

**STATE OF RHODE ISLAND  
INVESTMENT COMMISSION MEETING**

**DATA AT  
July 31<sup>st</sup>, 2018**

**August 22<sup>nd</sup>, 2018  
MEETING**

**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**

**Mr. Frank J. Karpinski  
Ms. Sylvia Maxfield  
Mr. Thomas Mullaney  
Ms. Marcia Reback**

## Section I.

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### Agenda



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

**Seth Magaziner**  
General Treasurer

## **RHODE ISLAND STATE INVESTMENT COMMISSION MEETING NOTICE**

The next meeting of the Rhode Island State Investment Commission has been scheduled for Wednesday, August 22<sup>nd</sup>, 2018 at 9:00 a.m. **in the Executive Conference Room, Department of Administration, 1 Capitol Hill, Providence.**

### **AGENDA**

- Chairperson Call to Order
- Membership Roll Call
- Approval of Minutes <sup>1</sup>
  - State Investment Commission Meeting held June 27<sup>th</sup>, 2018
- Homestead Capital USA Farmland Fund III <sup>1</sup>
  - Dan Little & Gabe Santos, Homestead Capital
  - Tom Lynch & Mark Williams, Cliffwater
- Level Equity Growth Partners IV and Opportunities Fund 2018 <sup>1</sup>
  - Benjamin Levin, Level Equity
  - Tom Lynch, Cliffwater
- Income Class Review - Liquid Credit <sup>1</sup>
  - Doug Moseley, NEPC
- Asset/Liability Stress Testing
  - Doug Moseley, Mark Cintolo & Robert Goldthorpe, NEPC
- Cash Management and BankLocal Update <sup>1</sup>
  - Kerri Baker & Patrick Marr, State of Rhode Island Treasury
- Legal Counsel Report
- Chief Investment Officer Report
- Treasurer's General Comments

<sup>1</sup> Commission members may be asked to vote on this item.

**POSTED ON August 20, 2018**

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Justin Maistrow at (401) 574-9246 twenty-four hours in advance of the scheduled meeting.

## Section II.

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### Approval of Minutes



**State Investment Commission**  
**Monthly Meeting Minutes Wednesday,**  
**June 27<sup>th</sup>, 2018 9:00 a.m.**  
**Executive Conference Room, Department of Administration**

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:06 AM, Wednesday, June 27<sup>th</sup>, 2018 in the Executive Conference Room, Department of Administration.

## **I. Roll Call of Members**

The following members were present: Mr. Michael Costello, Ms. Sylvia Maxfield, Mr. Thomas Mullaney, Ms. Marcia Reback, Mr. Robert Benson, Ms. Karen Hammond, Mr. Frank Karpinski, Mr. Erik Carleton, and Treasurer Seth Magaziner.

Also in attendance: Mr. Tom Lynch, Cliffwater; Mr. Loren Schlachet and Mr. Erick Bronner, Riverside; Ms. Tiffany Spudich and Mr. Peter Harvey, Capital Cities; Mr. David Iden and Mr. Larry Brown, TIAA; Mr. Alec Stais, Chief Investment Officer; Ms. Sally Dowling and Ms. Nicole Verdi, Adler, Pollock & Sheehan, legal counsel; Mr. Doug Moseley and Mr. Will Forde, NEPC; and other members of the Treasurer's staff.

Treasurer Magaziner called the meeting to order at 9:06 AM.

## **II. Approval of Minutes**

On a motion by Ms. Maxfield and seconded by Ms. Hammond, it was unanimously **VOTED: to approve the draft minutes of the May 23<sup>rd</sup>, 2018 meeting of the State Investment Commission.**

## **III. Private Equity Investment Recommendation, Riverside Micro-Cap Fund V**

Mr. Tom Lynch introduced Mr. Loren Schlachet and Mr. Erick Bronner from Riverside. Mr. Schlachet provided an overview of Riverside as a firm before discussing his background. He highlighted the depth and experience of the RMCF team. Mr. Schlachet described the fund's standardized processes and analytical tools, which facilitate a consistent approach to buying, building and selling companies. He walked the Board through the typical stages of a RMCF investment, noting the teams responsible for each stage of the process. He discussed the fund's investment strategy, noting target company characteristics and sector focus. Mr. Schlachet emphasized RMCF's strong realized acquisition to exit EBITDA growth, citing the roles of organic growth and add-on acquisitions in the value creation process. He illustrated some of the steps taken to transform the portfolio companies sold to date; namely, management upgrades, sales initiatives, and working capital improvements. Mr. Schlachet walked the Board through a couple of successful portfolio company case studies and referenced RMCF realization statistics. Mr. Bronner provided a summary of the terms and expected close. Mr. Lynch summarized Riverside's fit in the Plan's overall Private Equity portfolio.

The Board asked questions.

On a motion by Ms. Maxfield which was seconded by Ms. Reback, it was unanimously **VOTED: that the Employees' Retirement System of the State of Rhode Island make a commitment up to a \$40 million**

investment in Riverside Micro-Cap Fund V, subject to legal and investment staff review.

#### IV. Investment Policy Statement and Benchmark Update

Mr. Alec Stais reminded the board that the broad IPS language had been changed a few years ago in light of the asset/liability study. He noted that a few remaining changes to the IPS are still necessary in order for the IPS to align with the new asset allocation adopted by the board in 2016, including small changes to some of the sub-asset class benchmarks. He presented updated IPS language for the board to consider.

On a motion by Mr. Mullaney which was seconded by Ms. Reback, excluding Ms. Hammond, who abstained, it was unanimously **VOTED: that the Employees' Retirement System of the State of Rhode Island adopt the proposed Defined Benefit Investment Policy Statement and Benchmark adjustments.**

#### V. 529 Review, Capital Cities

Ms. Tiffany Spudich provided background on her firm and briefly described its relationship with Rhode Island's 529 program. She explained that Capital Cities is not currently recommending any changes to the program's investment menu, but they will be closely monitoring the 2017 tax reform's impact on other programs across the industry. Ms. Spudich summarized the structure of the investment products offered across both the direct and advisor 529 plans. She reviewed the program's individual portfolios' menu and reminded the board of the upcoming name change to the Invesco Global Sustainable Equity Portfolio. Ms. Spudich then overviewed the target risk and aged-based portfolios' menu. She referenced a graphic that compares Rhode Island's age-based glide path to that of Morningstar's peer group. Ms. Spudich explained the investment manager qualitative and quantitative review processes. She noted that overall the portfolio investment lineup was in good shape, but noted that three underlying funds—Diversified Dividend, International Growth, and Global Growth Funds—should be monitored. She elaborated on the comparative fee charts published in the Capital Cities meeting materials, describing efforts to continue reducing fees beyond what is already considered to be a relatively low-cost program. Ms. Spudich concluded by recommending a change to the IPS language to reflect the changes to 529 plans made in the recent tax reform.

The Board asked questions.

On a motion by Mr. Costello which was seconded by Ms. Reback, it was unanimously **VOTED: to implement the proposed update to the Investment Policy Statement for the Rhode Island Tuition Savings Program (CollegeBound Saver and CollegeBound 529).**

#### VI. 401/457 Review, TIAA

Mr. David Iden reviewed TIAA's Rhode Island member engagement and outreach statistics during the first calendar quarter. He noted the recent attention that has been given to the 457 multi-vendor coordinator implementation and referenced the vendor-agnostic Retirement@work website. Mr. Larry Brown referenced the Market Values for the 401a plan as of May 31. He noted that the Vanguard Total Bond Market Index Admiral has qualified for the cheaper share class, resulting in a change from 5 to 4 basis points. He also pointed out that roughly 96% of the 401a assets are indexed. Mr. Brown summarized performance across TIAA's Rhode Island 401a and 457 plans.

The Board asked questions.

## **VII. Legal Counsel Report**

There was no legal counsel report

## **VIII. Chief Investment Officer Report**

Mr. Stais reviewed the Plan's fiscal year-to-date performance, breaking down returns at the functional and asset class levels.

The Board asked questions.

## **IX. Treasurer's General Comments**

Treasurer Magaziner noted the Plan's outperformance relative to the 60/40 benchmark and the plan benchmark.

On a motion by Mr. Mullaney and seconded by Ms. Maxfield, it was unanimously **VOTED: to adjourn the meeting at 10:42 AM.**

Respectfully submitted,

**Seth Magaziner,  
General Treasurer**

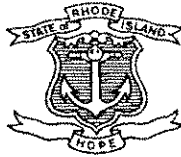
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## Section III.

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### Staff Summary



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

Seth Magaziner

General Treasurer

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

August 16, 2018

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, 2018.

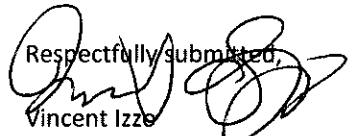
**Employees' Retirement System of Rhode Island**  
**Composite Reporting Investment Valuation**  
**July 31, 2018**

Asset Class	Base Market Value
<b>Grand Total</b>	<b>8,402,331,369</b>
CASH EQUIVALENT*	356,919,361
EQUITY HEDGE FUNDS**	259,441,175
GLOBAL PUBLIC EQUITY	3,934,295,142
CREDIT	346,030,553
INFLATION-LINKED BDS	193,946,624
PRIVATE EQUITY**	633,032,970
REAL ESTATE**	583,275,482
REAL RET HEDGE FUNDS**	284,335,781
INFRASTRUCTURE**	308,443,442
US TRADITIONAL FIXED	892,985,794
CPC PROGRAM	609,625,045

Plan Allocations	%	Base Market Value
<b>Grand Total</b>	<b>100.00%</b>	<b>8,402,331,369</b>
STATE EMP RET PLAN	74.65%	6,272,411,851
MUNI EMP RET PLAN	18.69%	1,570,629,532
TEACHER'S SURVIVOR BENEFIT	3.92%	329,317,457
STATE POLICE RET PL	1.67%	140,072,975
JUDICIAL RET PLAN	0.88%	74,128,899
NON-CONTRIB JUD RET	0.01%	788,503
NON-CONT ST POL RET	0.18%	14,982,152

\* 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

# Portfolio Highlights

## July 2018

The Plan returned 1.51%, net of fees, during the month of July, outperforming the Total Plan benchmark return of 1.31%. The positive performance was driven by the Growth and Income buckets, which earned 2.65% and 2.07%, respectively. The Public Growth aggregate asset class was the portfolio's top contributor, earning 3.05% and outperforming the MSCI ACWI Index, which returned 3.02%. This outperformance was due largely in part to the portfolio's QVM factor-tilt allocation, which returned 3.48% and outperformed its benchmark, the MSCI World Index, by 36 basis points. The total portfolio value increased by approximately \$103.2 million as the investment portfolio returned \$125.2 million and \$27.1 million of transfers were made to meet pension payroll in excess of pension contributions.

Calendar year-to-date the portfolio's 2.25% net return outperformed the 60/40 return of 0.97%, as well as the strategic benchmark return of 1.81%. Over this period, the total portfolio value has decreased by \$18.6 million, with net investment gains of \$185.6 million and \$204.2 million of transfers to meet pension payroll.

Over a 3-year time frame, the ERSRI portfolio outperformed, earning an annualized return of 6.68% net of fees versus the plan benchmark of 6.34% and the 60/40 portfolio which earned 6.06%. Over a 5-year time frame, the ERSRI portfolio earned an annualized return of 6.95% net of fees, outperforming the plan benchmark return of 6.71% and 60/40 benchmark, which posted 6.41%.

