | |
| *Mid-Cap Blend Number of Funds* | | | | | | *406* | | | | | *402* | | | *370* | | | *346* | | | *296* | | | | |
| **Small Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Small Cap Index I** | **VSCIX** | **US Fund Small Blend** | **3.25** | **92,923** | **0.04** | **0.04** | **2** | **0.00** | **1.27** | **21.05** | **2.27** | **94** | **13** | **12.39** | **103** | **16** | **7.73** | **74** | **14** | **14.81** | **18** | **5** | **8.92** | **7/7/1997** |
| Spliced Small Cap Index | | | | | | | | | 1.26 | 21.04 | 2.29 | | | 12.37 | | | 7.70 | | | 14.76 | | | | |
| *CRSP US Small Cap TR USD* | | | | | | | | | *1.26* | *21.04* | *2.29* | | | *12.37* | | | *7.70* | | | *15.14* | | | | |
| *Small Blend Median* | | | | | | *1.10* | | | *0.70* | *17.08* | *(3.74)* | | | *10.37* | | | *5.96* | | | *12.95* | | | | |
| *Small Blend Number of Funds* | | | | | | *712* | | | | | *708* | | | *682* | | | *616* | | | *512* | | | | |

# State of Rhode Island
# 457(b) Performance Summary

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep Date |
| **EQUITY** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Foreign Large Blend** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Schwab International Index** | **SWISX** | **US Fund Foreign Large Blend** | **2.25** | **5,167** | **0.06** | **0.06** | **3** | **0.00** | **(2.10)** | **11.69** | **1.40** | **212** | **30** | **8.98** | **139** | **27** | **2.25** | **164** | **38** | **6.91** | **113** | **34** | **4.34** | **5/19/1997** |
| *MSCI EAFE NR USD* | | | | | | | | | *(1.27)* | *12.58* | *1.08* | | | *9.11* | | | *2.25* | | | *6.90* | | | | |
| *Foreign Large Blend Median* | | | | | | *0.98* | | | *(1.98)* | *11.54* | *(0.10)* | | | *8.08* | | | *1.94* | | | *6.61* | | | | |
| *Foreign Large Blend Number of Funds* | | | | | | *712* | | | | | *686* | | | *645* | | | *576* | | | *497* | | | | |
| **Foreign Large Growth** | | | | | | | | | | | | | | | | | | | | | | | | |
| **American Funds Europacific Growth R6** | **RERGX** | **US Fund Foreign Large Growth** | **27.58** | **161,660** | **0.49** | **0.49** | **4** | **0.00** | **(0.83)** | **16.61** | **1.91** | **211** | **51** | **10.84** | **103** | **27** | **4.45** | **111** | **36** | **8.15** | **111** | **48** | **9.05** | **5/1/2009** |
| *MSCI ACWI Ex USA NR USD* | | | | | | | | | *(1.21)* | *12.22* | *1.29* | | | *9.39* | | | *2.16* | | | *6.54* | | | | |
| *Foreign Large Growth Median* | | | | | | *1.05* | | | *(1.02)* | *17.06* | *1.37* | | | *9.58* | | | *3.74* | | | *8.06* | | | | |
| *Foreign Large Growth Number of Funds* | | | | | | *484* | | | | | *468* | | | *442* | | | *406* | | | *338* | | | | |
| **ALLOCATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Target-Date** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Target Retire Inc Trust I** | | **US SA Target-Date Retirement** | | | **0.07** | **0.07** | | | **0.35** | **9.07** | **6.62** | | **25** | **5.29** | | **32** | **4.24** | | **19** | **6.44** | | **30** | **5.11** | **6/22/2007** |
| *Vanguard Target Retirement Income Composite* | | | | | | | | | *0.42* | *9.27* | *6.69* | | | *5.42* | | | *4.35* | | | *6.50* | | | | |
| *Target-Date Retirement Median* | | | | | | *0.68* | | | *0.32* | *9.24* | *5.85* | | | *4.92* | | | *3.50* | | | *6.09* | | | | |
| *Target-Date Retirement Number of Funds* | | | | | | | | | | | *188* | | | *175* | | | *149* | | | *124* | | | | |
| **Vanguard Target Retire 2015 Trust I** | | **US SA Target-Date 2015** | | | **0.07** | **0.07** | | | **0.33** | **10.11** | **6.50** | | **36** | **6.70** | | **42** | **4.97** | | **21** | **8.40** | | **21** | **5.13** | **6/28/2007** |
| *Vanguard Target Retirement 2015 Composite* | | | | | | | | | *0.43* | *10.35* | *6.65* | | | *6.86* | | | *5.08* | | | *8.46* | | | | |
| *Target-Date 2015 Median* | | | | | | *0.65* | | | *0.28* | *10.33* | *5.83* | | | *6.47* | | | *4.51* | | | *8.15* | | | | |
| *Target-Date 2015 Number of Funds* | | | | | | | | | | | *137* | | | *118* | | | *94* | | | *78* | | | | |
| **Vanguard Target Retire 2020 Trust I** | | **US SA Target-Date 2020** | | | **0.07** | **0.07** | | | **0.30** | **11.69** | **6.59** | | **28** | **7.89** | | **18** | **5.64** | | **1** | **9.24** | | **8** | **5.42** | **6/22/2007** |
| *Vanguard Target Retirement 2020 Composite* | | | | | | | | | *0.45* | *11.95* | *6.71* | | | *8.05* | | | *5.75* | | | *9.38* | | | | |
| *Target-Date 2020 Median* | | | | | | *0.70* | | | *0.30* | *11.02* | *5.89* | | | *6.90* | | | *4.64* | | | *8.29* | | | | |
| *Target-Date 2020 Number of Funds* | | | | | | | | | | | *248* | | | *225* | | | *191* | | | *141* | | | | |
| **Vanguard Target Retire 2025 Trust I** | | **US SA Target-Date 2025** | | | **0.07** | **0.07** | | | **0.30** | **12.87** | **6.70** | | **24** | **8.77** | | **20** | **6.04** | | **2** | **9.87** | | **11** | **5.49** | **6/28/2007** |
| *Vanguard Target Retirement 2025 Composite* | | | | | | | | | *0.47* | *13.15* | *6.79* | | | *8.94* | | | *6.15* | | | *10.02* | | | | |
| *Target-Date 2025 Median* | | | | | | *0.68* | | | *0.28* | *12.26* | *5.99* | | | *7.88* | | | *5.12* | | | *9.23* | | | | |
| *Target-Date 2025 Number of Funds* | | | | | | | | | | | *232* | | | *204* | | | *177* | | | *113* | | | | |
| **Vanguard Target Retire 2030 Trust I** | | **US SA Target-Date 2030** | | | **0.07** | **0.07** | | | **0.26** | **13.60** | **6.53** | | **24** | **9.48** | | **29** | **6.32** | | **12** | **10.44** | | **14** | **5.55** | **6/28/2007** |
| *Vanguard Target Retirement 2030 Composite* | | | | | | | | | *0.46* | *13.92* | *6.60* | | | *9.65* | | | *6.44* | | | *10.59* | | | | |
| *Target-Date 2030 Median* | | | | | | *0.71* | | | *0.27* | *13.39* | *5.78* | | | *8.71* | | | *5.54* | | | *9.67* | | | | |
| *Target-Date 2030 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *131* | | | | |
| **Vanguard Target Retire 2035 Trust I** | | **US SA Target-Date 2035** | | | **0.07** | **0.07** | | | **0.22** | **14.34** | **6.32** | | **27** | **10.18** | | **29** | **6.59** | | **16** | **10.98** | | **9** | **5.73** | **6/28/2007** |
| *Vanguard Target Retirement 2035 Composite* | | | | | | | | | *0.45* | *14.70* | *6.40* | | | *10.31* | | | *6.71* | | | *11.13* | | | | |
| *Target-Date 2035 Median* | | | | | | *0.69* | | | *0.27* | *14.32* | *5.60* | | | *9.58* | | | *5.86* | | | *10.19* | | | | |
| *Target-Date 2035 Number of Funds* | | | | | | | | | | | *227* | | | *199* | | | *172* | | | *108* | | | | |