## Section IV.

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### Asset Allocation

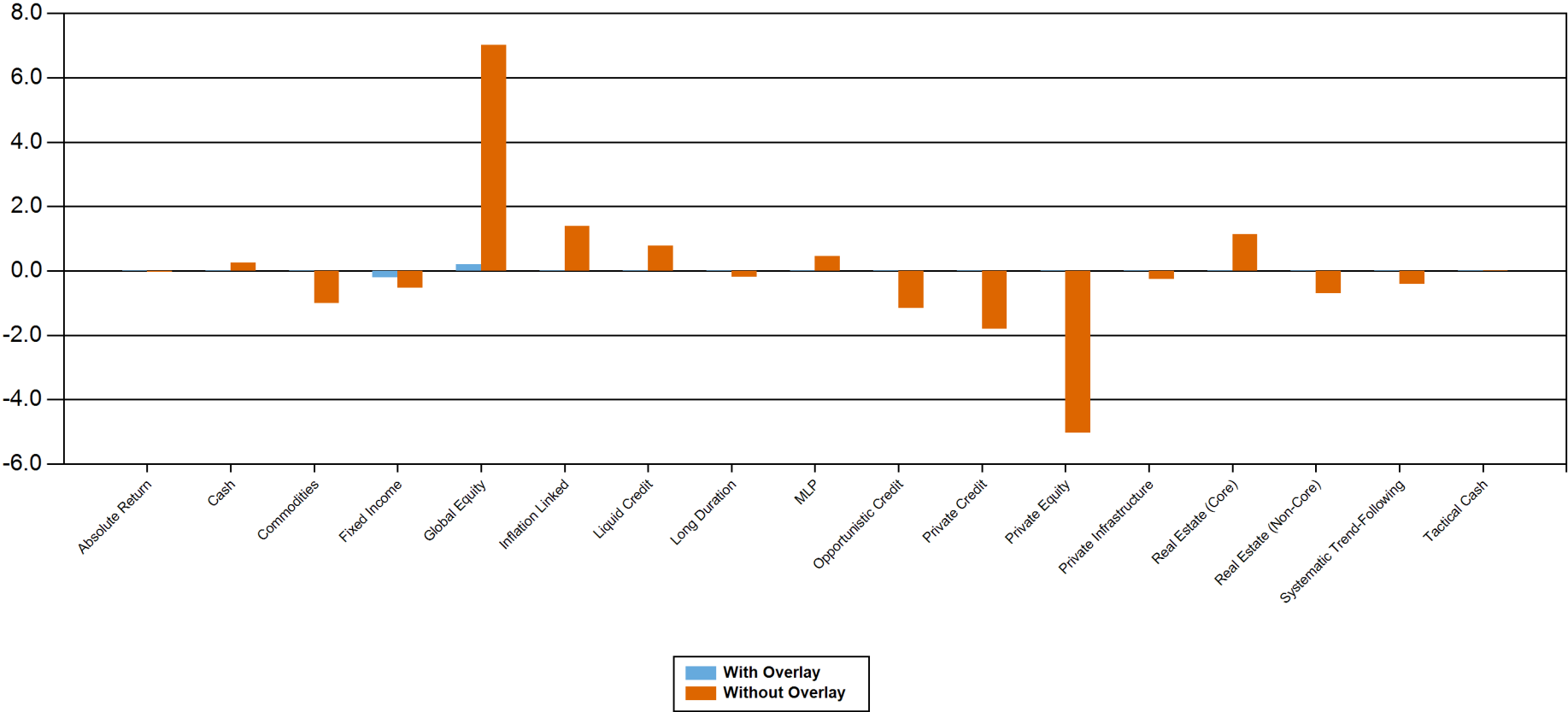
# Asset Summary

Balance Date: 7/31/2018



<u>Asset Class</u>	<u>Physical Exposure</u>		<u>Synthetic Exposure</u>		<u>Net Position</u>		<u>Overlay Target</u>		<u>Policy Target</u>	
<b>Total Market Value</b>	<b>8,397.1</b>	<b>100.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>8,397.1</b>	<b>100.0 %</b>	<b>8,397.2</b>	<b>100.0 %</b>	<b>8,397.2</b>	<b>100.00 %</b>
<b>Cash</b>	<b>21.5</b>	<b>0.3 %</b>	<b>-20.9</b>	<b>-0.2 %</b>	<b>0.6</b>	<b>0.0 %</b>	<b>0.5</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.00 %</b>
Cash	21.5	0.3 %	-20.9	-0.2 %	0.6	0.0 %	0.5	0.0 %	0.0	0.00 %
<b>Equity</b>	<b>4,450.5</b>	<b>53.0 %</b>	<b>-39.0</b>	<b>-0.5 %</b>	<b>4,411.5</b>	<b>52.5 %</b>	<b>4,393.9</b>	<b>52.3 %</b>	<b>4,282.6</b>	<b>51.00 %</b>
Global Equity	3,948.8	47.0 %	-39.0	-0.5 %	3,909.8	46.6 %	3,892.2	46.4 %	3,358.9	40.00 %
Private Equity	501.8	6.0 %	0.0	0.0 %	501.8	6.0 %	501.8	6.0 %	923.7	11.00 %
<b>Fixed</b>	<b>1,904.0</b>	<b>22.7 %</b>	<b>59.9</b>	<b>0.7 %</b>	<b>1,963.8</b>	<b>23.4 %</b>	<b>1,981.6</b>	<b>23.6 %</b>	<b>1,931.4</b>	<b>23.00 %</b>
Fixed Income	921.7	11.0 %	59.9	0.7 %	981.6	11.7 %	999.4	11.9 %	965.7	11.50 %
Inflation Linked	201.4	2.4 %	0.0	0.0 %	201.4	2.4 %	201.4	2.4 %	84.0	1.00 %
Liquid Credit	359.7	4.3 %	0.0	0.0 %	359.7	4.3 %	359.7	4.3 %	293.9	3.50 %
Long Duration	320.3	3.8 %	0.0	0.0 %	320.3	3.8 %	320.3	3.8 %	335.9	4.00 %
Private Credit	100.9	1.2 %	0.0	0.0 %	100.9	1.2 %	100.9	1.2 %	251.9	3.00 %
<b>Other</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>2,183.3</b>	<b>26.00 %</b>
Absolute Return	542.6	6.5 %	0.0	0.0 %	542.6	6.5 %	542.6	6.5 %	545.8	6.50 %
Commodities	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	84.0	1.00 %
MLP	164.9	2.0 %	0.0	0.0 %	164.9	2.0 %	164.9	2.0 %	126.0	1.50 %
Opportunistic Credit	28.8	0.3 %	0.0	0.0 %	28.8	0.3 %	28.8	0.3 %	126.0	1.50 %
Private Infrastructure	146.5	1.7 %	0.0	0.0 %	146.5	1.7 %	146.5	1.7 %	167.9	2.00 %
Real Estate (Core)	432.0	5.1 %	0.0	0.0 %	432.0	5.1 %	432.0	5.1 %	335.9	4.00 %
Real Estate (Non-Core)	151.3	1.8 %	0.0	0.0 %	151.3	1.8 %	151.3	1.8 %	209.9	2.50 %
Systematic Trend-Following	302.0	3.6 %	0.0	0.0 %	302.0	3.6 %	302.0	3.6 %	335.9	4.00 %
Tactical Cash	253.0	3.0 %	0.0	0.0 %	253.0	3.0 %	253.0	3.0 %	251.9	3.00 %

Percent Deviation from Overlay Target



Total Absolute Notional Value: 98.8 (USD)

# Asset Summary

Balance Date: 7/31/2018



<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
<b>Total Assets</b>	<b>8,397.2</b>	<b>100.0 %</b>	<b>4,450.5</b>	<b>53.0 %</b>	<b>1,904.0</b>	<b>22.7 %</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>21.5</b>	<b>0.3 %</b>
<b>Cash</b>	<b>21.5</b>	<b>0.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>21.4</b>	<b>0.3 %</b>
Cash Acct (Pooled Trust)	17.8	0.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	17.7	0.2 %
Municipal EE's Retirement Plan	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Russell Overlay	3.7	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	3.7	0.0 %
State EE's Retirement Plan	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Equity</b>	<b>4,450.6</b>	<b>53.0 %</b>	<b>4,450.5</b>	<b>53.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Global Equity</b>	<b>3,948.8</b>	<b>47.0 %</b>	<b>3,948.8</b>	<b>47.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Global Equity Transition	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
QVM Tilt	1,265.6	15.1 %	1,265.6	15.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Rhode Island Transition Acct	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Shott Capital	0.3	0.0 %	0.3	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Emerging Mkts	444.0	5.3 %	444.0	5.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI Canada	97.0	1.2 %	97.0	1.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI EAFE	790.8	9.4 %	790.8	9.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Russell 3000	1,351.1	16.1 %	1,351.1	16.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Private Equity</b>	<b>501.8</b>	<b>6.0 %</b>	<b>501.8</b>	<b>6.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Private Equity	501.8	6.0 %	501.8	6.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Fixed</b>	<b>1,904.0</b>	<b>22.7 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>1,904.0</b>	<b>22.7 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Fixed Income</b>	<b>921.7</b>	<b>11.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>921.7</b>	<b>11.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
MacKay Shields Core	454.7	5.4 %	0.0	0.0 %	454.7	5.4 %	0.0	0.0 %	0.0	0.0 %
Pyramis Core	467.0	5.6 %	0.0	0.0 %	467.0	5.6 %	0.0	0.0 %	0.0	0.0 %
<b>Inflation Linked</b>	<b>201.4</b>	<b>2.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>201.4</b>	<b>2.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Brown Brothers Harriman-GILBS	201.4	2.4 %	0.0	0.0 %	201.4	2.4 %	0.0	0.0 %	0.0	0.0 %
<b>Liquid Credit</b>	<b>359.7</b>	<b>4.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>359.7</b>	<b>4.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
PIMCO	186.5	2.2 %	0.0	0.0 %	186.5	2.2 %	0.0	0.0 %	0.0	0.0 %
WAMCO	173.2	2.1 %	0.0	0.0 %	173.2	2.1 %	0.0	0.0 %	0.0	0.0 %
<b>Long Duration</b>	<b>320.3</b>	<b>3.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>320.3</b>	<b>3.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Mackay Long Duration	160.3	1.9 %	0.0	0.0 %	160.3	1.9 %	0.0	0.0 %	0.0	0.0 %
WAMCO Long Duration	160.0	1.9 %	0.0	0.0 %	160.0	1.9 %	0.0	0.0 %	0.0	0.0 %
<b>Private Credit</b>	<b>100.9</b>	<b>1.2 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>100.9</b>	<b>1.2 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Private Credit	100.9	1.2 %	0.0	0.0 %	100.9	1.2 %	0.0	0.0 %	0.0	0.0 %
<b>Other</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,021.2</b>	<b>24.1 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Tactical Cash</b>	<b>253.0</b>	<b>3.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>253.0</b>	<b>3.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
ERSRI SMA CASH	253.0	3.0 %	0.0	0.0 %	0.0	0.0 %	253.0	3.0 %	0.0	0.0 %
<b>Absolute Return</b>	<b>542.6</b>	<b>6.5 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>542.6</b>	<b>6.5 %</b>	<b>0.0</b>	<b>0.0 %</b>
Capula Global Relative Value	72.1	0.9 %	0.0	0.0 %	0.0	0.0 %	72.1	0.9 %	0.0	0.0 %
Claren Road Cr Fund	0.1	0.0 %	0.0	0.0 %	0.0	0.0 %	0.1	0.0 %	0.0	0.0 %
D.E. Shaw Composite Fund	111.0	1.3 %	0.0	0.0 %	0.0	0.0 %	111.0	1.3 %	0.0	0.0 %
Davidson Kempner	87.8	1.0 %	0.0	0.0 %	0.0	0.0 %	87.8	1.0 %	0.0	0.0 %
Elliot Associates, LP	107.9	1.3 %	0.0	0.0 %	0.0	0.0 %	107.9	1.3 %	0.0	0.0 %

# Asset Summary

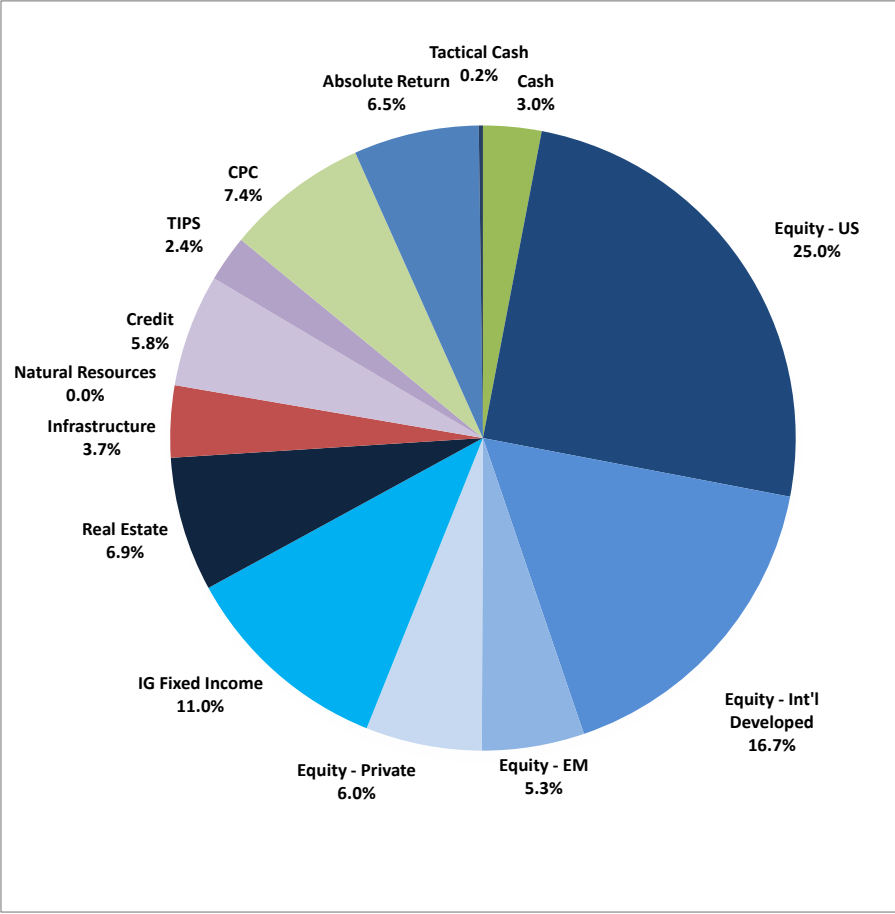
Balance Date: 7/31/2018



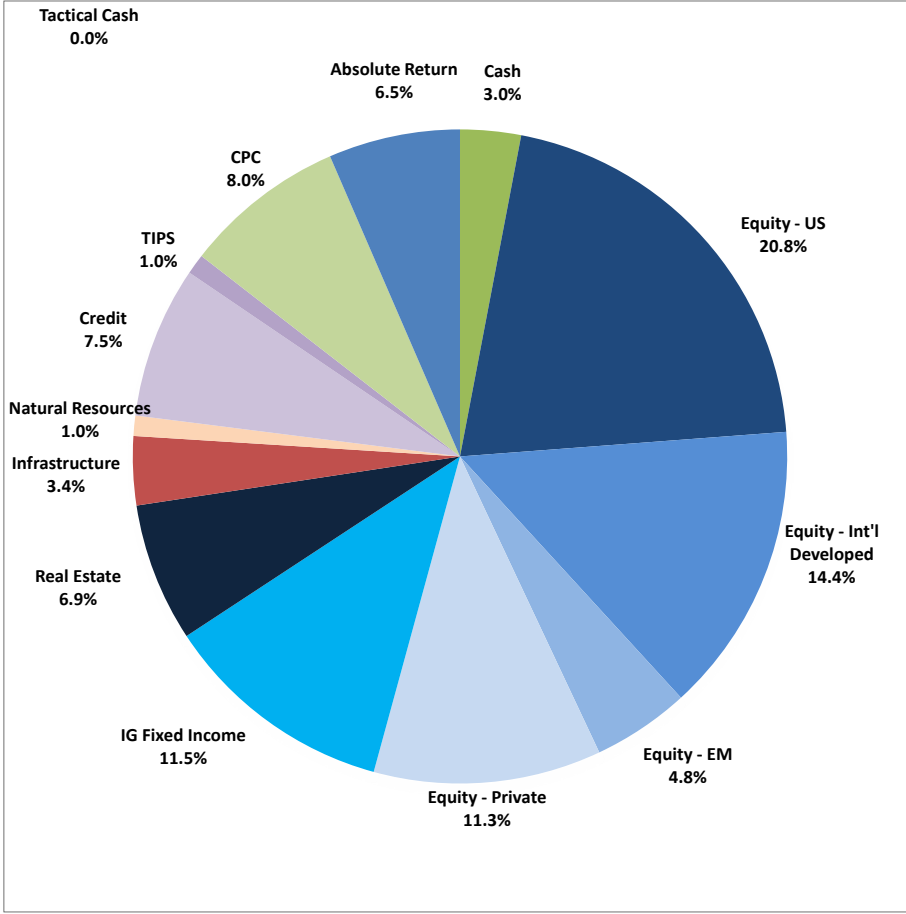
<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
Graham Global	61.2	0.7 %	0.0	0.0 %	0.0	0.0 %	61.2	0.7 %	0.0	0.0 %
Indus Asia Pacific Fund	0.3	0.0 %	0.0	0.0 %	0.0	0.0 %	0.3	0.0 %	0.0	0.0 %
Luxor Capital Partners	1.1	0.0 %	0.0	0.0 %	0.0	0.0 %	1.1	0.0 %	0.0	0.0 %
Viking Global Equities	61.9	0.7 %	0.0	0.0 %	0.0	0.0 %	61.9	0.7 %	0.0	0.0 %
Winton Futures Ltd Fund	39.1	0.5 %	0.0	0.0 %	0.0	0.0 %	39.1	0.5 %	0.0	0.0 %
<b>Commodities</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
RI Commodities	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>MLP</b>	<b>164.9</b>	<b>2.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>164.9</b>	<b>2.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Harvest Fund Advisor	164.9	2.0 %	0.0	0.0 %	0.0	0.0 %	164.9	2.0 %	0.0	0.0 %
<b>Opportunistic Credit</b>	<b>28.8</b>	<b>0.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>28.8</b>	<b>0.3 %</b>	<b>0.0</b>	<b>0.0 %</b>
Opportunistic Private Credit	28.8	0.3 %	0.0	0.0 %	0.0	0.0 %	28.8	0.3 %	0.0	0.0 %
<b>Private Infrastructure</b>	<b>146.5</b>	<b>1.7 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>146.5</b>	<b>1.7 %</b>	<b>0.0</b>	<b>0.0 %</b>
Priv Listed Infrastructure	146.5	1.7 %	0.0	0.0 %	0.0	0.0 %	146.5	1.7 %	0.0	0.0 %
<b>Real Estate (Core)</b>	<b>432.0</b>	<b>5.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>432.0</b>	<b>5.1 %</b>	<b>0.0</b>	<b>0.0 %</b>
Core Real Estate	432.0	5.1 %	0.0	0.0 %	0.0	0.0 %	432.0	5.1 %	0.0	0.0 %
<b>Real Estate (Non-Core)</b>	<b>151.3</b>	<b>1.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>151.3</b>	<b>1.8 %</b>	<b>0.0</b>	<b>0.0 %</b>
Non-Core Real Estate	151.3	1.8 %	0.0	0.0 %	0.0	0.0 %	151.3	1.8 %	0.0	0.0 %
<b>Systematic Trend-Following</b>	<b>302.0</b>	<b>3.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>302.0</b>	<b>3.6 %</b>	<b>0.0</b>	<b>0.0 %</b>
CPC AP LLC	102.5	1.2 %	0.0	0.0 %	0.0	0.0 %	102.5	1.2 %	0.0	0.0 %
CPC CB LLC	98.6	1.2 %	0.0	0.0 %	0.0	0.0 %	98.6	1.2 %	0.0	0.0 %
CPC QIS LLC	100.9	1.2 %	0.0	0.0 %	0.0	0.0 %	100.9	1.2 %	0.0	0.0 %



Actual Allocation



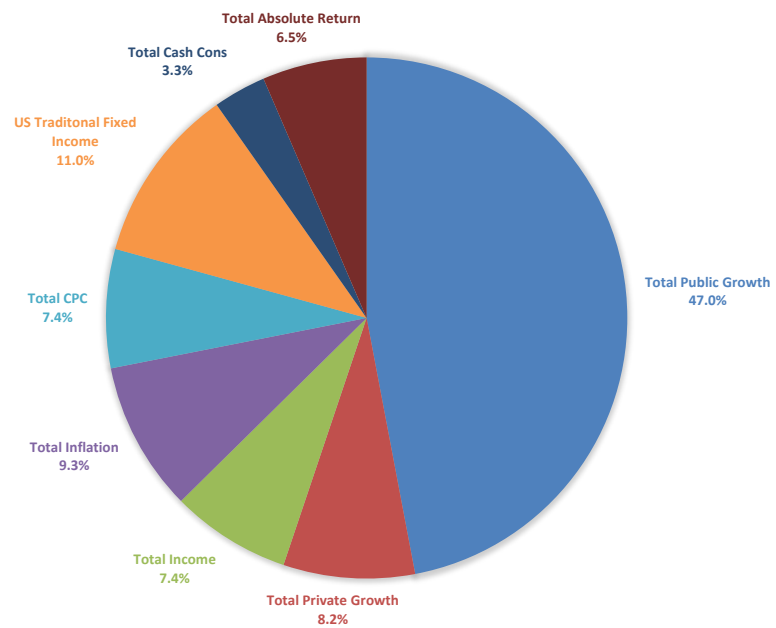
Policy Allocation



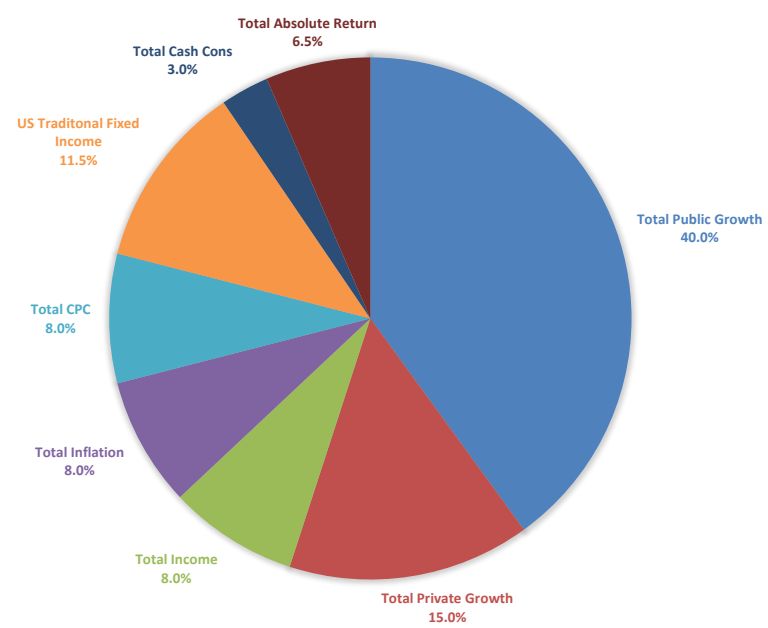
## ERSRI Portfolio

%%% - as of July 31, 2018

### ACTUAL ALLOCATION



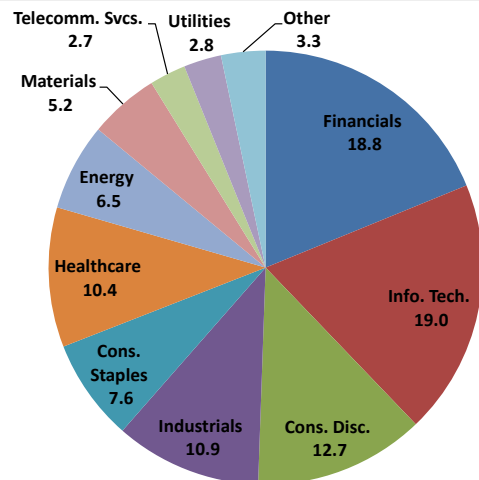
### POLICY ALLOCATION



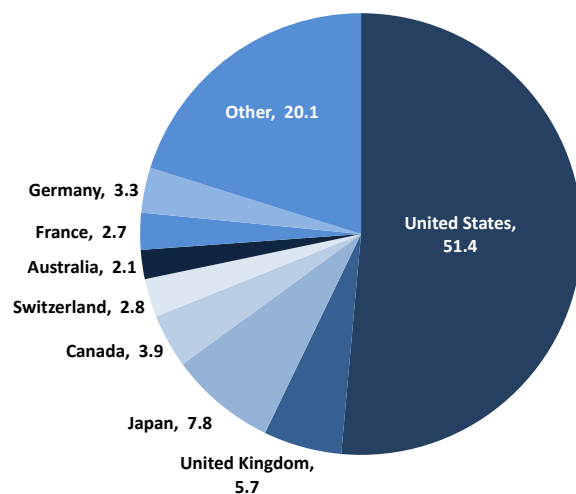
# ERSRI Asset Allocation Public-Asset Portfolios

%%% - as of July 31, 2018

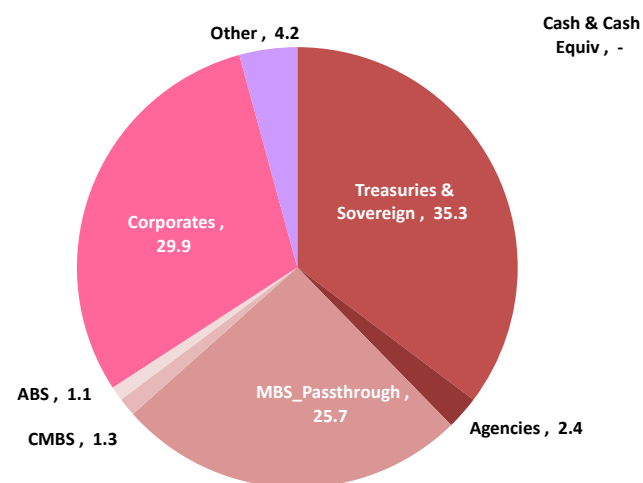
## Global Public Equity - by Industry Sector