# State of Rhode Island
# 457(b) Performance Summary

As of 07/31/2019

**The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.**

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) | (X) | (Y) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Recent Returns | | Annualized Total Returns as of 6/30/2019 | | | | | | | | | | | | | |
| Investment Name | Ticker | Morningstar Category | Mgr Tenure | AUM $M | Gross ER | Net ER | %-ile ER | Rev Share | 1 Mo | YTD | 1 Yr | Category Rank | %-ile | 3 Yr | Category Rank | %-ile | 5 Yr | Category Rank | %-ile | 10 Yr | Category Rank | %-ile | SI | Incep Date |
| **ALLOCATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Target-Date** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Vanguard Target Retire 2040 Trust I** | | **US SA Target-Date 2040** | | | **0.07** | **0.07** | | | **0.18** | **15.06** | **6.09** | | **27** | **10.88** | | **21** | **6.83** | | **18** | **11.27** | | **11** | **5.99** | **6/28/2007** |
| *Vanguard Target Retirement 2040 Composite* | | | | | | | | | *0.44* | *15.47* | *6.19* | | | *11.08* | | | *6.98* | | | *11.44* | | | | |
| *Target-Date 2040 Median* | | | | | | *0.74* | | | *0.26* | *15.02* | *5.42* | | | *10.00* | | | *6.11* | | | *10.42* | | | | |
| *Target-Date 2040 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *131* | | | | |
| **Vanguard Target Retire 2045 Trust I** | | **US SA Target-Date 2045** | | | **0.07** | **0.07** | | | **0.15** | **15.61** | **5.94** | | **31** | **11.11** | | **21** | **6.94** | | **13** | **11.34** | | **13** | **6.01** | **6/28/2007** |
| *Vanguard Target Retirement 2045 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | *11.51* | | | | |
| *Target-Date 2045 Median* | | | | | | *0.71* | | | *0.22* | *15.55* | *5.41* | | | *10.36* | | | *6.21* | | | *10.63* | | | | |
| *Target-Date 2045 Number of Funds* | | | | | | | | | | | *227* | | | *199* | | | *172* | | | *107* | | | | |
| **Vanguard Target Retire 2050 Trust I** | | **US SA Target-Date 2050** | | | **0.07** | **0.07** | | | **0.15** | **15.60** | **5.96** | | **32** | **11.12** | | **27** | **6.94** | | **20** | **11.34** | | **10** | **6.06** | **6/28/2007** |
| *Vanguard Target Retirement 2050 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | *11.51* | | | | |
| *Target-Date 2050 Median* | | | | | | *0.74* | | | *0.23* | *15.64* | *5.36* | | | *10.34* | | | *6.28* | | | *10.67* | | | | |
| *Target-Date 2050 Number of Funds* | | | | | | | | | | | *237* | | | *215* | | | *181* | | | *106* | | | | |
| **Vanguard Target Retire 2055 Trust I** | | **US SA Target-Date 2055** | | | **0.07** | **0.07** | | | **0.15** | **15.61** | **5.96** | | **29** | **11.12** | | **32** | **6.91** | | **21** | | | | **9.78** | **10/5/2010** |
| *Vanguard Target Retirement 2055 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | | | | | |
| *Target-Date 2055 Median* | | | | | | *0.72* | | | *0.20* | *15.76* | *5.35* | | | *10.62* | | | *6.34* | | | | | | | |
| *Target-Date 2055 Number of Funds* | | | | | | | | | | | *227* | | | *196* | | | *164* | | | | | | | |
| **Vanguard Target Retire 2060 Trust I** | | **US SA Target-Date 2060+** | | | **0.07** | **0.07** | | | **0.13** | **15.59** | **5.96** | | **30** | **11.13** | | **36** | **6.92** | | **42** | | | | **9.52** | **3/1/2012** |
| *Vanguard Target Retirement 2060 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | *11.33* | | | *7.12* | | | | | | | |
| *Target-Date 2060+ Median* | | | | | | *0.71* | | | *0.22* | *15.98* | *5.45* | | | *10.88* | | | *6.65* | | | | | | | |
| *Target-Date 2060+ Number of Funds* | | | | | | | | | | | *214* | | | *131* | | | *16* | | | | | | | |
| **Vanguard Target Retire 2065 Trust I** | | **US SA Target-Date 2060+** | | | **0.07** | **0.07** | | | **0.17** | **15.66** | **6.06** | | **26** | | | | | | | | | | **9.66** | **7/21/2017** |
| *Vanguard Target Retirement 2060 Composite* | | | | | | | | | *0.43* | *16.05* | *6.06* | | | | | | | | | | | | | |
| *Target-Date 2060+ Median* | | | | | | *0.71* | | | *0.22* | *15.98* | *5.45* | | | | | | | | | | | | | |
| *Target-Date 2060+ Number of Funds* | | | | | | | | | | | *214* | | | | | | | | | | | | | |

Source: Morningstar & TIAA

**1 Mo & YTD as of 7/31/2019. All other data as of 6/30/2019.**

**Since Incep. = Since Inception Date**

**%-ile --> Percentile Ranking in Morningstar Category.**

**Vanguard Index Information available at http://www.vanguard.com**

**"Since Inception" performance is calculated from this date.**

**For definitions please visit www.tiaa.org/public/assetmanagement**

*** = S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter**

**** = Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter**

**Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio is calculated by TIAA and may differ based on calculation methods**

**Accumulations in mutual funds not managed by TIAA may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.**

***** = Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter**

**The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.**

**You cannot invest directly in an index.**

# Disclosures

As of 07/31/2019

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Traditional is a guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

**Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.**

Morningstar Ranking/Number of Funds in Category displays the Fund's actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Morningstar Percentile Rankings are the Fund's total return rank relative to all funds in the same Morningstar category, where 1 is the highest percentile and 100 is the lowest percentile.

# Disclosures

As of 07/31/2019

**Prospectus Gross Expense Ratio**
The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.
--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
--Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

**Prospectus Net Expense Ratio**
The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.
--The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
--Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
--TIAA, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees. --Prospectus Net Expense Ratio % - ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s).TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

# State of Rhode Island - Plan Balance Summary

457(b)

State of Rhode Island 457(b) Deferred Compensation Plan

TIAA

As of 07/31/2019

| Ticker | Investment Name | Asset Class Description | 7/31/2019 Account Balance |
|---|---|---|---|
| AIADX | American Century Inf Adj Bd R6 | Fixed Income | $589,175.01 |
| PTTRX | PIMCO Total Return Instl | Fixed Income | $578,787.04 |
| RERGX | American EuroPac Growth R6 | Equities | $1,669,379.98 |
| SWISX | Schwab International Index Fd | Equities | $344,861.82 |
| TIAA# | TIAA Traditional Benefit Responsive 2 | Guaranteed | $7,215,805.43 |
| VBTIX | Vanguard Ttl Bd Mkt Idx Inst | Fixed Income | $328,075.74 |
| VFTAX | Vanguard FTSE Social Index Adm | Equities | $713,156.51 |
| VINIX | Vanguard Inst Idx Inst | Equities | $10,344,886.79 |
| VLC1# | VALIC Fixed-Interest Opt 3% | Guaranteed | $6,265,934.11 |
| VLC2# | VALIC Fixed-Interest Opt 1.5% | Guaranteed | $34,822.95 |
| VMCIX | Vanguard Mid-Cap Idx Inst | Equities | $5,482,295.54 |
| VSCIX | Vanguard Small-Cap Idx Inst | Equities | $3,349,649.70 |
| VT15# | Vanguard Tgt Rtmt 2015 Tr I | Multi-Asset | $23,970.56 |
| VT20# | Vanguard Tgt Rtmt 2020 Tr I | Multi-Asset | $684,694.19 |
| VT25# | Vanguard Tgt Rtmt 2025 Tr I | Multi-Asset | $575,381.09 |
| VT30# | Vanguard Tgt Rtmt 2030 Tr I | Multi-Asset | $832,100.76 |
| VT35# | Vanguard Tgt Rtmt 2035 Tr I | Multi-Asset | $297,122.61 |
| VT40# | Vanguard Tgt Rtmt 2040 Tr I | Multi-Asset | $109,154.15 |
| VT45# | Vanguard Tgt Rtmt 2045 Tr I | Multi-Asset | $141,665.96 |
| VT50# | Vanguard Tgt Rtmt 2050 Tr I | Multi-Asset | $101,923.79 |
| VT55# | Vanguard Tgt Rtmt 2055 Tr I | Multi-Asset | $28,177.34 |
| VT60# | Vanguard Tgt Rtmt 2060 Tr I | Multi-Asset | $10,901.96 |
| VT65# | Vanguard Target Rtmt 2065 Tr I | Multi-Asset | $2,613.14 |
| VTIN# | Vanguard Tgt Rtmt Income Tr I | Multi-Asset | $70,560.67 |
| | **STATE OF RHODE ISLAND 457(B) DEFERRED COMPENSATION PLAN Total** | | **$39,795,096.84** |

# Disclosures

TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA reported performance may differ from Morningstar source returns for the same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by $1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

**Investment products may be subject to market and other risk factors. See the applicable product literature or visit tiaa.org for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or go to www.TIAA.org/prospectuses for current product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.**

TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distribute securities products. Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association (TIAA) of America and College Retirement Equities Fund (CREF), New York, NY. Each is solely responsible for its own financial condition and contractual obligations.

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929878

# Monthly Plan Performance Update

STATE OF RHODE ISLAND - STATE OF RI (35835)

*Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate, so you may have a gain or loss when shares are sold. Current performance may be higher or lower than that quoted. Visit your Fidelity website for the most recent month-end performance.*

| | Cumulative Total Returns | | | | Average Annual Total Returns | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Name** | **As of** | **1 mo** | **3 mo** | **YTD** | **As of** | **1 yr** | **3 yr** | **5 yr** | **10 yr** |
| DOW JONES INDUSTRIAL AVERAGE | 07/31/2019 | 1.12 | 1.65 | 16.69 | 06/30/2019 | 12.20 | 16.80 | 12.29 | 15.03 |
| BLOOMBERG BARCLAYS U.S. AGGREGATE BOND INDEX | 07/31/2019 | 0.22 | 3.28 | 6.35 | 06/30/2019 | 7.87 | 2.31 | 2.95 | 3.90 |
| NASDAQ COMPOSITE INDEX | 07/31/2019 | 2.15 | 1.27 | 23.94 | 06/30/2019 | 7.78 | 19.56 | 13.97 | 17.19 |
| RUSSELL 2000 INDEX | 07/31/2019 | 0.58 | -0.69 | 17.66 | 06/30/2019 | -3.31 | 12.30 | 7.06 | 13.45 |
| S&P 500 INDEX | 07/31/2019 | 1.44 | 1.69 | 20.24 | 06/30/2019 | 10.42 | 14.19 | 10.71 | 14.70 |

| | Cumulative Total Returns | | | | Average Annual Total Returns | | | | | Fees | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Investment Name** | **As of** | **1 mo** | **3 mo** | **YTD** | **As of** | **1 yr** | **3 yr** | **5 yr** | **10 yr** | **Life** | **Short Term Trading** | **Expense Ratio** | **Inception Date** |
| **Stock Investments** | | | | | | | | | | | | | |
| **Others** | | | | | | | | | | | | | |
| VAN FTSE SOC IDX ADM | 07/31/2019 | 2.09 | 2.31 | 21.45 | 06/30/2019 | 11.28 | 15.98 | 11.46 | 15.47 | 5.06 | -- | 0.14% on 02/05/2019 | 05/31/2000 |
| **Large Cap** | | | | | | | | | | | | | |
| FID 500 INDEX | 07/31/2019 | 1.44 | 1.69 | 20.25 | 06/30/2019 | 10.41 | 14.17 | 10.70 | 14.69 | 10.31 | -- | 0.01% on 04/29/2019 | 02/17/1988 |
| FID CONTRAFUND K | 07/31/2019 | 0.91 | 1.53 | 21.96 | 06/30/2019 | 8.02 | 17.92 | 12.64 | 15.54 | 12.57 | -- | 0.73% on 03/01/2019 | 05/17/1967 |
| FID LARGE CAP STOCK | 07/31/2019 | 1.01 | -0.61 | 18.29 | 06/30/2019 | 5.14 | 13.22 | 7.96 | 14.57 | 8.52 | -- | 0.63% on 06/29/2019 | 06/22/1995 |
| INVESCO DIVRS DIV R6 | 07/31/2019 | -0.15 | 1.24 | 15.31 | 06/30/2019 | 9.18 | 6.93 | 7.26 | 12.57 | 7.77 | -- | 0.43% on 02/28/2019 | 12/31/2001 |
| **Mid-Cap** | | | | | | | | | | | | | |
| FID LOW PRICED STK K | 07/31/2019 | 0.93 | 0.04 | 13.08 | 06/30/2019 | -0.84 | 9.44 | 6.11 | 12.96 | 13.19 | -- | 0.53% on 09/29/2018 | 12/27/1989 |
| FID MID CAP IDX | 07/31/2019 | 1.42 | 1.78 | 23.08 | 06/30/2019 | 7.88 | 12.16 | 8.64 | -- | 13.61 | -- | 0.03% on 06/29/2019 | 09/08/2011 |
| **Small Cap** | | | | | | | | | | | | | |
| FID SM CAP IDX | 07/31/2019 | 0.60 | -0.68 | 17.70 | 06/30/2019 | -3.21 | 12.46 | 7.28 | -- | 12.68 | -- | 0.03% on 06/29/2019 | 09/08/2011 |
| **International** | | | | | | | | | | | | | |
| FID INTL INDEX | 07/31/2019 | -1.89 | -1.19 | 11.94 | 06/30/2019 | 1.21 | 9.02 | 2.34 | 7.01 | 4.86 | -- | 0.04% on 05/01/2019 | 11/05/1997 |
| HARBOR INTL INST | 07/31/2019 | -2.39 | -2.54 | 10.20 | 06/30/2019 | -6.14 | 4.90 | -0.42 | 6.35 | 10.00 | -- | 0.89% on 03/01/2019 | 12/29/1987 |