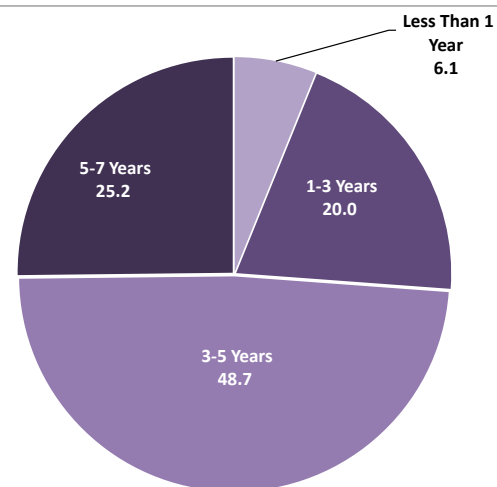
## Global Public Equity - by Geography



## Core Fixed Income - by Type



## Inflation-Linked Bonds - by Duration



## ERSRI Asset Allocation Tracking

Functional Bucket	Aggregate Asset Class	Aggregate Allocation Weight	Asset Class	(a) Strategic Benchmark Weight	(b) Actual exposure as of 07/31/18	(b) - (a)
GROWTH	Global Equity	40.0%	US Equity	20.8%	25.0%	4.2%
			International Developed Equity	14.4%	16.7%	2.3%
			EM Equity	4.8%	5.3%	0.5%
	Private Growth	15.0%	PE	11.0%	6.0%	-5.0%
			Non-core RE	2.5%	1.8%	-0.7%
			Opp Private Credit	1.5%	0.3%	-1.2%
INCOME	Income	8.0%	HY Infra	1.5%	2.0%	0.5%
			REITs	0.0%	0.0%	0.0%
			Liquid Credit	3.5%	4.3%	0.8%
			Private Credit	3.0%	1.2%	-1.8%
STABILITY	CPC	8.0%	Treasury Duration	4.0%	3.8%	-0.2%
			Systematic Trend	4.0%	3.6%	-0.4%
	Inflation Protection	8.0%	Core RE	4.0%	5.1%	1.1%
			Private Infra	2.0%	1.7%	-0.3%
			TIPs	1.0%	2.4%	1.4%
			Nat' Resources	1.0%	0.0%	-1.0%
	Volatility Protection	21.0%	IG Fixed Income	11.5%	11.0%	-0.5%
			Absolute Return	6.5%	6.5%	0.0%
			Cash	3.0%	3.0%	0.0%
OTHER	Short-term Tactical	n/a	ST Tactical Cash	0.0%	0.2%	0.2%
		n/a	Russell Overlay	0.0%	0.0%	0.0%
TOTAL	Total	100.0%		100.0%	100.0%	0.0%

## Section V.

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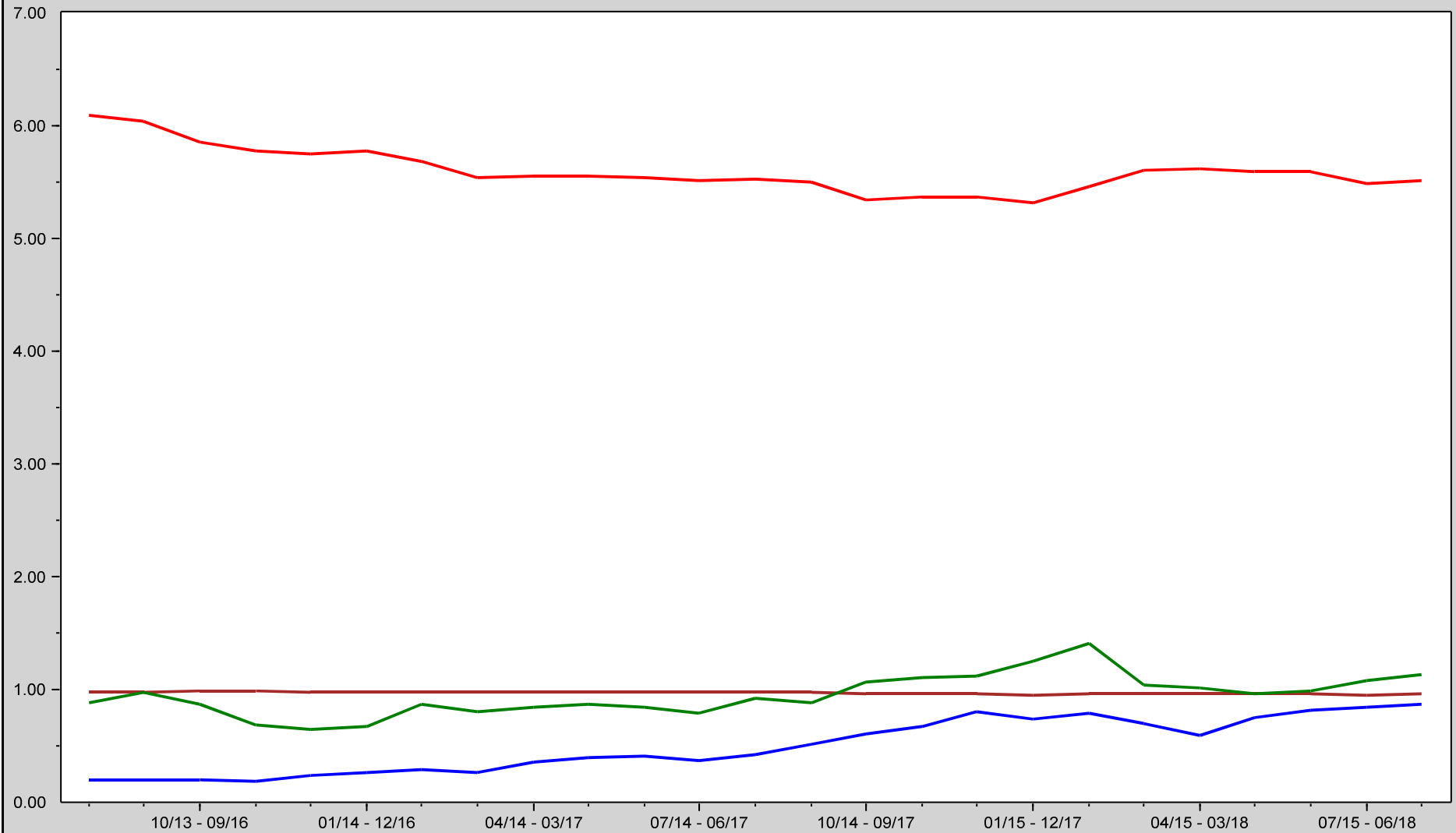
### Risk Overview

# Historical Risk - Three Year Rolling Periods

TOTAL PLAN

5 Years Ending July 31, 2018

Trend



Market Proxy: Total Plan Benchmark; Risk-Free Proxy: BofA Merrill Lynch 3 Month US Treasury Bill G001

Ann Std Dev

Ann Sharpe Ratio

Ann Alpha

Beta

## Risk Exposures

### 3 Years Ending July 31, 2018

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
US Public Equity	12.25	10.23	0.91	-0.49	0.20	1.57
Non-US Public Equity	6.27	12.01	1.09	0.27	0.25	2.82
Equity Hedge Funds	2.57	3.82	0.19	-0.43	0.06	0.99
TOTAL PRIVATE EQUITY	12.12	4.73	-0.09	0.26	0.03	0.33
Traditional Fixed Income	1.69	2.56	0.02	0.98	-0.01	0.46
TOTAL REAL ESTATE	10.41	2.15	-0.02	0.19	-0.02	0.23
Real Return Hedge Funds	4.30	2.42	0.08	-0.34	0.04	0.89
Inflation-Linked Bonds	1.34	2.26	0.01	0.70	0.01	0.75
Cash	1.13	0.24	0.01	0.01	0.00	0.07
Russell Overlay Fd	0.02	0.07	-0.00	0.00	-0.00	-0.04
TOTAL PLAN	6.68	5.52	0.51	0.06	0.14	1.34

## 5 Years Ending July 31, 2018 Comparison

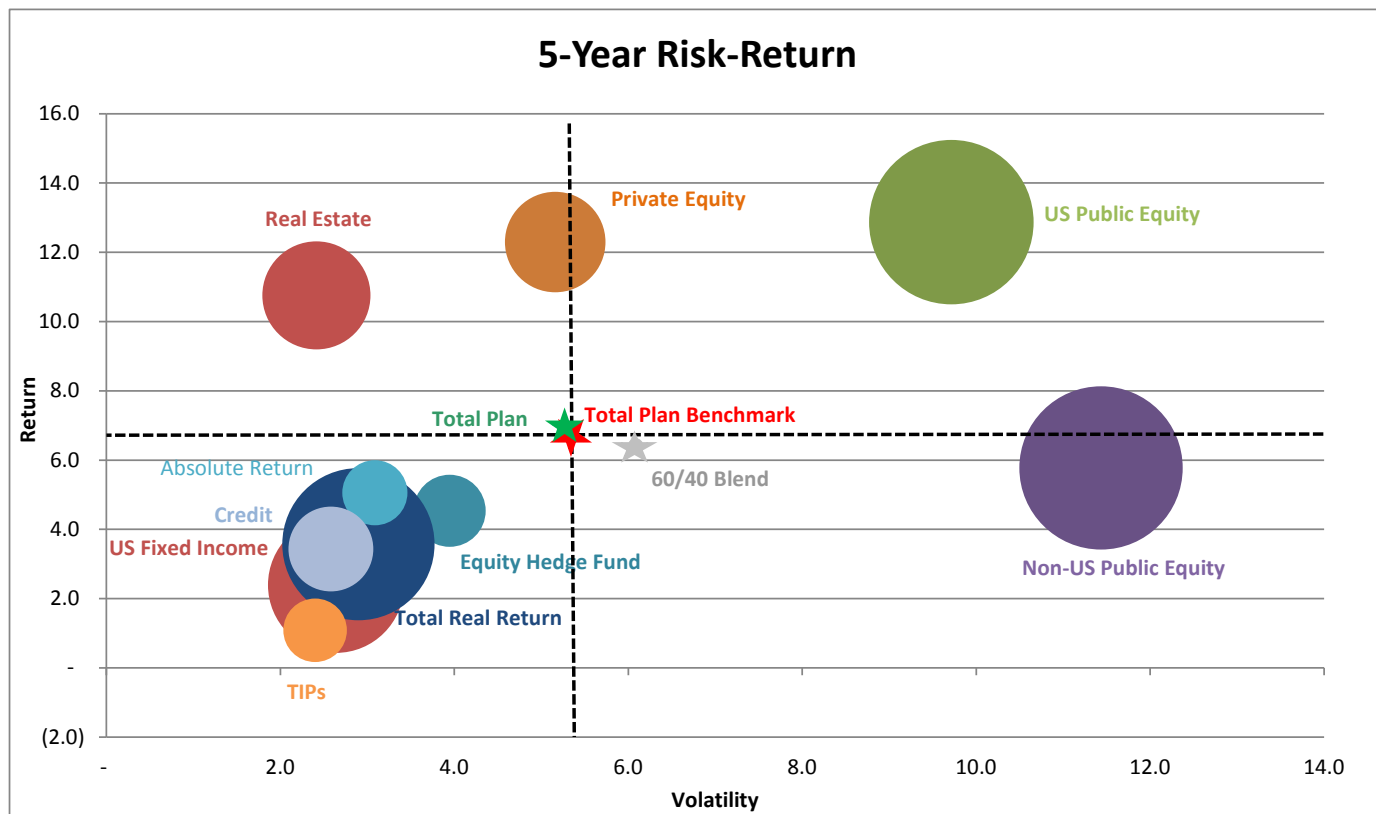
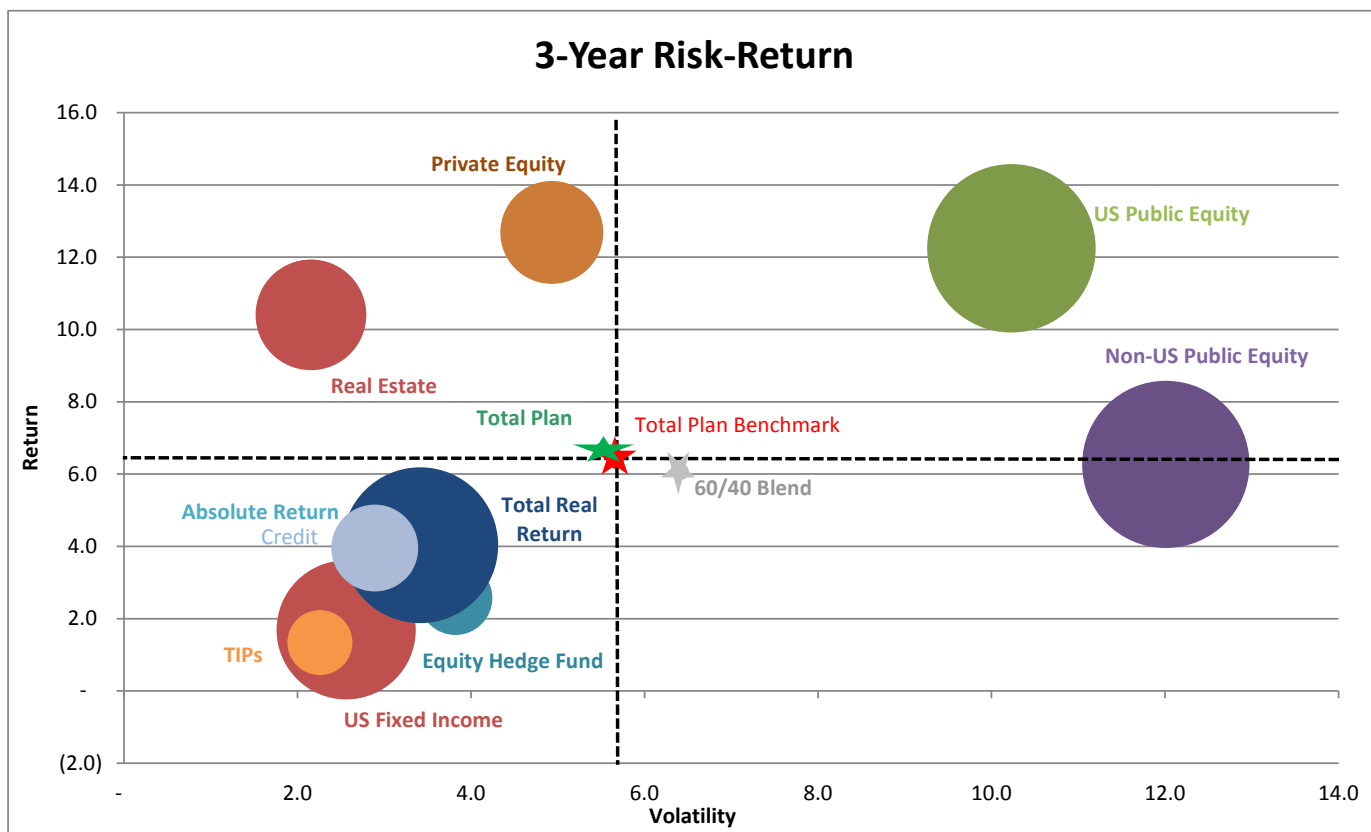
	TOTAL PLAN	Total Plan Benchmark	60/40 Blend
Ann Return	6.95	6.71	6.41
Ann Ex Ret vs Mkt	0.22		
Ann Tracking Error	0.94		
Ann Std Dev	5.29	5.32	6.08
Beta	0.98		
R-Squared	0.97		
Ann Alpha	0.36		
Ann Sharpe Ratio	1.21	1.17	0.98