| Investment Name | Cumulative Total Returns As of | 1 mo | 3 mo | YTD | Average Annual Total Returns As of | 1 yr | 3 yr | 5 yr | 10 yr | Life | Fees Short Term Trading | Expense Ratio | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blended Investments*** | | | | | | | | | | | | | |
| **Others** | | | | | | | | | | | | | |
| FID FREEDOM 2005 K | 07/31/2019 | 0.16 | 1.81 | 8.14 | 06/30/2019 | 5.40 | 6.00 | 4.27 | 6.74 | 4.93 | -- | 0.42% on 05/30/2019 | 11/06/2003 |
| FID FREEDOM 2010 K | 07/31/2019 | 0.13 | 1.65 | 9.32 | 06/30/2019 | 5.33 | 6.93 | 4.79 | 7.63 | 6.42 | -- | 0.46% on 05/30/2019 | 10/17/1996 |
| FID FREEDOM 2015 K | 07/31/2019 | 0.16 | 1.44 | 10.37 | 06/30/2019 | 5.19 | 7.76 | 5.25 | 8.05 | 5.87 | -- | 0.49% on 05/30/2019 | 11/06/2003 |
| FID FREEDOM 2020 K | 07/31/2019 | 0.13 | 1.25 | 11.28 | 06/30/2019 | 5.18 | 8.38 | 5.58 | 8.70 | 6.74 | -- | 0.53% on 05/30/2019 | 10/17/1996 |
| FID FREEDOM 2025 K | 07/31/2019 | 0.07 | 1.13 | 12.01 | 06/30/2019 | 5.08 | 8.97 | 5.84 | 9.35 | 6.43 | -- | 0.56% on 05/30/2019 | 11/06/2003 |
| FID FREEDOM 2030 K | 07/31/2019 | 0.12 | 0.88 | 13.37 | 06/30/2019 | 4.81 | 10.32 | 6.48 | 9.95 | 6.91 | -- | 0.60% on 05/30/2019 | 10/17/1996 |
| FID FREEDOM 2035 K | 07/31/2019 | 0.07 | 0.38 | 14.61 | 06/30/2019 | 4.13 | 11.18 | 6.87 | 10.42 | 6.87 | -- | 0.63% on 05/30/2019 | 11/06/2003 |
| FID FREEDOM 2040 K | 07/31/2019 | 0.10 | 0.17 | 15.13 | 06/30/2019 | 4.01 | 11.19 | 6.88 | 10.51 | 4.20 | -- | 0.65% on 05/30/2019 | 09/06/2000 |
| FID FREEDOM 2045 K | 07/31/2019 | 0.09 | 0.19 | 15.14 | 06/30/2019 | 3.95 | 11.17 | 6.88 | 10.60 | 6.00 | -- | 0.65% on 05/30/2019 | 06/01/2006 |
| FID FREEDOM 2050 K | 07/31/2019 | 0.00 | 0.09 | 15.02 | 06/30/2019 | 3.95 | 11.20 | 6.88 | 10.65 | 5.85 | -- | 0.65% on 05/30/2019 | 06/01/2006 |
| FID FREEDOM 2055 K | 07/31/2019 | 0.08 | 0.18 | 15.11 | 06/30/2019 | 3.97 | 11.17 | 6.88 | -- | 8.04 | -- | 0.65% on 05/30/2019 | 06/01/2011 |
| FID FREEDOM 2060 K | 07/31/2019 | 0.09 | 0.15 | 15.06 | 06/30/2019 | 3.97 | 11.16 | -- | -- | 7.56 | -- | 0.65% on 05/30/2019 | 08/05/2014 |
| FID FREEDOM INC K | 07/31/2019 | 0.11 | 1.98 | 7.13 | 06/30/2019 | 5.48 | 4.90 | 3.65 | 5.19 | 4.80 | -- | 0.42% on 05/30/2019 | 10/17/1996 |
| **Bond Investments** | | | | | | | | | | | | | |
| **Stable Value** | | | | | | | | | | | | | |
| TRP STABLE VALUE A | 07/31/2019 | 0.19 | 0.55 | 1.28 | 06/30/2019 | 2.17 | 1.98 | 1.95 | 2.46 | 4.75 | -- | 0.30% on 12/31/2018 | 09/12/1988 |
| **Income** | | | | | | | | | | | | | |
| FID US BOND IDX | 07/31/2019 | 0.31 | 3.32 | 6.33 | 06/30/2019 | 7.88 | 2.19 | 2.91 | 3.82 | 5.92 | -- | 0.03% on 11/29/2018 | 03/08/1990 |
| PIM TOTAL RT INST | 07/31/2019 | -0.01 | 3.01 | 6.07 | 06/30/2019 | 7.64 | 3.18 | 3.02 | 4.69 | 7.16 | -- | 0.71% on 07/31/2019 | 05/11/1987 |
| **Other Investments** | | | | | | | | | | | | | |
| **Others** | | | | | | | | | | | | | |
| BROKERAGELINK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Expense Ratio is the total annual fund operating expense ratio from the fund's most recent prospectus. For non-Fidelity fund of funds listed, the ratio shown may solely reflect the total operating expense ratio of the fund, or may be a combined ratio reflecting both the total operating expense ratio of the fund and the total operating expense ratios of the underlying funds in which it was invested. Please consult the fund's prospectus for more detail on a particular fund's expense ratio.

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Cumulative total returns are reported as of the period indicated. Life of Fund figures are reported as of the inception date to the period indicated.

The management company may be temporarily reimbursing a portion of the fund's expenses. Absent such reimbursement, returns and yields would have been lower. A fund's expense limitation may be terminated at any time.

**For any Government or U.S. Treasury Money Market funds listed:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.* Fidelity's government and U.S. Treasury money market funds will not impose a fee upon the sale of your shares, nor temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors.

**For any Retail (Non Government or U.S. Treasury) Money Market Funds listed:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

**For any Institutional Money Market Funds listed:** *You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

A money market fund's current yield reflects the current earnings of the fund, while the total return refers to a specific past holding period.

Performance of an index is not illustrative of any particular investment and an investment cannot be made directly in an index.

Generally, among asset classes stocks are more volatile than bonds or short-term instruments and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Although the bond market is also volatile, lower-quality debt securities including leveraged loans generally offer higher yields compared to investment grade securities, but also involve greater risk of default or price changes. Foreign markets can be more volatile than U.S. markets due to increased risks of adverse issuer, political, market or economic developments, all of which are magnified in emerging markets.

**Before investing, consider the funds' investment objectives, risks, charges, and expenses. Contact Fidelity for a prospectus or, if available, a summary prospectus containing this information. Read it carefully.**

For Investment Professional or Plan Sponsor use only.

Fidelity Brokerage Services LLC, Member NYSE, SIPC, 900 Salem Street, Smithfield, RI 02917

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## STATE OF RHODE ISLAND

Balance by Fund

Data As Of: 7/31/2019

| DC Plan Number | DC Plan Short Name | Fund Code | Fund Name | Fund Ticker Symbol | Fund Type | Fund Distinct Count By Participant | Market Value | Asset Percentage |
|---|---|---|---|---|---|---|---|---|
| 35835 | STATE OF RI | 338 | FID LARGE CAP STOCK | FLCSX | DOMESTIC EQUITY | 289 | $8,575,217.73 | 5.38% |
| 35835 | STATE OF RI | 2080 | FID CONTRAFUND K | FCNKX | DOMESTIC EQUITY | 717 | $37,492,212.02 | 23.51% |
| 35835 | STATE OF RI | 2095 | FID LOW PRICED STK K | FLPKX | DOMESTIC EQUITY | 351 | $9,939,000.79 | 6.23% |
| 35835 | STATE OF RI | 2326 | FID US BOND IDX | FXNAX | BOND | 162 | $2,233,784.75 | 1.40% |
| 35835 | STATE OF RI | 2328 | FID 500 INDEX | FXAIX | DOMESTIC EQUITY | 352 | $12,686,699.34 | 7.95% |
| 35835 | STATE OF RI | 2352 | FID MID CAP IDX | FSMDX | DOMESTIC EQUITY | 199 | $2,237,571.42 | 1.40% |
| 35835 | STATE OF RI | 2358 | FID SM CAP IDX | FSSNX | DOMESTIC EQUITY | 237 | $1,983,501.02 | 1.24% |
| 35835 | STATE OF RI | 2363 | FID INTL INDEX | FSPSX | INTERNATIONAL EQUITY | 195 | $2,786,659.41 | 1.75% |
| 35835 | STATE OF RI | 3019 | FID FREEDOM INC K | FNSHX | LIFECYCLE | 48 | $1,692,027.36 | 1.06% |
| 35835 | STATE OF RI | 3020 | FID FREEDOM 2005 K | FSNJX | LIFECYCLE | 10 | $362,930.40 | 0.23% |
| 35835 | STATE OF RI | 3021 | FID FREEDOM 2010 K | FSNKX | LIFECYCLE | 70 | $4,132,503.34 | 2.59% |
| 35835 | STATE OF RI | 3022 | FID FREEDOM 2015 K | FSNLX | LIFECYCLE | 50 | $2,089,348.88 | 1.31% |
| 35835 | STATE OF RI | 3023 | FID FREEDOM 2020 K | FSNOX | LIFECYCLE | 231 | $14,743,462.68 | 9.24% |
| 35835 | STATE OF RI | 3024 | FID FREEDOM 2025 K | FSNPX | LIFECYCLE | 105 | $4,006,980.80 | 2.51% |
| 35835 | STATE OF RI | 3025 | FID FREEDOM 2030 K | FSNQX | LIFECYCLE | 260 | $12,947,494.25 | 8.12% |
| 35835 | STATE OF RI | 3026 | FID FREEDOM 2035 K | FSNUX | LIFECYCLE | 78 | $3,090,325.98 | 1.94% |
| 35835 | STATE OF RI | 3027 | FID FREEDOM 2040 K | FSNVX | LIFECYCLE | 62 | $1,565,564.33 | 0.98% |
| 35835 | STATE OF RI | 3028 | FID FREEDOM 2045 K | FSNZX | LIFECYCLE | 63 | $1,213,635.83 | 0.76% |
| 35835 | STATE OF RI | 3029 | FID FREEDOM 2050 K | FNSBX | LIFECYCLE | 51 | $364,786.06 | 0.23% |
| 35835 | STATE OF RI | 3030 | FID FREEDOM 2055 K | FNSDX | LIFECYCLE | 44 | $709,653.35 | 0.44% |
| 35835 | STATE OF RI | 3031 | FID FREEDOM 2060 K | FNSFX | LIFECYCLE | 20 | $79,802.84 | 0.05% |
| 35835 | STATE OF RI | BLNK | BROKERAGELINK | | OTHER | 111 | $12,812,341.72 | 8.03% |
| 35835 | STATE OF RI | OE9Q | VAN FTSE SOC IDX ADM | VFTAX | DOMESTIC EQUITY | 111 | $871,310.35 | 0.55% |
| 35835 | STATE OF RI | OF1P | PIM TOTAL RT INST | PTTRX | BOND | 248 | $7,072,446.61 | 4.43% |
| 35835 | STATE OF RI | OFHL | HARBOR INTL INST | HAINX | INTERNATIONAL EQUITY | 253 | $3,787,369.95 | 2.37% |
| 35835 | STATE OF RI | OGMU | TRP STABLE VALUE A | | STABLE VALUE | 338 | $7,503,998.61 | 4.70% |
| 35835 | STATE OF RI | OK26 | INVESCO DIVRS DIV R6 | LCEFX | DOMESTIC EQUITY | 180 | $2,524,443.10 | 1.58% |
| | | | | | | | $159,505,072.91 | |

# P E R F O R M A N C E  U P D A T E

## Voya Retirement Insurance and Annuity Company

### STATE OF RHODE ISLAND VK0450

**Average Annual Total Returns as of: 07/31/2019** (shown in percentages)

Variable annuities and mutual funds offered through a retirement plan are intended as long-term investments designed for retirement purposes. Money distributed from a 403(b) plan, 401(a)/(k) plan, or a 457 plan will be taxed as ordinary income in the year the money is distributed. Early withdrawals from a 403(b) plan and a 401(a)/(k) plan, if taken prior to age 59 1/2, will be subject to the IRS 10% premature distribution penalty tax, unless an exception applies. This IRS premature distribution penalty tax does not apply to 457 plans. Account values fluctuate with market conditions, and when surrendered the principal may be worth more or less than the original amount invested.

**The performance data quoted represents past performance. Past performance does not guarantee future results. For month-end performance which may be lower or higher than the performance data shown please call 800-232-5422. Investment return and principal value of an investment will fluctuate so that, when sold, an investment may be worth more or less than the original cost.**

The below investment options are in Separate Account D. Please note that the figures do not include an adjustment for the Voya Administrative Fund Fee (where applicable) and the deduction of the Daily Asset Charge from the Separate Account (if applicable), or other applicable contract charges. If these fees and charges were included, performance would be less favorable.

The returns assume reinvestment of all dividends (ordinary income and capital gains) and are net of management fees and other fund operating expenses.

**You should consider the investment objectives, risks and charges, and expenses of the funds carefully before investing. The prospectus contains this and other information. Anyone who wishes to obtain a free copy of the fund prospectuses may call their Voya representative or the number above. Please read the prospectus carefully before investing.**

Returns less than one year are not annualized. Fund Inception Date is the date of inception for the underlying fund, and is the date used in calculating the periodic returns. This date may also precede the portfolio's inclusion in the product.

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Stability of Principal** | | | | | | | | | | | | | | | | | | | |
| ***Stability of Principal*** | | | | | | | | | | | | | | | | | | | |
| Voya Fixed Account - 457/401 II A - 4573 (22)(23) | MFR | 0.15 | 0.17 | 0.44 | 0.51 | 1.01 | 1.21 | 1.75 | 1.96 | 1.79 | 2.17 | 1.92 | 1.31 | 2.27 | 0.67 | | | | |
| **Bonds** | | | | | | | | | | | | | | | | | | | |
| ***High Yield Bond*** | | | | | | | | | | | | | | | | | | | |
| PGIM High Yield Fund - Class Z - 2482 | BCUSH1IC | 0.54 | 0.53 | 2.19 | 1.55 | 11.52 | 10.51 | 8.16 | 6.76 | 7.28 | 6.70 | 5.68 | 5.06 | 8.69 | 8.59 | | 03/01/1996 | 0.55 | 0.55 |
| ***Inflation-Protected Bond*** | | | | | | | | | | | | | | | | | | | |

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PIMCO VIT Real Return Portfolio - Administrative Class - 833 | LBUSTIPS | 0.29 | 0.36 | 2.64 | 2.89 | 6.66 | 6.53 | 4.95 | 5.72 | 2.05 | 1.91 | 1.38 | 1.82 | 3.80 | 3.67 | | 09/30/1999 | 1.42 | 1.42 |
| ***Intermediate-Term Bond*** | | | | | | | | | | | | | | | | | | | |
| Voya Intermediate Bond Portfolio - Class I - 004 (1) | LEHM | 0.36 | 0.22 | 3.64 | 3.28 | 7.35 | 6.35 | 8.38 | 8.08 | 3.14 | 2.17 | 3.70 | 3.05 | 5.54 | 3.75 | | 05/23/1973 | 0.55 | 0.55 |
| Voya U.S. Bond Index Portfolio - Class I - 1554 (2) | LEHM | 0.29 | 0.22 | 3.27 | 3.28 | 6.19 | 6.35 | 7.76 | 8.08 | 1.81 | 2.17 | 2.72 | 3.05 | 3.36 | 3.75 | | 03/07/2008 | 0.38 | 0.38 |
| **Asset Allocation** | | | | | | | | | | | | | | | | | | | |
| ***Lifecycle*** | | | | | | | | | | | | | | | | | | | |
| Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4) | SPT2020 | 0.45 | 0.39 | 2.04 | 1.48 | 11.13 | 10.97 | 5.57 | 4.66 | 6.64 | 6.59 | 5.74 | 5.54 | | | 8.60 | 10/03/2011 | 0.87 | 0.72 |
| Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5) | SPT2025 | 0.50 | 0.40 | 1.68 | 1.30 | 12.43 | 12.06 | 4.79 | 4.33 | 7.50 | 7.31 | 5.99 | 5.95 | 8.55 | 8.68 | | 04/29/2005 | 0.85 | 0.78 |
| Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6) | SPT2030 | 0.44 | 0.42 | 1.26 | 1.08 | 13.75 | 13.24 | 4.16 | 3.92 | 8.20 | 7.96 | 6.60 | 6.36 | | | 10.30 | 10/03/2011 | 0.94 | 0.79 |
| Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7) | SP2035 | 0.40 | 0.42 | 0.89 | 0.88 | 14.60 | 14.26 | 3.36 | 3.49 | 8.72 | 8.56 | 6.56 | 6.73 | 9.38 | 9.66 | | 04/29/2005 | 0.90 | 0.83 |
| Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8) | SPT2040 | 0.36 | 0.43 | 0.66 | 0.80 | 15.21 | 14.94 | 2.90 | 3.25 | 9.01 | 9.00 | 6.93 | 6.99 | | | 11.36 | 10/03/2011 | 1.01 | 0.83 |
| Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9) | SP2045 | 0.32 | 0.42 | 0.49 | 0.75 | 15.66 | 15.27 | 2.16 | 3.06 | 8.89 | 9.27 | 6.63 | 7.14 | 9.76 | 10.17 | | 04/29/2005 | 0.92 | 0.86 |
| Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10) | SPT2050 | 0.29 | 0.42 | 0.40 | 0.68 | 15.89 | 15.46 | 2.03 | 2.90 | 8.97 | 9.50 | 6.89 | 7.28 | | | 11.45 | 10/03/2011 | 1.03 | 0.86 |
| Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11) | SPT2055 | 0.27 | 0.42 | 0.41 | 0.69 | 15.78 | 15.50 | 2.07 | 2.88 | 8.99 | 9.66 | 6.71 | 7.34 | | | 8.83 | 03/08/2010 | 0.93 | 0.86 |
| Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12) | SPT2060 | 0.25 | 0.43 | 0.41 | 0.69 | 15.75 | 15.67 | 1.98 | 2.95 | 9.01 | 9.85 | | | | | 6.80 | 02/09/2015 | 1.13 | 0.87 |
| Voya Solution Income Portfolio - Initial Class - 767 (4)(13) | SPTREIN | 0.41 | 0.36 | 2.25 | 1.96 | 9.47 | 8.93 | 5.97 | 5.26 | 5.13 | 4.66 | 4.56 | 4.19 | 6.22 | 5.72 | | 04/29/2005 | 0.80 | 0.68 |
| **Balanced** | | | | | | | | | | | | | | | | | | | |
| ***Allocation--50% to 70% Equity*** | | | | | | | | | | | | | | | | | | | |
| VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 | SPXLBGC | 0.65 | 0.92 | 3.12 | 2.58 | 18.20 | 15.02 | 13.38 | 8.69 | 11.38 | 8.78 | 10.80 | 8.09 | 12.51 | 10.07 | | 01/24/1989 | 0.64 | 0.64 |
| **Large Cap Value** | | | | | | | | | | | | | | | | | | | |
| ***Large Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya Growth and Income Portfolio - Class I - 001 (14) | SPXRE | 2.13 | 1.44 | 3.12 | 1.69 | 20.00 | 20.24 | 9.61 | 7.99 | 12.76 | 13.36 | 9.41 | 11.34 | 12.38 | 14.03 | | 12/31/1979 | 0.63 | 0.58 |
| Voya U.S. Stock Index Portfolio - Institutional Class - 829 | SPXRE | 1.44 | 1.44 | 1.63 | 1.69 | 20.05 | 20.24 | 7.67 | 7.99 | 13.04 | 13.36 | 11.03 | 11.34 | 13.73 | 14.03 | | 05/03/2004 | 0.27 | 0.27 |
| ***Large Value*** | | | | | | | | | | | | | | | | | | | |
| BlackRock Equity Dividend Fund - Institutional Shares - 8518 (15) | RS1000V | 1.17 | 0.83 | 1.65 | 1.12 | 16.77 | 17.20 | 4.02 | 5.20 | 11.07 | 9.44 | 9.39 | 8.01 | 11.74 | 12.40 | | 11/29/1988 | 0.73 | 0.73 |
| **Large Cap Growth** | | | | | | | | | | | | | | | | | | | |
| ***Large Growth*** | | | | | | | | | | | | | | | | | | | |
| Voya Large Cap Growth Portfolio - Institutional Class - 742 (16) | RS1000G | 2.31 | 2.26 | 2.07 | 2.38 | 22.05 | 24.23 | 10.04 | 10.82 | 16.00 | 17.13 | 13.36 | 14.25 | 15.49 | 15.74 | | 05/03/2004 | 0.67 | 0.67 |
| **Small/Mid/Specialty** | | | | | | | | | | | | | | | | | | | |
| ***Mid-Cap Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya Russell™ Mid Cap Index Portfolio - Class I - 1560 (17) | RSMID | 1.42 | 1.43 | 1.68 | 1.74 | 22.79 | 23.08 | 6.37 | 6.71 | 10.61 | 11.02 | 9.18 | 9.59 | 13.94 | 14.35 | | 03/04/2008 | 0.46 | 0.41 |
| ***Mid-Cap Growth*** | | | | | | | | | | | | | | | | | | | |