# ERSRI Portfolio

% - as of July 31, 2018

Bubble-Size Scaled based on Current Allocations



**3 Years Ending July 31, 2018  
Correlation**

Ann Return

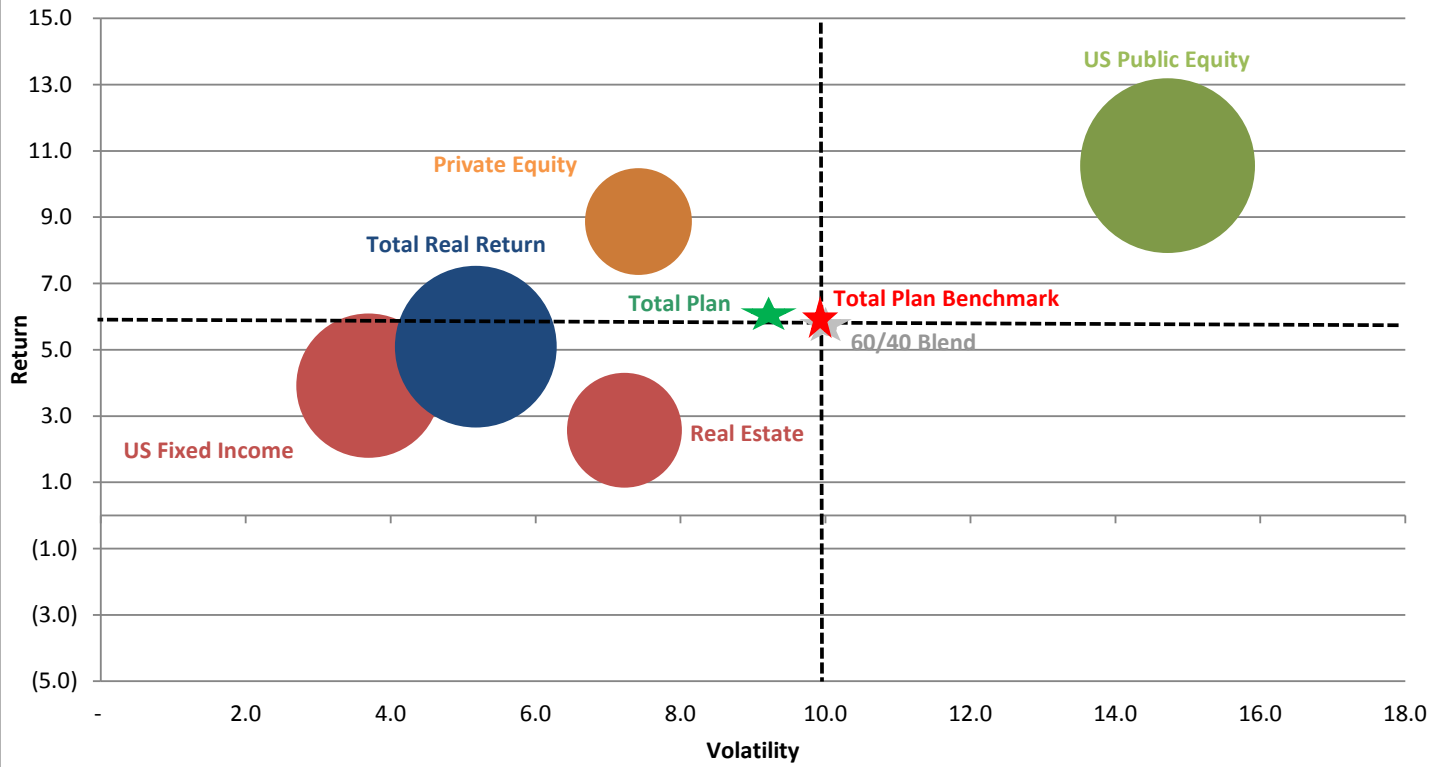
	US Pub EQ	Non-US Pub EQ	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
<b>US Pub</b>	1.00										
<b>Non-US P</b>	0.81	1.00									
<b>Eq HF</b>	0.49	0.50	1.00								
<b>PE</b>	-0.19	-0.16	-0.07	1.00							
<b>FI</b>	-0.02	0.17	-0.21	0.12	1.00						
<b>RE</b>	0.02	-0.16	0.01	0.10	0.19	1.00					
<b>RR HF</b>	0.42	0.26	0.44	-0.08	-0.31	0.10	1.00				
<b>TIPS</b>	-0.04	0.16	-0.27	0.08	0.81	0.23	-0.13	1.00			
<b>Cash</b>	0.24	0.34	0.42	0.07	0.13	0.10	0.18	0.05	1.00		
<b>Overlay</b>	-0.03	-0.15	-0.09	0.22	-0.19	0.22	0.05	-0.19	0.06	1.00	
<b>Total</b>	0.94	0.95	0.53	-0.11	0.14	-0.04	0.37	0.12	0.36	-0.11	1.00
<b>Tot BM</b>	0.92	0.96	0.48	-0.18	0.18	-0.08	0.28	0.15	0.31	-0.14	0.98

**5 Years Ending July 31, 2018  
Correlation**

Ann Return

	US Pub Eq	Non-US Pub Eq	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
<b>US Pub</b>	1.00										
<b>Non-US P</b>	0.78	1.00									
<b>Eq HF</b>	0.55	0.49	1.00								
<b>PE</b>	-0.01	-0.02	0.05	1.00							
<b>FI</b>	0.01	0.15	-0.10	-0.08	1.00						
<b>RE</b>	0.08	0.00	0.04	-0.10	0.32	1.00					
<b>RR HF</b>	0.38	0.26	0.54	-0.03	-0.07	0.02	1.00				
<b>TIPS</b>	-0.01	0.23	-0.15	-0.09	0.82	0.36	-0.01	1.00			
<b>Cash</b>	0.14	0.09	0.10	-0.03	-0.08	-0.11	0.13	-0.17	1.00		
<b>Overlay</b>	-0.33	-0.26	-0.37	-0.03	-0.07	0.12	-0.14	-0.05	0.02	1.00	
<b>Total</b>	0.93	0.94	0.57	0.04	0.16	0.08	0.37	0.18	0.12	-0.32	1.00
<b>Tot BM</b>	0.91	0.95	0.53	-0.03	0.17	0.03	0.31	0.19	0.10	-0.31	0.98

## 10-Year Risk-Return



**10 Years Ending July 31, 2018**  
**Correlation**

**Ann Return**

	<b>US Pub Eq</b>	<b>Non-US Pub Eq</b>	<b>Eq HF</b>	<b>PE</b>	<b>FI</b>	<b>RE</b>	<b>RR HF</b>	<b>TIPS</b>	<b>Cash</b>	<b>Overlay</b>	<b>Total</b>
<b>US Pub</b>	1.00										
<b>Non-US P</b>	---	---									
<b>Eq HF</b>	---	---	---								
<b>PE</b>	0.17	---	---	1.00							
<b>FI</b>	0.32	---	---	-0.04	1.00						
<b>RE</b>	0.00	---	---	0.23	-0.18	1.00					
<b>RR HF</b>	---	---	---	---	---	---	---				
<b>TIPS</b>	---	---	---	---	---	---	---	---			
<b>Cash</b>	-0.08	---	---	-0.09	-0.17	0.01	---	---	1.00		
<b>Overlay</b>	---	---	---	---	---	---	---	---	---	---	
<b>Total</b>	0.96	---	---	0.23	0.49	0.00	---	---	-0.12	---	1.00
<b>Tot BM</b>	0.95	---	---	0.16	0.49	-0.02	---	---	-0.12	---	0.99

## Section VI.

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### Performance Overview

## TOTAL NET OF FEES

7/31/2018

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
US Public Equity Russell 3000 Index	1,351,088,094	16	3.33 3.32	6.63 6.64	3.33 3.32	16.36 16.39	12.25 12.18	12.87 12.83	10.55 10.68	8.58 8.58	8/1/2007 8/1/2007
Non-US Public Equity Total International Equity BM	1,331,768,714	16	2.36 2.39	-1.64 -1.46	2.36 2.39	5.88 5.94	6.27 6.00	5.77 5.59		8.79 8.07	5/1/2009 5/1/2009
QVM Tilt MSCI World Net Dividend Index	1,265,587,906	15	3.48 3.12	3.98 3.57	3.48 3.12	13.27 11.88				14.29 13.67	10/1/2015 10/1/2015
<b>Total Public Growth</b> <b>MSCI All Country World Net Index</b>	<b>3,948,444,714</b>	<b>47</b>	<b>3.05</b> <b>3.02</b>	<b>2.84</b> <b>2.57</b>	<b>3.05</b> <b>3.02</b>	<b>11.80</b> <b>10.97</b>	<b>9.32</b> <b>8.95</b>	<b>9.35</b> <b>9.04</b>	<b>7.61</b> <b>6.39</b>	<b>4.98</b>	<b>7/1/2000</b> <b>7/1/2000</b>
Private Equity ILPA All Fds BM 1Q Lag 2	504,443,464	6	0.56 0.56	7.97 8.37	0.56 0.56	18.39 17.51	12.69 11.77	12.30 12.88	8.87 11.58	9.52	2/1/1989 2/1/1989
Non Core Real Estate	151,296,943	2	0.00	17.35	0.00	25.68				24.69	7/1/2017
Opportunistic Private Credit ILPA Distressed BM 1Q Lag	28,898,249	0	-0.31 -0.31	6.63 3.71	-0.31 -0.31	12.64 10.16				17.13 9.35	7/1/2017 7/1/2017
<b>Total Private Growth</b> <b>Private Growth Benchmark</b>	<b>684,638,657</b>	<b>8</b>	<b>0.40</b> <b>0.41</b>	<b>9.86</b> <b>7.37</b>	<b>0.40</b> <b>0.41</b>	<b>19.55</b>				<b>18.61</b>	<b>7/1/2017</b> <b>7/1/2017</b>
<b>TOTAL GROWTH COMPOSITE</b> <b>Total Growth Composite BM</b>	<b>4,633,083,371</b>	<b>55</b>	<b>2.65</b> <b>2.31</b>	<b>3.89</b> <b>3.97</b>	<b>2.65</b> <b>2.31</b>	<b>12.94</b>				<b>14.41</b>	<b>7/1/2017</b> <b>7/1/2017</b>
Harvest Fund Advisor Alerian MLP Index	164,912,501	2	6.60 6.58	9.46 5.91	6.60 6.58	5.62 0.40	-1.67 -2.85			-4.02 -6.38	1/1/2015 1/1/2015
Liquid Credit Liquid Credit BM (50% BoA US HY/50% CS LL)	359,183,774	4	0.69 0.97	2.87 2.21	0.69 0.97	3.67 3.60	3.95 4.54	3.43 4.26		3.36 4.19	5/1/2013 5/1/2013
Private Credit S&P LSTA Lev Loans + 3%	100,858,922	1	0.00 0.66	1.73 4.69	0.00 0.66	5.31 7.41				4.89 7.49	7/1/2017 7/1/2017
<b>TOTAL INCOME COMPOSITE</b> <b>Income Aggregate BM</b>	<b>624,955,197</b>	<b>7</b>	<b>2.07</b> <b>1.91</b>	<b>4.27</b> <b>4.05</b>	<b>2.07</b> <b>1.91</b>	<b>4.20</b> <b>4.68</b>				<b>4.99</b> <b>5.20</b>	<b>7/1/2017</b> <b>7/1/2017</b>
CPC Long Duration Barclays US Treasury LT Index	320,250,238	4	-1.54 -1.47	-4.61 -4.42	-1.54 -1.47	-1.48 -0.98				-2.79 -2.26	6/1/2017 6/1/2017
CPC Trend Following Credit Suisse Liquid Alt Beta	298,843,151	4	-1.05 -1.30	-12.32 -15.96	-1.05 -1.30	-2.95 -11.88				-2.00 -8.27	6/1/2017 6/1/2017
<b>Total Crisis Protection</b> <b>50/50 CPC Custom BM</b>	<b>619,093,389</b>	<b>7</b>	<b>-1.30</b> <b>-1.39</b>	<b>-7.97</b> <b>-9.89</b>	<b>-1.30</b> <b>-1.39</b>	<b>-1.56</b> <b>-6.06</b>				<b>-1.82</b> <b>-4.82</b>	<b>6/1/2017</b> <b>6/1/2017</b>