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Principal MidCap Fund - Class R-5 - 3412 | RSMID | 1.79 | 1.43 | 5.14 | 1.74 | 32.56 | 23.08 | 16.84 | 6.71 | 15.92 | 11.02 | 13.27 | 9.59 | 16.65 | 14.35 | | 12/06/2000 | 0.85 | 0.85 |
| ***Small Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (18) | RS2000 | 0.52 | 0.58 | -0.81 | -0.69 | 17.45 | 17.66 | -4.78 | -4.42 | 10.02 | 10.36 | 8.26 | 8.53 | 12.31 | 12.47 | | 03/04/2008 | 0.47 | 0.46 |
| Voya Small Company Portfolio - Class I - 042 (19) | RS2000 | 0.95 | 0.58 | -0.83 | -0.69 | 18.43 | 17.66 | -4.54 | -4.42 | 7.63 | 10.36 | 8.32 | 8.53 | 12.23 | 12.47 | | 12/27/1996 | 0.90 | 0.90 |
| **Global / International** | | | | | | | | | | | | | | | | | | | |
| ***Foreign Large Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya International Index Portfolio - Class I - 1551 (20) | MSEAFANET | -2.11 | -1.27 | -1.60 | -0.44 | 11.60 | 12.58 | -3.67 | -2.60 | 6.41 | 6.87 | 2.07 | 2.39 | 5.48 | 5.84 | | 03/04/2008 | 0.54 | 0.45 |
| ***Foreign Large Growth*** | | | | | | | | | | | | | | | | | | | |
| American Funds EuroPacific Growth Fund - Class R-4 - 573 | MSCIXUS | -0.87 | -1.21 | -0.09 | -0.88 | 16.38 | 12.22 | -1.38 | -2.28 | 8.17 | 7.20 | 4.34 | 2.12 | 6.67 | 5.42 | | 04/16/1984 | 0.84 | 0.84 |
| ***World Large Stock*** | | | | | | | | | | | | | | | | | | | |
| VY® Invesco Oppenheimer Global Portfolio - Initial Class - 432 (21) | MSCIACN | -0.37 | 0.29 | -0.51 | 0.52 | 21.05 | 16.57 | 0.36 | 2.95 | 13.79 | 10.17 | 8.50 | 6.48 | 11.09 | 9.25 | | 05/01/2002 | 0.75 | 0.75 |

The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.

Foreign investing involves special risks such as currency fluctuation and public disclosure, as well as economic and political risks.

Some of the Funds invest in securities guaranteed by the U.S. Government as to the timely payment of principal and interest; however, shares of the Funds are not insured nor guaranteed.

High yielding fixed-income securities generally are subject to greater market fluctuations and risks of loss of income and principal than are investments in lower yielding fixed-income securities.

Sector funds may involve greater-than average risk and are often more volatile than funds holding a diversified portfolio of stocks in many industries. Examples include: banking, biotechnology, chemicals, energy, environmental services, natural resources, precious metals, technology, telecommunications, and utilities.

*The Gross Expense Ratios shown do not reflect any temporary fee or expense waivers that may be in effect for a fund. The performance of a fund with a temporary fee or expense waiver would have been lower if the gross fund fees / expenses listed had been reflected.

# P E R F O R M A N C E  U P D A T E

## Voya Retirement Insurance and Annuity Company

### STATE OF RHODE ISLAND VK0450

**Average Annual Total Returns as of: 06/30/2019** (shown in percentages)

Variable annuities and mutual funds offered through a retirement plan are intended as long-term investments designed for retirement purposes. Money distributed from a 403(b) plan, 401(a)/(k) plan, or a 457 plan will be taxed as ordinary income in the year the money is distributed. Early withdrawals from a 403(b) plan and a 401(a)/(k) plan, if taken prior to age 59 1/2, will be subject to the IRS 10% premature distribution penalty tax, unless an exception applies. This IRS premature distribution penalty tax does not apply to 457 plans. Account values fluctuate with market conditions, and when surrendered the principal may be worth more or less than the original amount invested.

**The performance data quoted represents past performance. Past performance does not guarantee future results. For month-end performance which may be lower or higher than the performance data shown please call 800-232-5422. Investment return and principal value of an investment will fluctuate so that, when sold, an investment may be worth more or less than the original cost.**

The below investment options are in Separate Account D. Please note that the figures do not include an adjustment for the Voya Administrative Fund Fee (where applicable) and the deduction of the Daily Asset Charge from the Separate Account (if applicable), or other applicable contract charges. If these fees and charges were included, performance would be less favorable.

The returns assume reinvestment of all dividends (ordinary income and capital gains) and are net of management fees and other fund operating expenses.

Returns less than one year are not annualized. Fund Inception Date is the date of inception for the underlying fund, and is the date used in calculating the periodic returns. This date may also precede the portfolio's inclusion in the product.

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Stability of Principal** | | | | | | | | | | | | | | | | | | | |
| ***Stability of Principal*** | | | | | | | | | | | | | | | | | | | |
| Voya Fixed Account - 457/401 II A - 4573 (22)(23) | MFR | 0.14 | 0.17 | 0.43 | 0.51 | 0.86 | 1.03 | 1.75 | 1.92 | 1.80 | 2.12 | 1.92 | 1.28 | 2.28 | 0.65 | | | | |
| **Bonds** | | | | | | | | | | | | | | | | | | | |
| ***High Yield Bond*** | | | | | | | | | | | | | | | | | | | |
| PGIM High Yield Fund - Class Z - 2482 | BCUSH1IC | 2.54 | 2.28 | 3.30 | 2.47 | 10.92 | 9.92 | 8.73 | 7.32 | 8.03 | 7.45 | 5.25 | 4.67 | 9.26 | 9.17 | | 03/01/1996 | 0.55 | 0.55 |
| ***Inflation-Protected Bond*** | | | | | | | | | | | | | | | | | | | |
| PIMCO VIT Real Return Portfolio - Administrative Class - 833 | LBUSTIPS | 0.64 | 0.86 | 2.68 | 2.86 | 6.35 | 6.15 | 4.36 | 4.84 | 2.23 | 2.08 | 1.32 | 1.76 | 3.89 | 3.64 | | 09/30/1999 | 1.42 | 1.42 |
| ***Intermediate-Term Bond*** | | | | | | | | | | | | | | | | | | | |

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voya Intermediate Bond Portfolio - Class I - 004 (1) | LEHM | 1.37 | 1.26 | 3.39 | 3.08 | 6.96 | 6.11 | 8.37 | 7.87 | 3.40 | 2.31 | 3.56 | 2.95 | 5.84 | 3.90 | | 05/23/1973 | 0.55 | 0.55 |
| Voya U.S. Bond Index Portfolio - Class I - 1554 (2) | LEHM | 1.22 | 1.26 | 2.87 | 3.08 | 5.88 | 6.11 | 7.56 | 7.87 | 1.92 | 2.31 | 2.61 | 2.95 | 3.51 | 3.90 | | 03/07/2008 | 0.38 | 0.38 |
| **Asset Allocation** | | | | | | | | | | | | | | | | | | | |
| ***Lifecycle*** | | | | | | | | | | | | | | | | | | | |
| Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4) | SPT2020 | 3.23 | 3.65 | 3.23 | 2.88 | 10.63 | 10.54 | 6.58 | 5.78 | 7.33 | 7.28 | 5.34 | 5.15 | | | 8.64 | 10/03/2011 | 0.87 | 0.72 |
| Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5) | SPT2025 | 4.15 | 4.17 | 3.25 | 2.99 | 11.87 | 11.61 | 6.10 | 5.70 | 8.32 | 8.09 | 5.53 | 5.52 | 9.24 | 9.33 | | 04/29/2005 | 0.85 | 0.78 |
| Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6) | SPT2030 | 4.69 | 4.74 | 3.28 | 3.09 | 13.26 | 12.78 | 5.81 | 5.55 | 9.16 | 8.82 | 6.14 | 5.89 | | | 10.36 | 10/03/2011 | 0.94 | 0.79 |
| Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7) | SP2035 | 5.25 | 5.26 | 3.33 | 3.18 | 14.14 | 13.78 | 5.24 | 5.36 | 9.80 | 9.50 | 6.08 | 6.23 | 10.14 | 10.39 | | 04/29/2005 | 0.90 | 0.83 |
| Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8) | SPT2040 | 5.58 | 5.61 | 3.38 | 3.27 | 14.80 | 14.45 | 5.00 | 5.26 | 10.17 | 10.00 | 6.45 | 6.47 | | | 11.44 | 10/03/2011 | 1.01 | 0.83 |
| Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9) | SP2045 | 5.91 | 5.81 | 3.43 | 3.32 | 15.28 | 14.78 | 4.40 | 5.15 | 10.12 | 10.32 | 6.12 | 6.61 | 10.59 | 10.94 | | 04/29/2005 | 0.92 | 0.86 |
| Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10) | SPT2050 | 6.17 | 5.92 | 3.51 | 3.32 | 15.56 | 14.97 | 4.39 | 5.03 | 10.20 | 10.61 | 6.44 | 6.73 | | | 11.54 | 10/03/2011 | 1.03 | 0.86 |
| Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11) | SPT2055 | 6.20 | 5.96 | 3.48 | 3.34 | 15.46 | 15.02 | 4.36 | 5.03 | 10.23 | 10.80 | 6.23 | 6.79 | | | 8.88 | 03/08/2010 | 0.93 | 0.86 |
| Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12) | SPT2060 | 6.25 | 6.02 | 3.47 | 3.37 | 15.47 | 15.17 | 4.35 | 5.11 | 10.29 | 11.01 | | | | | 6.88 | 02/09/2015 | 1.13 | 0.87 |
| Voya Solution Income Portfolio - Initial Class - 767 (4)(13) | SPTREIN | 2.52 | 2.84 | 2.95 | 2.82 | 9.03 | 8.55 | 6.67 | 5.90 | 5.59 | 5.02 | 4.28 | 3.94 | 6.60 | 6.03 | | 04/29/2005 | 0.80 | 0.68 |
| **Balanced** | | | | | | | | | | | | | | | | | | | |
| ***Allocation--50% to 70% Equity*** | | | | | | | | | | | | | | | | | | | |
| VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 | SPXLBGC | 4.66 | 4.82 | 4.92 | 4.14 | 17.44 | 13.97 | 15.26 | 9.56 | 11.98 | 9.36 | 10.37 | 7.70 | 13.03 | 10.53 | | 01/24/1989 | 0.64 | 0.64 |
| **Large Cap Value** | | | | | | | | | | | | | | | | | | | |
| ***Large Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya Growth and Income Portfolio - Class I - 001 (14) | SPXRE | 6.30 | 7.05 | 5.35 | 4.30 | 17.50 | 18.54 | 11.10 | 10.42 | 12.78 | 14.19 | 8.65 | 10.71 | 12.94 | 14.70 | | 12/31/1979 | 0.63 | 0.58 |
| Voya U.S. Stock Index Portfolio - Institutional Class - 829 | SPXRE | 7.03 | 7.05 | 4.25 | 4.30 | 18.35 | 18.54 | 10.07 | 10.42 | 13.87 | 14.19 | 10.41 | 10.71 | 14.40 | 14.70 | | 05/03/2004 | 0.27 | 0.27 |
| ***Large Value*** | | | | | | | | | | | | | | | | | | | |
| BlackRock Equity Dividend Fund - Institutional Shares - 8518 (15) | RS1000V | 6.34 | 7.18 | 4.67 | 3.84 | 15.42 | 16.24 | 7.57 | 8.46 | 11.54 | 10.19 | 8.68 | 7.46 | 12.42 | 13.19 | | 11/29/1988 | 0.73 | 0.73 |
| **Large Cap Growth** | | | | | | | | | | | | | | | | | | | |
| ***Large Growth*** | | | | | | | | | | | | | | | | | | | |
| Voya Large Cap Growth Portfolio - Institutional Class - 742 (16) | RS1000G | 5.63 | 6.87 | 3.82 | 4.64 | 19.29 | 21.49 | 11.01 | 11.56 | 16.95 | 18.07 | 12.65 | 13.39 | 16.01 | 16.28 | | 05/03/2004 | 0.67 | 0.67 |
| **Small/Mid/Specialty** | | | | | | | | | | | | | | | | | | | |
| ***Mid-Cap Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya Russell™ Mid Cap Index Portfolio - Class I - 1560 (17) | RSMID | 6.89 | 6.87 | 4.05 | 4.13 | 21.07 | 21.35 | 7.47 | 7.83 | 11.73 | 12.16 | 8.21 | 8.63 | 14.75 | 15.16 | | 03/04/2008 | 0.46 | 0.41 |
| ***Mid-Cap Growth*** | | | | | | | | | | | | | | | | | | | |
| Principal MidCap Fund - Class R-5 - 3412 | RSMID | 6.59 | 6.87 | 9.23 | 4.13 | 30.23 | 21.35 | 17.93 | 7.83 | 17.08 | 12.16 | 12.39 | 8.63 | 17.27 | 15.16 | | 12/06/2000 | 0.85 | 0.85 |
| ***Small Blend*** | | | | | | | | | | | | | | | | | | | |

| Investment Options | Fund Benchmark ID (BM) | 1-Mo Fund | 1-Mo BM | 3-Mo Fund | 3-Mo BM | YTD Fund | YTD BM | 1-Yr Fund | 1-Yr BM | 3-Yr Fund | 3-Yr BM | 5-Yr Fund | 5-Yr BM | 10-Yr Fund | 10-Yr BM | Incept | Fund Inception Date | Gross Fund Exp %* | Net Fund Exp %* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (18) | RS2000 | 7.06 | 7.07 | 1.99 | 2.10 | 16.84 | 16.98 | -3.65 | -3.31 | 11.97 | 12.30 | 6.83 | 7.06 | 13.27 | 13.45 | | 03/04/2008 | 0.47 | 0.46 |
| Voya Small Company Portfolio - Class I - 042 (19) | RS2000 | 6.88 | 7.07 | 2.49 | 2.10 | 17.32 | 16.98 | -4.26 | -3.31 | 8.96 | 12.30 | 6.87 | 7.06 | 13.11 | 13.45 | | 12/27/1996 | 0.90 | 0.90 |
| **Global / International** | | | | | | | | | | | | | | | | | | | |
| ***Foreign Large Blend*** | | | | | | | | | | | | | | | | | | | |
| Voya International Index Portfolio - Class I - 1551 (20) | MSEAFANET | 5.96 | 5.93 | 3.66 | 3.68 | 14.00 | 14.03 | 1.01 | 1.08 | 8.63 | 9.11 | 1.99 | 2.25 | 6.68 | 6.90 | | 03/04/2008 | 0.54 | 0.45 |
| ***Foreign Large Growth*** | | | | | | | | | | | | | | | | | | | |
| American Funds EuroPacific Growth Fund - Class R-4 - 573 | MSCIXUS | 6.62 | 6.02 | 3.78 | 2.98 | 17.40 | 13.60 | 1.57 | 1.29 | 10.45 | 9.38 | 4.09 | 2.16 | 7.78 | 6.54 | | 04/16/1984 | 0.84 | 0.84 |
| ***World Large Stock*** | | | | | | | | | | | | | | | | | | | |
| VY® Invesco Oppenheimer Global Portfolio - Initial Class - 432 (21) | MSCIACN | 7.75 | 6.55 | 3.98 | 3.61 | 21.50 | 16.23 | 3.57 | 5.74 | 16.21 | 11.62 | 7.98 | 6.16 | 12.17 | 10.15 | | 05/01/2002 | 0.75 | 0.75 |

The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.

Foreign investing involves special risks such as currency fluctuation and public disclosure, as well as economic and political risks.

Some of the Funds invest in securities guaranteed by the U.S. Government as to the timely payment of principal and interest; however, shares of the Funds are not insured nor guaranteed.

High yielding fixed-income securities generally are subject to greater market fluctuations and risks of loss of income and principal than are investments in lower yielding fixed-income securities.

Sector funds may involve greater-than average risk and are often more volatile than funds holding a diversified portfolio of stocks in many industries. Examples include: banking, biotechnology, chemicals, energy, environmental services, natural resources, precious metals, technology, telecommunications, and utilities.

*The Gross Expense Ratios shown do not reflect any temporary fee or expense waivers that may be in effect for a fund. The performance of a fund with a temporary fee or expense waiver would have been lower if the gross fund fees / expenses listed had been reflected.

# P E R F O R M A N C E  U P D A T E

## Voya Retirement Insurance and Annuity Company

### STATE OF RHODE ISLAND VK0450

### Separate Account D

**Average Annual Total Returns as of: 06/30/2019** (shown in percentages)

Variable annuities and funding agreements are long-term investment vehicles designed for retirement purposes which allow you to allocate contributions among variable investment options that have the potential to grow tax-deferred with an option to receive a stream of income at a later date.

**The performance data quoted represents past performance. Past performance does not guarantee future results. For month-end performance which may be lower or higher than the performance data shown please call 800-232-5422. Investment return and principal value of an investment will fluctuate so that, when sold, an investment may be worth more or less than the original cost.**

These numbers reflect total Separate Account charges of 0.15% on an annual basis. They also assume reinvestment of all dividends (ordinary income and capital gains) and are net of management fees and other fund operating expenses.

**Depending upon the type of contract in which you participate, you have either received disclosure booklets for the separate account and/or fund prospectuses. You should consider the investment objectives, risks and charges, and expenses of the variable product and its underlying fund options carefully before investing. The disclosure booklet contains this and other information. Anyone who wishes to obtain a free copy of the separate account disclosure booklet and/or fund prospectuses may call their Voya representative or the number above. Please read the separate account disclosure booklet and/or the fund prospectuses carefully before investing.**

Returns less than one year are not annualized. Fund Inception Date is the date of inception for the underlying fund, and is the date used in calculating the periodic returns. This date may also precede the portfolio's inclusion in the product.