## TOTAL NET OF FEES

7/31/2018

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
Priv Listed Infrastructure CPI + 4% 1 Mo Lag	146,973,893	2	0.35 0.48	9.16 4.42	0.35 0.48	11.64 6.87	11.83			9.02	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	431,978,539	5	0.00 0.00	4.31 3.85	0.00 0.00	6.69 7.11				7.00 6.55	7/1/2017 7/1/2017
Inflation-Linked Bonds Total Inflation Linked Custom	201,427,666	2	-0.40 -0.39	-0.13 -0.18	-0.40 -0.39	0.65 0.55	1.34 1.39	1.09 1.27		3.47 3.47	11/1/2009 11/1/2009
<b>Total Inflation Protection</b> <b>Inflation Protection Custom BM</b>	<b>780,380,098</b>	<b>9</b>	<b>-0.04</b> <b>-0.19</b>	<b>3.97</b> <b>2.75</b>	<b>-0.04</b> <b>-0.19</b>	<b>5.85</b> <b>5.67</b>				<b>6.34</b> <b>5.46</b>	<b>7/1/2017</b> <b>7/1/2017</b>
Absolute Return HFRI Fund of Funds Composite Index	543,782,444	6	0.21 0.24	3.72 0.92	0.21 0.24	6.45 4.32				7.02 4.96	7/1/2017 7/1/2017
Traditional Fixed Income Bloomberg Barclays U.S. Aggregate Bond Index	921,704,553	11	0.07 0.02	-1.69 -1.59	0.07 0.02	-0.74 -0.80	1.69 1.49	2.39 2.25	3.92 3.73	4.91 4.77	7/1/2000 7/1/2000
Total Cash and Other Funds	279,000,958	3	-0.04	1.90	-0.04	1.64	3.32	0.77		1.57	11/1/2012
Russell Overlay Fd	3,665,520	0	-0.01	0.03	-0.01	-0.02	0.02	-0.02		-0.06	9/1/2008
<b>Total Volatility Protection</b> <b>Total Volatility Protection BM</b>	<b>1,744,487,954</b>	<b>21</b>	<b>0.09</b> <b>0.11</b>	<b>0.60</b> <b>-0.44</b>	<b>0.09</b> <b>0.11</b>	<b>1.80</b>				<b>2.24</b>	<b>7/1/2017</b> <b>7/1/2017</b>
<b>TOTAL STABILITY COMPOSITE</b> <b>Total Stability Composite BM</b>	<b>3,143,961,441</b>	<b>37</b>	<b>-0.21</b> <b>-0.28</b>	<b>-0.40</b> <b>-1.81</b>	<b>-0.21</b> <b>-0.28</b>	<b>1.53</b>				<b>2.12</b>	<b>7/1/2017</b> <b>7/1/2017</b>
<b>TOTAL PLAN</b> Total Plan Benchmark 60/40 Blend	<b>8,402,331,369</b>	<b>100</b>	<b>1.51</b> 1.32 1.82	<b>2.25</b> 1.82 0.97	<b>1.51</b> 1.32 1.82	<b>7.82</b> 7.24 6.22	<b>6.68</b> 6.34 6.06	<b>6.95</b> 6.71 6.41	<b>6.00</b> 5.85 5.67	<b>5.12</b>	<b>7/1/2000</b> 7/1/2000 7/1/2000
<b>Total Plan ex PE,RE &amp; Priv Inf</b> Total Plan BM ex PE RE	<b>7,037,881,359</b>	<b>84</b>	<b>1.76</b> 1.77	<b>1.29</b> 1.61	<b>1.76</b> 1.77	<b>6.76</b> 6.73	<b>5.94</b> 5.83	<b>6.28</b> 6.24	<b>5.80</b> 5.52	<b>6.39</b>	<b>4/1/1996</b> 4/1/1996

## END NOTES

7/31/2018

1 RI6G23000000

TOTAL PLAN

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

40% MSCI ACWI Net

11% ILPA All Funds Index

11.5% Barclays Agg

1% Barclays 1-10 Year TIPs Index

4% Barclays Long Duration US Treasury Index

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

3% S&amp;P LSTA Lev Loans + 3%

2.5% ODCE + 2.5%

1.5% ILPA/Cambridge Distressed Securities Index

6.5% HFRI FOF Composite

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

4% NFI-ODCE Index

2% CPI + 4%

1.5% Alerian MLP Total Return

4% CS Managed Futures 18% Vol Index

1% BB Commodities Index



## TOTAL NET OF FEES

7/31/2018

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2017	2016	2015	Inception Date
				5/1/2018 - 5/31/2018	4/1/2018 - 4/30/2018					
US Public Equity Russell 3000 Index	1,351,088,094	16	3.33 3.32	0.66 0.65	2.83 2.82	6.63 6.64	21.14 21.13	12.84 12.74	0.60 0.48	8/1/2007 8/1/2007
Non-US Public Equity Total International Equity BM	1,331,768,714	16	2.36 2.39	-2.13 -1.88	-2.21 -2.31	-1.64 -1.46	27.76 27.19	5.01 4.50	-5.77 -5.66	5/1/2009 5/1/2009
QVM Tilt MSCI World Net Dividend Index	1,265,587,906	15	3.48 3.12	-0.66 -0.05	0.57 0.63	3.98 3.57	23.36 22.40	7.58 7.51		10/1/2015 10/1/2015
<b>Total Public Growth</b> <b>MSCI All Country World Net Index</b>	<b>3,948,444,714</b>	<b>47</b>	<b>3.05</b> <b>3.02</b>	<b>-0.72</b> <b>-0.54</b>	<b>0.27</b> <b>0.12</b>	<b>2.84</b> <b>2.57</b>	<b>24.11</b> <b>23.97</b>	<b>8.78</b> <b>7.86</b>	<b>-2.48</b> <b>-2.36</b>	<b>7/1/2000</b> <b>7/1/2000</b>
Private Equity ILPA All Fds BM 1Q Lag 2	504,443,464	6	0.56 0.56	-0.10 2.72	2.85 0.00	7.97 8.37	19.69 15.60	9.19 7.99	7.08 7.18	2/1/1989 2/1/1989
Non Core Real Estate	151,296,943	2	0.00	0.55	14.07	17.35				7/1/2017
Opportunistic Private Credit ILPA Distressed BM 1Q Lag	28,898,249	0	-0.31 -0.31	0.20 0.72	-0.19 0.00	6.63 3.71				7/1/2017 7/1/2017
<b>Total Private Growth</b> <b>Private Growth Benchmark</b>	<b>684,638,657</b>	<b>8</b>	<b>0.40</b> <b>0.41</b>	<b>0.06</b> <b>2.42</b>	<b>5.09</b> <b>0.03</b>	<b>9.86</b> <b>7.37</b>				<b>7/1/2017</b> <b>7/1/2017</b>
<b>TOTAL GROWTH COMPOSITE</b> <b>Total Growth Composite BM</b>	<b>4,633,083,371</b>	<b>55</b>	<b>2.65</b> <b>2.31</b>	<b>-0.60</b> <b>0.27</b>	<b>0.99</b> <b>0.10</b>	<b>3.89</b> <b>3.97</b>				<b>7/1/2017</b> <b>7/1/2017</b>
Harvest Fund Advisor Alerian MLP Index	164,912,501	2	6.60 6.58	-1.05 -1.54	6.70 5.05	9.46 5.91	-5.26 -6.52	20.64 18.31	-31.01 -32.59	1/1/2015 1/1/2015
Liquid Credit Liquid Credit BM (50% BoA US HY/50% CS LL)	359,183,774	4	0.69 0.97	0.22 0.22	-0.03 0.09	2.87 2.21	3.54 4.60	9.59 9.63	-1.29 0.49	5/1/2013 5/1/2013
Private Credit S&P LSTA Lev Loans + 3%	100,858,922	1	0.00 0.66	0.15 0.51	0.99 0.43	1.73 4.69				7/1/2017 7/1/2017
<b>TOTAL INCOME COMPOSITE</b> <b>Income Aggregate BM</b>	<b>624,955,197</b>	<b>7</b>	<b>2.07</b> <b>1.91</b>	<b>-0.11</b> <b>0.00</b>	<b>1.76</b> <b>1.15</b>	<b>4.27</b> <b>4.05</b>				<b>7/1/2017</b> <b>7/1/2017</b>
CPC Long Duration Barclays US Treasury LT Index	320,250,238	4	-1.54 -1.47	0.22 0.18	2.14 2.12	-4.61 -4.42				6/1/2017 6/1/2017
CPC Trend Following Credit Suisse Liquid Alt Beta	298,843,151	4	-1.05 -1.30	1.64 1.98	-6.45 -2.21	-12.32 -15.96				6/1/2017 6/1/2017
<b>Total Crisis Protection</b> <b>50/50 CPC Custom BM</b>	<b>619,093,389</b>	<b>7</b>	<b>-1.30</b> <b>-1.39</b>	<b>0.90</b> <b>1.08</b>	<b>-2.15</b> <b>-0.05</b>	<b>-7.97</b> <b>-9.89</b>				<b>6/1/2017</b> <b>6/1/2017</b>

## TOTAL NET OF FEES

7/31/2018

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2017	2016	2015	Inception Date
				5/1/2018 - 5/31/2018	4/1/2018 - 4/30/2018					
Priv Listed Infrastructure CPI + 4% 1 Mo Lag	146,973,893	2	0.35 0.48	0.04 0.72	0.48 0.71	9.16 4.42	12.45	13.35		3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	431,978,539	5	0.00 0.00	0.62 1.97	0.19 0.00	4.31 3.85				7/1/2017 7/1/2017
Inflation-Linked Bonds Total Inflation Linked Custom	201,427,666	2	-0.40 -0.39	0.22 0.28	0.52 0.46	-0.13 -0.18	1.73 1.90	3.91 4.01	-0.26 -0.15	11/1/2009 11/1/2009
<b>Total Inflation Protection Inflation Protection Custom BM</b>	<b>780,380,098</b>	<b>9</b>	<b>-0.04 -0.19</b>	<b>0.40 0.76</b>	<b>0.33 0.41</b>	<b>3.97 2.75</b>				<b>7/1/2017 7/1/2017</b>
Absolute Return HFRI Fund of Funds Composite Index	543,782,444	6	0.21 0.24	0.15 -0.50	0.94 0.71	3.72 0.92				7/1/2017 7/1/2017
Traditional Fixed Income Bloomberg Barclays U.S. Aggregate Bond Index	921,704,553	11	0.07 0.02	-0.13 -0.12	0.59 0.71	-1.69 -1.59	3.99 3.54	3.15 2.65	0.25 0.55	7/1/2000 7/1/2000
Total Cash and Other Funds	279,000,958	3	-0.04	0.10	0.49	1.90	-1.64	3.33	0.03	11/1/2012
Russell Overlay Fd	3,665,520	0	-0.01	0.00	0.01	0.03	-0.09	0.06	0.00	9/1/2008
<b>Total Volatility Protection Total Volatility Protection BM</b>	<b>1,744,487,954</b>	<b>21</b>	<b>0.09 0.11</b>	<b>0.00 -0.20</b>	<b>0.68 0.64</b>	<b>0.60 -0.44</b>				<b>7/1/2017 7/1/2017</b>
<b>TOTAL STABILITY COMPOSITE Total Stability Composite BM</b>	<b>3,143,961,441</b>	<b>37</b>	<b>-0.21 -0.28</b>	<b>0.27 0.28</b>	<b>0.03 0.44</b>	<b>-0.40 -1.81</b>				<b>7/1/2017 7/1/2017</b>
<b>TOTAL PLAN Total Plan Benchmark 60/40 Blend</b>	<b>8,402,331,369</b>	<b>100</b>	<b>1.51 1.32 1.82</b>	<b>-0.23 0.25 -0.37</b>	<b>0.67 0.31 0.36</b>	<b>2.25 1.82 0.97</b>	<b>14.48 14.29 15.41</b>	<b>7.35 6.42 5.92</b>	<b>-0.28 -0.25 -0.98</b>	<b>7/1/2000 7/1/2000 7/1/2000</b>
<b>Total Plan ex PE,RE &amp; Priv Inf Total Plan BM ex PE RE</b>	<b>7,037,881,359</b>	<b>84</b>	<b>1.76 1.77</b>	<b>-0.32 -0.40</b>	<b>0.28 0.48</b>	<b>1.29 1.61</b>	<b>14.66 14.46</b>	<b>6.97 6.13</b>	<b>-1.68 -1.64</b>	<b>4/1/1996 4/1/1996</b>

**END NOTES**
**7/31/2018**

1	RI6G23000000	TOTAL PLAN	<p>Month - Current Month</p> <p>Cumulative Months - Prior Month and Second Prior Month</p> <p>Monthly Reporting for Private Equity and Real Estate skew performance on an actual and benchmark basis due to nature of valuations</p> <p>2014, 2013, 2012 - Calendar Years</p>
	RI6G23000000	TOTAL PLAN	<p>The current composition of the Total Plan Benchmark is as follows:</p> <p>40% MSCI ACWI Net</p> <p>11% ILPA All Funds Index</p> <p>11.5% Barclays Agg</p> <p>1% Barclays 1-10 Year TIPs Index</p> <p>4% Barclays Long Duration US Treasury Index</p> <p>3.5% Liquid Credit Custom (50% BoA HY/50% CS LL)</p> <p>3% S&amp;P LSTA Lev Loans + 3%</p> <p>2.5% ODCE + 2.5%</p> <p>1.5% ILPA/Cambridge Distressed Securities Index</p> <p>6.5% HFRI FOF Composite</p> <p>3.0% BofA Merrill Lynch US T-Notes 0-1 Yr</p> <p>4% NFI-ODCE Index</p> <p>2% CPI + 4%</p> <p>1.5% Alerian MLP Total Return</p> <p>4% CS Managed Futures 18% Vol Index</p> <p>1% BB Commodities Index</p>

## Section VII.

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### Crisis Protection Class

CPC Returns				
CPC Program, July 31, 2018, %				
Account Name	MTD Return	Annualized Return (Since Inception)	Annualized Std. Dev (July '18)	Annualized Std. Dev (Since Inception)
Total CPC Program	-1.30	-1.82	7.74	8.87
CPC Trend	-1.05	-2.00	12.88	16.11
CPC Long Duration	-1.54	-2.79	7.42	9.04

Portfolio Beta						
CPC Program, 07/31/2018, USD, Monte Carlo 1 Day - .94 Decay						
Account Name	Market Monitor: Barclays Long term bond Index  Beta	Market Monitor: Dollar Index  Beta	Market Monitor: Gold  Beta	Market Monitor: GSCI Non-Energy  Beta	Market Monitor: IBOXHY  Beta	Market Monitor: S&P 500 INDEX  Beta
Total CPC Program	0.57	0.98	-0.33	-0.40	-0.02	0.27
CPC Trend	0.52	1.60	-1.08	-0.59	1.66	0.67
CPC Long Duration	0.62	0.39	0.36	-0.22	-1.58	-0.10

Portfolio Beta						
CPC Program, 07/31/2018, USD, Monte Carlo 1 Day - .94 Decay						
Account Name	Market Monitor: SG Trend Index  Beta	Market Monitor: US 10YR NOTE (CBT)  Beta	Market Monitor: WTI Crude Oil  Beta	Market Monitor: 90 Day T-Bill  Beta	Market Monitor: Bench Global Equity D  Beta	Market Monitor: Russell 3000 Index  Beta
Total CPC Program	0.67	1.02	0.03	38.67	0.13	0.20
CPC Trend	2.07	-1.00	-0.03	77.26	0.68	0.64
CPC Long Duration	-0.64	2.91	0.08	2.69	-0.37	-0.20

Return Correlation (Since Inception)			
	Total CPC Program	CPC Trend	CPC Long Duration
Total CPC Program	1.00	0.86	0.45
CPC Trend	0.86	1.00	-0.07
CPC Long Duration	0.45	-0.07	1.00

Return Correlation (JULY '18)			
	Total CPC Program	CPC Trend	CPC Long Duration
Total CPC Program	1.00	0.87	0.61
CPC Trend	0.87	1.00	0.14
CPC Long Duration	0.61	0.14	1.00

## Section VIII.

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### Absolute Returns

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

Absolute Return Portfolio  
Portfolio Performance Summary  
Estimated as of July 31, 2018

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Jul	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Absolute Return Portfolio													
Capula Global Relative Value Fund Ltd.	72,456,135	13.3%			2.74%	0.41%	3.98%	5.97%	6.74%	5.72%	1.83%	2.63	Dec-11
Davidson Kempner Institutional Partners, L.P.	88,090,727	16.1%	0.33%	0.33%	2.49%	0.33%	4.45%	5.07%	5.00%	5.85%	1.96%	2.54	Nov-11
DE Shaw Composite Fund LLC	112,689,992	20.6%			6.88%	1.40%	11.43%	9.63%	11.90%	12.79%	4.07%	2.81	Nov-11
Elliott Associates, L.P.	108,607,585	19.9%	-0.70%	-0.70%	3.43%	-0.70%	7.29%	8.61%	8.75%	9.19%	3.57%	2.29	Nov-11
Graham Absolute Return Trading Ltd.	60,183,900	11.0%	-1.66%	-1.66%	4.24%	-1.66%	2.41%	1.80%	2.66%	2.82%	5.64%	0.40	Jan-12
Viking Global Equities, LP	63,430,933	11.6%	2.46%	2.46%	7.40%	2.46%	10.18%	4.55%	9.59%	10.73%	7.00%	1.40	Dec-11
Winton Fund Limited	38,932,421	7.1%	-0.46%	-0.46%	0.90%	-0.46%	9.75%	1.36%	5.05%	3.99%	8.55%	0.42	Dec-11
Absolute Return Portfolio - Total	544,391,693	99.7%	0.31%	0.31%	4.16%	0.31%	7.16%	3.78%	5.46%	6.09%	3.12%	1.69	Nov-11
HFRI Fund of Funds Composite Index			0.12%	0.12%	0.78%	0.12%	4.18%	1.90%	3.27%	3.55%	3.33%	0.86	Nov-11
MSCI AC World Index Free - Net			3.02%	3.02%	2.57%	3.02%	10.97%	8.95%	9.04%	10.20%	10.51%	0.91	Nov-11
ML 3-month T-Bills			0.16%	0.16%	0.97%	0.16%	1.44%	0.73%	0.45%	0.36%	0.15%	-	Nov-11
25% MSCI ACWI/75% Barclays Aggregate			0.77%	0.77%	-0.50%	0.77%	2.11%	3.44%	4.02%	4.18%	3.32%	1.04	Nov-11
Liquidating Portfolio													
Claren Road Credit Fund, Ltd.	73,333	0.0%	0.00%	0.00%	2.13%	0.00%	-14.85%	-0.93%	-3.86%	-3.53%	11.89%	-0.31	Apr-13
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series (liquidating trust)	341,288	0.1%	-0.12%	-0.12%	-7.32%	-0.12%	-3.06%	-19.97%	-15.37%	-10.79%	18.92%	-0.54	Jan-12
Luxor Capital Partners, LP - Liquidating SPV	1,145,582	0.2%	1.15%	1.15%	0.37%	1.15%	19.52%	-	-	13.75%	17.73%	0.73	Jul-16
Liquidating/Redeeming - Total	1,560,203	0.3%	0.81%	0.81%	3.65%	0.81%	2.96%	0.27%	-0.93%	0.58%	4.98%	0.00	Nov-11
Total Absolute Return Portfolio	545,951,895	100.0%	0.32%	0.32%	4.05%	0.32%	6.76%	3.37%	4.64%	5.40%	2.95%	1.57	Nov-11
HFRI Fund of Funds Composite Index			0.12%	0.12%	0.78%	0.12%	4.18%	1.90%	3.27%	3.55%	3.33%	-	Nov-11
Market Indices													
Libor3Month			0.20%	0.20%	1.28%	0.20%	1.89%	1.17%	0.80%	0.69%	0.17%	-	Nov-11
Bloomberg Barclays US Aggregate Bond Index			0.02%	0.02%	-1.60%	0.02%	-0.80%	1.50%	2.25%	2.09%	2.72%	0.52	Nov-11
Bloomberg Barclays US High Yield Bond Index			1.09%	1.09%	1.25%	1.09%	2.59%	6.12%	5.35%	6.81%	5.05%	1.19	Nov-11
S&P 500 TR			3.72%	3.72%	6.47%	3.72%	16.24%	12.52%	13.13%	15.15%	9.60%	1.45	Nov-11
MSCI EAFE - Net			2.46%	2.46%	-0.36%	2.46%	6.40%	5.03%	5.86%	7.32%	12.46%	0.58	Nov-11
MSCI EMF (Emerging Markets Free) - Net			2.20%	2.20%	-4.61%	2.20%	4.36%	8.94%	5.25%	3.81%	15.37%	0.27	Nov-11

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.

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

Absolute Return Portfolio

Fund Level Performance Report

Estimated as of July 31, 2018

Fund	QTD	YTD	Jul	Jun	May	Trailing Returns			Calendar Year Returns					5 Yr	Sharpe Ratio			Start Date
						1 Year	3 Year	5 Year	2017	2016	2015	2014	2013	Std Dev	3 yr	5 yr	Incep.	
Absolute Return																		
Capula Global Relative Value Fund Ltd.		2.72%				3.93%	5.97%	6.74%	3.79%	8.37%	7.54%	8.14%	7.60%	1.63%	2.77	3.42	1.83	Oct-05
Davidson Kempner Institutional Partners, L.P.	0.33%	2.36%	0.33%	0.63%	-0.10%	4.21%	4.82%	4.84%	6.11%	6.71%	1.51%	4.45%	9.52%	1.95%	2.04	2.02	1.57	Mar-96
DE Shaw Composite Fund LLC		6.51%				10.79%	9.17%	11.19%	10.41%	6.12%	13.68%	15.57%	11.51%	3.88%	2.34	2.54	1.60	Mar-01
Elliott Associates, L.P.	-0.70%	3.42%	-0.70%	1.30%	0.90%	7.18%	8.37%	8.36%	8.80%	12.98%	2.51%	8.24%	12.44%	3.52%	1.82	2.07	1.92	Jan-90
Graham Absolute Return Trading Ltd.	-1.66%	4.26%	-1.66%	0.12%	0.50%	2.47%	1.79%	4.97%	-7.01%	11.78%	1.50%	10.42%	10.50%	7.99%	0.12	0.55	0.93	Jan-05
Viking Global Equities, LP	2.50%	7.45%	2.50%	0.30%	3.00%	11.10%	4.82%	9.71%	13.01%	-3.92%	8.27%	13.47%	22.65%	7.73%	0.48	1.14	1.43	Oct-99
Winton Fund Limited	-0.52%	0.81%	-0.52%	1.16%	-0.28%	9.63%	1.32%	5.02%	7.88%	-3.01%	0.95%	13.88%	9.43%	8.99%	0.06	0.50	0.66	Oct-97
Liquidating Portfolio																		
Claren Road Credit Fund, Ltd.	0.00%	2.29%	0.00%	0.48%	0.70%	-2.12%	-3.93%	-5.76%	0.09%	-12.72%	-7.96%	-10.10%	5.43%	7.25%	-0.75	-0.89	0.31	Jan-06
Indus Asia Pacific Fund, LP	-0.12%	-7.32%	-0.12%	-1.15%	-1.24%	-3.06%	-19.97%	-15.25%	9.70%	-26.00%	-33.23%	-15.60%	4.97%	21.32%	-0.72	-0.70	0.03	Dec-00
Luxor Capital Partners, LP	1.15%	0.37%	1.15%	4.35%	-0.29%	19.52%	10.00%	5.52%	54.38%	7.80%	-19.05%	-9.83%	19.53%	14.48%	0.57	0.39	0.86	Apr-02
Benchmark																		
HFRI Fund of Funds Composite Index	0.12%	0.78%	0.12%	-0.51%	0.71%	4.18%	1.90%	3.27%	7.77%	0.51%	-0.27%	3.37%	8.96%	3.30%				Jan-90
HFRI Fund Weighted Composite Index	0.61%	1.45%	0.61%	-0.42%	0.89%	5.25%	4.04%	4.30%	8.59%	5.44%	-1.12%	2.98%	9.13%	3.62%				Jan-90
Market Indices																		
3 Month Libor - BOM	0.20%	1.28%	0.20%	0.19%	0.20%	1.89%	1.17%	0.80%	1.29%	0.76%	0.33%	0.23%	0.27%	0.19%				Jan-87
Barclays Aggregate Bond Index	0.02%	-1.60%	0.02%	-0.12%	0.71%	-0.80%	1.50%	2.25%	3.55%	2.66%	0.57%	5.94%	-2.02%	2.71%				Jan-76
Barclays High Yield Credit Bond Index	1.09%	1.25%	1.09%	0.40%	-0.03%	2.59%	6.12%	5.35%	7.50%	17.14%	-4.46%	2.46%	7.46%	4.98%				Jul-83
S&P 500 (TR)	3.72%	6.47%	3.72%	0.62%	2.41%	16.24%	12.52%	13.12%	21.83%	11.96%	1.38%	13.69%	32.39%	9.71%				Jun-88
MSCI EAFE - Net - USD	2.46%	-0.36%	2.46%	-1.22%	-2.25%	6.40%	5.03%	5.86%	25.03%	1.00%	-0.81%	-4.90%	22.78%	11.45%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	2.20%	-4.61%	2.20%	-4.15%	-3.54%	4.36%	8.94%	5.25%	37.28%	11.19%	-14.92%	-2.19%	-2.60%	14.87%				Dec-87