| Investment Options | 1-Mo | 3-Mo | YTD | 1-Yr | 3-Yr | 5-Yr | 10-Yr | Incept | Fund Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| **Stability of Principal** | | | | | | | | | |
| ***Stability of Principal*** | | | | | | | | | |
| Voya Fixed Account - 457/401 II A - 4573 (22)(23) | 0.14 | 0.43 | 0.86 | 1.75 | 1.80 | 1.92 | 2.28 | | |
| *This fund is not part of the product's separate account.* | | | | | | | | | |
| **Bonds** | | | | | | | | | |
| ***High Yield Bond*** | | | | | | | | | |
| PGIM High Yield Fund - Class Z - 2482 | 2.52 | 3.25 | 10.81 | 8.55 | 7.85 | 5.07 | 9.08 | | 03/01/1996 |
| ***Inflation-Protected Bond*** | | | | | | | | | |
| PIMCO VIT Real Return Portfolio - Administrative Class - 833 | 0.63 | 2.64 | 6.26 | 4.20 | 2.07 | 1.17 | 3.73 | | 09/30/1999 |
| ***Intermediate-Term Bond*** | | | | | | | | | |

| Investment Options | 1-Mo | 3-Mo | YTD | 1-Yr | 3-Yr | 5-Yr | 10-Yr | Incept | Fund Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| Voya Intermediate Bond Portfolio - Class I - 004 (1) | 1.36 | 3.35 | 6.86 | 8.19 | 3.24 | 3.40 | 5.68 | | 05/23/1973 |
| Voya U.S. Bond Index Portfolio - Class I - 1554 (2) | 1.21 | 2.83 | 5.79 | 7.39 | 1.77 | 2.45 | 3.36 | | 03/07/2008 |
| **Asset Allocation** | | | | | | | | | |
| ***Lifecycle*** | | | | | | | | | |
| Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4) | 3.22 | 3.19 | 10.55 | 6.42 | 7.17 | 5.18 | | 8.48 | 10/03/2011 |
| Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5) | 4.13 | 3.21 | 11.79 | 5.94 | 8.16 | 5.37 | 9.08 | | 04/29/2005 |
| Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6) | 4.68 | 3.24 | 13.17 | 5.65 | 9.00 | 5.99 | | 10.19 | 10/03/2011 |
| Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7) | 5.24 | 3.29 | 14.06 | 5.09 | 9.63 | 5.92 | 9.97 | | 04/29/2005 |
| Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8) | 5.57 | 3.34 | 14.72 | 4.85 | 10.01 | 6.29 | | 11.28 | 10/03/2011 |
| Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9) | 5.90 | 3.39 | 15.20 | 4.25 | 9.95 | 5.96 | 10.42 | | 04/29/2005 |
| Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10) | 6.16 | 3.48 | 15.47 | 4.23 | 10.04 | 6.28 | | 11.37 | 10/03/2011 |
| Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11) | 6.19 | 3.44 | 15.38 | 4.20 | 10.07 | 6.07 | | 8.72 | 03/08/2010 |
| Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12) | 6.24 | 3.43 | 15.39 | 4.20 | 10.12 | | | 6.72 | 02/09/2015 |
| Voya Solution Income Portfolio - Initial Class - 767 (4)(13) | 2.51 | 2.92 | 8.95 | 6.51 | 5.43 | 4.13 | 6.44 | | 04/29/2005 |
| **Balanced** | | | | | | | | | |
| ***Allocation--50% to 70% Equity*** | | | | | | | | | |
| VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 | 4.65 | 4.88 | 17.35 | 15.09 | 11.82 | 10.20 | 12.86 | | 01/24/1989 |
| **Large Cap Value** | | | | | | | | | |
| ***Large Blend*** | | | | | | | | | |
| Voya Growth and Income Portfolio - Class I - 001 (14) | 6.29 | 5.31 | 17.41 | 10.94 | 12.61 | 8.48 | 12.77 | | 12/31/1979 |
| Voya U.S. Stock Index Portfolio - Institutional Class - 829 | 7.01 | 4.21 | 18.26 | 9.90 | 13.70 | 10.25 | 14.23 | | 05/03/2004 |
| ***Large Value*** | | | | | | | | | |
| BlackRock Equity Dividend Fund - Institutional Shares - 8518 (15) | 6.33 | 4.63 | 15.33 | 7.41 | 11.37 | 8.52 | 12.26 | | 11/29/1988 |
| **Large Cap Growth** | | | | | | | | | |
| ***Large Growth*** | | | | | | | | | |
| Voya Large Cap Growth Portfolio - Institutional Class - 742 (16) | 5.62 | 3.78 | 19.20 | 10.85 | 16.77 | 12.49 | 15.84 | | 05/03/2004 |
| **Small/Mid/Specialty** | | | | | | | | | |
| ***Mid-Cap Blend*** | | | | | | | | | |
| Voya Russell™ Mid Cap Index Portfolio - Class I - 1560 (17) | 6.88 | 4.01 | 20.98 | 7.31 | 11.56 | 8.04 | 14.57 | | 03/04/2008 |
| ***Mid-Cap Growth*** | | | | | | | | | |
| Principal MidCap Fund - Class R-5 - 3412 | 6.58 | 9.19 | 30.14 | 17.75 | 16.91 | 12.23 | 17.09 | | 12/06/2000 |
| ***Small Blend*** | | | | | | | | | |
| Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (18) | 7.04 | 1.95 | 16.75 | -3.79 | 11.81 | 6.67 | 13.10 | | 03/04/2008 |
| Voya Small Company Portfolio - Class I - 042 (19) | 6.87 | 2.45 | 17.24 | -4.40 | 8.80 | 6.71 | 12.94 | | 12/27/1996 |
| **Global / International** | | | | | | | | | |
| ***Foreign Large Blend*** | | | | | | | | | |

| Investment Options | 1-Mo | 3-Mo | YTD | 1-Yr | 3-Yr | 5-Yr | 10-Yr | Incept | Fund Inception Date |
|---|---|---|---|---|---|---|---|---|---|
| Voya International Index Portfolio - Class I - 1551 (20) | 5.95 | 3.62 | 13.92 | 0.86 | 8.47 | 1.84 | 6.52 | | 03/04/2008 |
| ***Foreign Large Growth*** | | | | | | | | | |
| American Funds EuroPacific Growth Fund - Class R-4 - 573 | 6.61 | 3.74 | 17.31 | 1.41 | 10.29 | 3.94 | 7.62 | | 04/16/1984 |
| ***World Large Stock*** | | | | | | | | | |
| VY® Invesco Oppenheimer Global Portfolio - Initial Class - 432 (21) | 7.73 | 3.94 | 21.41 | 3.41 | 16.03 | 7.82 | 12.00 | | 05/01/2002 |

The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.

Foreign investing involves special risks such as currency fluctuation and public disclosure, as well as economic and political risks.

Some of the Funds invest in securities guaranteed by the U.S. Government as to the timely payment of principal and interest; however, shares of the Funds are not insured nor guaranteed.

High yielding fixed-income securities generally are subject to greater market fluctuations and risks of loss of income and principal than are investments in lower yielding fixed-income securities.

Sector funds may involve greater-than average risk and are often more volatile than funds holding a diversified portfolio of stocks in many industries. Examples include: banking, biotechnology, chemicals, energy, environmental services, natural resources, precious metals, technology, telecommunications, and utilities.

**Additional Notes**

Insurance products, annuities and funding agreements issued by Voya Retirement Insurance and Annuity Company, One Orange Way Windsor, CT 06095, (VRIAC), which is solely responsible for meeting its obligations. Plan administrative services provided by VRIAC or Voya Institutional Plan Services, LLC. All companies are members of the Voya family of companies. Securities are distributed by or offered through Voya Financial Partners, LLC (member SIPC) or other broker-dealers with which it has a selling agreement.

For a performance report reflecting the charges or more information regarding product expenses, please contact your Voya Representative.

(1)Voya Intermediate Bond Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.53% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(2)Voya U.S. Bond Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.40% for Class I through May 1, 2019. The limitation does not extend to interest, taxes, interest-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(3)Voya Solution 2020 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.72% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(4)There is no guarantee that any investment option will achieve its stated objective. Principal value fluctuates and there is no guarantee of value at any time, including the target date. The "target date" is the approximate date when you plan to start withdrawing your money. When your target date is reached, you may have more or less than the original amount invested. For each target date Portfolio, until the day prior to its Target Date, the Portfolio will seek to provide total returns consistent with an asset allocation targeted for an investor who is retiring in approximately each Portfolio's designation Target Year. Prior to choosing a Target Date Portfolio, investors are strongly encouraged to review and understand the Portfolio's objectives and its composition of stocks and bonds, and how the asset allocation will change over time as the target date nears. No two investors are alike and one should not assume that just because they intend to retire in the year corresponding to the Target Date that that specific Portfolio is appropriate and suitable to their risk tolerance. It is recommended that an investor consider carefully the possibility of capital loss in each of the target date Portfolios, the likelihood and magnitude of which will be dependent upon the Portfolio's asset allocation. On the Target Date, the portfolio will seek to provide a combination of total return and stability of principal.

**Additional Notes**

The Voya Solution / Target Date PortfoliosSM are actively managed and the asset allocation adjusted over time. The portfolios may merge with or change to other portfolios over time. Refer to the prospectus for more information about the specific risks of investing in the various asset classes included in the The Voya Solution / Target Date PortfoliosSM.

Stocks are more volatile than bonds, and portfolios with a higher concentration of stocks are more likely to experience greater fluctuations in value than portfolios with a higher concentration in bonds. Foreign stocks and small and midcap stocks may be more volatile than large cap stocks. Investing in bonds also entails credit risk and interest rate risk. Generally investors with longer timeframes can consider assuming more risk in their investment portfolio.

(5)Voya Solution 2025 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.78% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(6)Voya Solution 2030 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.79% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(7)Voya Solution 2035 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.83% of Class I shares through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(8)Voya Solution 2040 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.83% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(9)Voya Solution 2045 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(10)Voya Solution 2050 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% of Class I shares through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(11)Voya Solution 2055 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% of Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(12)Voya Solution 2060 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.87% for Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(13)Voya Solution Income Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.68% for Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(14)Voya Growth and Income Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.70% for Class I shares through May 1, 2020. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2020. Termination or modification of these obligations requires approval by the Portfolio's board.

**Additional Notes**

(15)BlackRock Equity Dividend Fund - Institutional Shares: As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 39, BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund's assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee, through November 30, 2018. The contractual agreement may be terminated upon 90 days' notice by a majority of the non-interested trustees of the Fund or by a vote of a majority of the outstanding voting securities of the Fund. The Total Annual Fund Operating Expenses do not correlate to the ratio of expenses to average net assets given in the Fund's most recent annual report which does not include Acquired Fund Fees and Expenses.

(16)Voya Large Cap Growth Portfolio - Institutional Class: The adviser is contractually obligated to limit expenses to 0.67% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

(17)Voya Russell (TM) Mid Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.40% for Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

(18)Voya Russell (TM) Small Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.45% for Class I through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(19)Voya Small Company Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.93% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(20)Voya International Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.50% for Class I through May 1, 2019. In addition, the adviser is contractually obligated to further limit expenses to 0.45% for the Portfolio's Class I through May 1, 2019. These limitations do not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. These limitations are subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of these obligations requires approval by the Portfolio's board.

(21)VY Oppenheimer Global Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.80% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(22)The current rate for the Voya Fixed Account - 457/401 II A MC 901, Fund 4573 is 1.75%, expressed as an annual effective yield. The current rate may change and be higher or lower than the previously identified rate but is guaranteed not to be less than 1.00%. VRIAC will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the month in which such change was effective. Note: The current rate for an initial investment in the fixed account previously identified may be in effect for less than a full three-month period.

(23)The Investment Option is neither a mutual fund nor part of a Separate Account. The returns listed do not include the impact of contract charges. Please refer to the contract or disclosure book to determine which Fixed Interest Options are available for your specific plan. The Investment Option is offered through Voya Retirement Insurance and Annuity Company.

The returns do not reflect the impact of a Deferred Surrender Charge. If included, performance would be less favorable.

Not all investments options are available under all contracts; please check your disclosure booklet for options available under your plan.

| Benchmark Id | Benchmark Description |
|---|---|
| BCUSH1IC | BBgBarc US HY 1% Issuer Cap TR USD |
| LBUSTIPS | BBgBarc Capital U.S. Treasury U.S. TIPS Index measures the performance of rulesbased, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L). |

| Benchmark Id | Benchmark Description |
|---|---|
| LEHM | BBgBarc U.S. Aggregate Bond Index measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt. |
| MFR | MFR Money Market Index is comprised of returns which are based upon historical average 30-day compound yields on a universe of taxable money market funds. The data for the universe, which includes approximately 980 funds, is compiled by iMoneynet, Inc. Goal of ING Fixed Account - 457/401 is to outperform the MFR by 150 - 200 basis points over 3 - 5 year time periods. |
| MSCIACN | MSCI ACWI (All Country World Index) measures the performance of the large and mid-cap segment of the particular regions equity securities,including developed and emerging market. It is free float-adjusted market-capitalization weighted. |
| MSCIXUS | MSCI ACWI (All Country World Index) ex USA Index measures the performance of the large and mid-cap segment of the particular regions, excluding USA equity securities,including developed and emerging market. It is free float-adjusted market-capitalization weighted. |
| MSEAFANET | MSCI EAFE Index measures the performance of the large and mid-cap segment of developed markets, excluding the U.S. & Canada equity securities. It is free float-adjusted market-capitalization weighted. |
| RS1000G | Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. |
| RS1000V | Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted. |
| RS2000 | Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. |
| RSMID | Russell Mid-Cap Index measures the performance of the mid-cap segment of the U.S. equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies. |
| SP2035 | S&P Target Date 2035 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2035, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SP2045 | S&P Target Date 2045 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2045, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2020 | S&P Target Date 2020 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2020, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2025 | S&P Target Date 2025 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2025, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2030 | S&P Target Date 2030 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2030, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2040 | S&P Target Date 2040 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2040, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management |

| Benchmark Id | Benchmark Description |
|---|---|
| | companies that offer target date products. |
| SPT2050 | S&P Target Date 2050 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2050, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2055 | S&P Target Date 2055+ Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2055, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPT2060 | S&P Target Date 2060+ TR USD - description is not available. |
| SPTREIN | S&P Target Date Retirement Income Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products. |
| SPXLBGC | S&P 500 60% / Barclays Capital Corp/Gov Bond Index 40% consists of a mix of 60% of an unmanaged stock index (The Standard & Poor's 500) and 40% of an unmanaged bond index (Barclays Capital Gov't Corp. Bond Index). |
| SPXRE | S&P 500 Index measures the performance of 500 widely held stocks in U.S. equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid 1989, this composition has been more flexible and the number of issues in each sector has varied. The index is market capitalization-weighted. |

# State of Rhode Island Plan Balance By Investment 07/31/2019

| Fund Name | Fund Number | Asset Class | Balance | YTD Contributions | % |
|---|---|---|---|---|---|
| Voya Solution 2025 Portfolio I | 790 | Asset Allocation | $903,503.41 | $81,520.88 | 0.47% |
| Voya Solution 2030 Port I | 6753 | Asset Allocation | $1,992.92 | $2,014.50 | 0.01% |
| Voya Solution 2035 Portfolio I | 761 | Asset Allocation | $1,133,775.93 | $114,106.63 | 0.59% |
| Voya Solution 2040 Port I | 6756 | Asset Allocation | $1,414.42 | $1,382.50 | 0.00% |
| Voya Solution 2045 Portfolio I | 764 | Asset Allocation | $998,665.07 | $104,598.62 | 0.52% |
| Voya Solution 2050 Port I | 6759 | Asset Allocation | $4,088.37 | $2,471.24 | 0.01% |
| Voya Solution 2055 Portfolio I | 1166 | Asset Allocation | $508,914.02 | $79,161.12 | 0.26% |
| Voya Solution 2060 Port I | 3290 | Asset Allocation | $15,115.28 | $13,394.00 | 0.01% |
| Voya Solution Income Prt I | 767 | Asset Allocation | $432,036.62 | $35,560.06 | 0.22% |
| VY TRowePrice Captl Apprec Pt Inst | 1257 | Balanced | $9,280,086.58 | $276,511.62 | 4.81% |
| PGIM High Yield Fund Z | 2482 | Bonds | $607,452.50 | $27,413.27 | 0.31% |
| PIMCO VIT Real Return Portfolio Adm | 833 | Bonds | $423,158.90 | $27,304.24 | 0.22% |
| Voya Intermediate Bond Port I | 4 | Bonds | $7,749,813.47 | $443,166.06 | 4.02% |
| Voya U.S. Bond Index Portfolio I | 1554 | Bonds | $671,278.75 | $34,704.85 | 0.35% |
| American Funds EuroPacific R4 | 573 | Global / International | $6,094,137.77 | $253,884.84 | 3.16% |
| Voya International Index Port I | 1551 | Global / International | $504,396.02 | $24,930.05 | 0.26% |
| VY Inv Opp Global Port I | 432 | Global / International | $7,240,373.66 | $255,124.86 | 3.75% |
| Voya Growth and Income Port I | 1 | Large Cap Blend | $28,059,192.04 | $552,846.68 | 14.54% |
| Voya Large Cap Growth Port Inst | 742 | Large Cap Growth | $12,540,204.84 | $461,577.46 | 6.50% |
| BlackRock Equity Dividend Fund Inst | 8518 | Large Cap Value | $4,228,499.20 | $149,543.11 | 2.19% |
| Voya U.S. Stock Index Port Inst | 829 | Large Cap Value | $9,471,514.73 | $294,385.98 | 4.91% |
| Principal MidCap Fund R5 | 3412 | Small/Mid/Specialty | $11,599,318.53 | $253,845.09 | 6.01% |
| Voya Russell Mid Cap Index Port I | 1560 | Small/Mid/Specialty | $1,595,545.39 | $98,312.10 | 0.83% |
| Voya Russell Sm Cp Index Port I | 1563 | Small/Mid/Specialty | $1,512,815.48 | $95,767.97 | 0.78% |
| Voya Small Company Portfolio I | 42 | Small/Mid/Specialty | $7,605,547.09 | $221,301.05 | 3.94% |
| Voya Fixed Account - 457/401 | 43 | Stability of Principal | $71,547,458.70 | $0.00 | 37.09% |
| Voya Fixed Account 457401 II A | 4573 | Stability of Principal | $8,159,254.01 | $1,833,444.61 | 4.23% |
| Voya Long-Term GAA (4560) | 4560 | Stability of Principal | $25,555.73 | $0.00 | 0.01% |
| | | **TOTAL** | **$192,915,109.43** | **$5,738,273.39** | |

# Section XV.

## OPEB Trust

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name<br>Benchmark Name | Market Value | % of Total | Month | YTD | Fiscal YTD | 1 Year | Annualized<br>3 Years | 5 Years | 10 Years | ITD | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mackay Shields OPEB | 119,258,261.5 | 35.0 | 0.30 | 6.60 | 0.30 | 8.03 | 2.13 | 2.93 | | 2.47 | 5/1/2013 |
| *Bloomberg Barclays U.S. Aggregate Bond Index* | | | *0.22* | *6.35* | *0.22* | *8.08* | *2.17* | *3.05* | | *2.54* | *5/1/2013* |
| SSGA S&P 500 INDX | 221,350,510.4 | 65.0 | 1.44 | 20.00 | 1.44 | 7.75 | 13.26 | 11.30 | | 12.79 | 5/1/2011 |
| *S&P 500 - Total Return Index* | | | *1.44* | *20.24* | *1.44* | *7.99* | *13.36* | *11.34* | | *12.28* | *5/1/2011* |
| **Total OPEB** | **340,608,771.9** | **100.0** | **1.04** | **15.09** | **1.04** | **8.00** | **9.37** | **8.42** | | **9.09** | **5/1/2011** |
| *OPEB Custom Blend* [1] | | | *1.01* | *15.41* | *1.01* | *8.45* | *9.52* | *8.56* | | *8.54* | *5/1/2011* |

Source: The Bank of New York Mellon Corporation

## END NOTES

**7/31/2019**

| | | | |
|---|---|---|---|
| 1 | RI7GX0903OPE | OPEB Custom Blend | 35% Barclays Aggregate and 65% S&P 500 |

BNY MELLON

# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

7/31/2019

| Account Name<br>Benchmark Name | | Market Value | % of Total | YTD | Month | Cumulative<br>6/1/2019 - 6/30/2019 | Cumulative<br>5/1/2019 - 5/31/2019 | 2018 | 2017 | 2016 | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mackay Shields OPEB | | 119,258,261.5 | 35.0 | 6.60 | 0.30 | 1.24 | 1.77 | -0.54 | 3.78 | 2.28 | 5/1/2013 |
| *Bloomberg Barclays U.S. Aggregate Bond Index* | | | | *6.35* | *0.22* | *1.26* | *1.78* | *0.01* | *3.54* | *2.65* | *5/1/2013* |
| SSGA S&P 500 INDX | | 221,350,510.4 | 65.0 | 20.00 | 1.44 | 6.91 | -6.36 | -4.42 | 21.80 | 11.99 | 5/1/2011 |
| *S&P 500 - Total Return Index* | | | | *20.24* | *1.44* | *7.05* | *-6.35* | *-4.38* | *21.83* | *11.96* | *5/1/2011* |
| **Total OPEB** | 1 | **340,608,771.9** | **100.0** | **15.09** | **1.04** | **4.87** | **-3.56** | **-2.85** | **15.32** | **8.69** | **5/1/2011** |
| *OPEB Custom Blend* | 2 | | | *15.41* | *1.01* | *5.02* | *-3.51* | *-2.58* | *15.14* | *8.77* | *5/1/2011* |

Source: The Bank of New York Mellon Corporation

## END NOTES

**7/31/2019**

| | | | |
|---|---|---|---|
| 1 | RI7G10000000 | Total OPEB | YTD - Calendar Year to Date |
| | | | Month - Current Month |
| | | | Cumulative Months - Prior Month and Second Prior Month |
| | | | 2013, 2012, 2011 - Calendar Year |
| 2 | RI7GX0903OPE | OPEB Custom Blend | 65% S&P 500 and 35% Barclays Aggregate |