Note: The above is manager composite history.



## Section IX.

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### Private Equity Returns

## Portfolio Summary

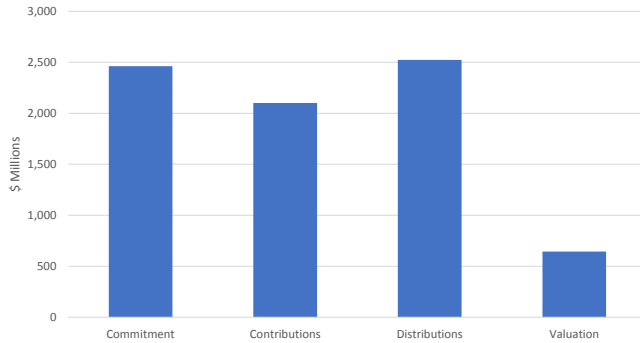
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All Investments

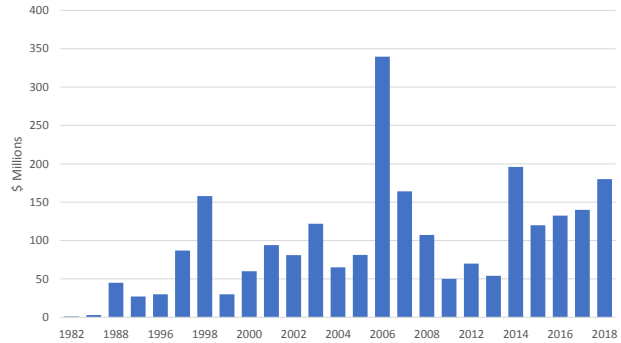
### Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Valuation	Multiple of Cost	IRR	TWR
Private Equity Funds									
	Buyout Total	81	1,440,318,986	1,267,164,581	1,624,488,818	369,643,340	1.57	13.32%	12.95%
	Direct Lending Total	4	125,000,000	68,463,210	36,921,520	42,322,392	1.16	9.53%	8.27%
	Distressed Debt Total	14	263,000,000	223,015,944	243,540,441	70,504,152	1.41	10.29%	10.01%
	Energy Total	9	198,000,000	153,675,653	191,663,345	35,807,194	1.48	23.73%	7.77%
	Fund of Funds Total	1	45,000,000	45,000,000	106,748,821	-	2.37	19.94%	-
	Opportunistic Credit Total	1	50,000,000	22,326,873	-	21,072,773	0.94	-6.09%	-12.78%
	Secondary Total	4	60,000,000	55,009,798	64,223,765	3,242,504	1.23	5.87%	3.10%
	Venture Capital Total	22	281,250,000	267,187,297	255,742,037	102,236,673	1.34	5.62%	3.44%
<b>Total: Private Equity Fu</b>		<b>136</b>	<b>2,462,568,986</b>	<b>2,101,843,355</b>	<b>2,523,328,748</b>	<b>644,829,028</b>	<b>1.51</b>	<b>13.52%</b>	<b>11.41%</b>

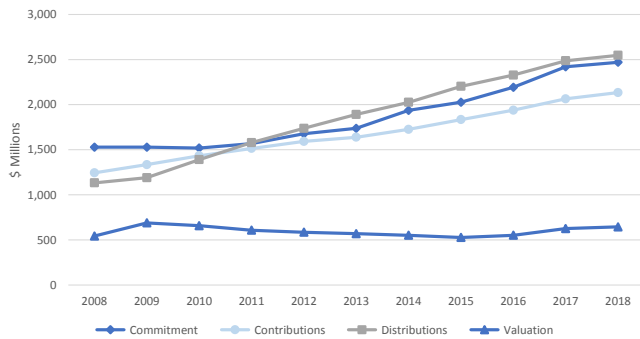
Cash Flow and Valuation Summary



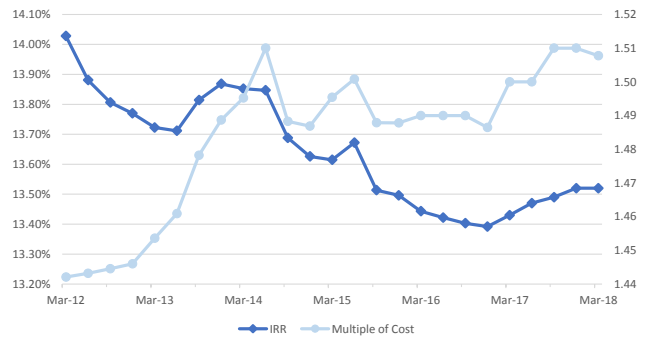
Commitment by Vintage Year



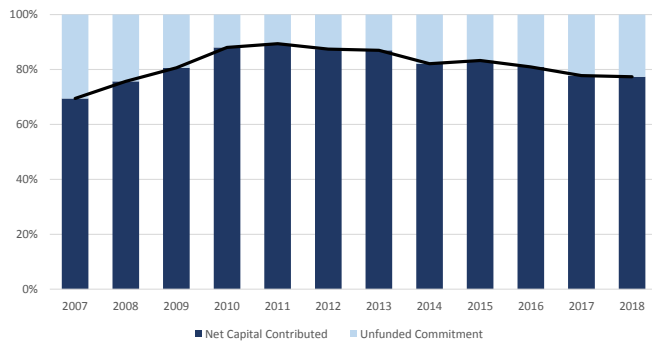
Historical Cash Flows and Valuation



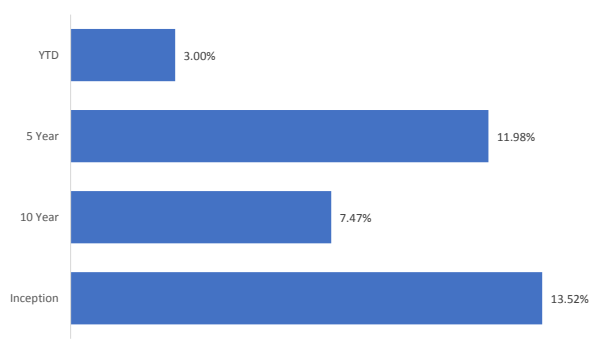
Historical Performance



Historical Percent Funded



Period IRRs



**Employees' Retirement System of Rhode Island Private Equity Performance**  
**3/31/2018**

Current Partnerships	Vintage Year	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
Fenway Partners Capital Fund II	1998	Buyout	15,000,000	18,538,740	20,462,364	150,000	1,594,059	4.71	1.19
Nautic Partners V	2000	Buyout	20,000,000	20,331,229	40,426,893	600,000	1,556,590	17.14	2.06
CVC European Equity Partners III	2001	Buyout	20,000,000	23,760,732	59,551,716	200,000	1,464,114	41.04	2.57
Parthenon Investors II	2001	Buyout	23,960,000	23,409,381	37,415,960	550,619	832,287	12.39	1.63
Leeds Equity Partners IV	2003	Buyout	10,000,000	10,209,327	11,467,347	1,100,000	2,012,605	4.36	1.32
Nordic Capital Fund V	2003	Buyout	€ 14,615,550	20,646,607	54,323,851	-	473,283	20.22	2.65
TPG Partners IV	2003	Buyout	15,000,000	16,672,684	31,152,325	-	1,189,707	15.53	1.94
Aurora Equity Partners III	2004	Buyout	15,000,000	16,243,392	26,952,245	900,000	513,547	15.06	1.69
W Capital	2004	Buyout	15,000,000	14,197,500	10,411,595	802,500	180,831	-10.14	0.75
Birch Hill Equity Partners III	2005	Buyout	CAD 18,000,000	20,483,878	36,651,654	360,000	4,304,919	13.11	2.00
CVC European Equity Partners IV	2005	Buyout	€ 16,500,000	20,072,162	39,240,082	325,138	28,499	16.64	1.96
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,133	36,171,706	2,250,000	843,650	3.28	1.19
Centerbridge Capital Partners	2006	Buyout	15,000,000	23,606,988	39,001,831	1,050,000	3,373,093	19.62	1.80
Fenway Partners Capital Fund III	2006	Buyout	15,000,000	17,230,534	14,080,832	1,050,000	6,863,757	3.60	1.22
LNK Partners	2006	Buyout	12,500,000	12,143,603	16,923,986	356,397	-	8.12	1.39
Nordic Capital Fund VI	2006	Buyout	€ 15,000,000	20,128,265	33,836,591	-	1,032,367	8.65	1.73
TPG Partners V	2006	Buyout	20,000,000	20,697,887	24,082,830	1,200,000	4,691,612	5.16	1.39
Green Equity V	2007	Buyout	20,000,000	20,422,420	31,283,175	1,800,000	11,934,609	18.10	2.12
Nautic Partners VI	2007	Buyout	20,000,000	23,976,560	47,554,599	800,000	7,381,234	17.62	2.29
Providence Equity Partners VI	2007	Buyout	25,000,000	29,379,971	29,642,363	1,250,000	10,355,646	6.17	1.36
Trilantic Capital Partners IV	2007	Buyout	11,098,351	11,606,535	17,528,744	1,442,786	1,533,849	14.51	1.64
Bain Capital Fund X	2008	Buyout	25,000,000	24,300,000	30,825,853	700,000	8,790,899	9.76	1.63
CVC V	2008	Buyout	€ 20,000,000	27,117,925	44,399,184	247,240	9,767,759	19.04	2.00
Nordic Capital Fund VII	2008	Buyout	€ 15,000,000	19,183,506	17,628,540	927,150	12,808,167	8.31	1.59
TPG VI	2008	Buyout	10,000,000	13,835,221	14,284,490	500,000	4,779,196	9.15	1.38
Advent International GPE VII-C, L.P.	2012	Buyout	20,000,000	18,800,000	9,240,000	1,200,000	23,402,566	18.92	1.74
Providence Equity Partners VII	2012	Buyout	25,000,000	26,464,925	17,317,949	8,250,000	23,972,110	23.47	1.56
Nordic Capital Fund VIII	2013	Buyout	€ 15,000,000	18,971,204	6,502,350	1,483,440	19,410,250	16.40	1.37
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	16,636,517	5,160,709	3,363,483	19,545,267	17.51	1.49
Carlyle Asia Partners IV	2014	Buyout	30,000,000	22,745,337	4,585,592	7,254,663	28,439,787	17.68	1.45
CVC Capital Partners VI	2014	Buyout	€ 15,000,000	18,894,564	3,644,661	2,225,160	15,875,992	2.48	1.03
Nautic Partners VII	2014	Buyout	20,000,000	16,345,636	19,462,846	3,654,164	11,107,323	45.82	1.87
Riverside Micro-Cap Fund III	2014	Buyout	20,000,000	17,758,317	1,455,104	2,241,683	37,607,171	27.63	2.20
Sorenson Capital Partners III	2014	Buyout	30,000,000	21,469,828	7,769	8,530,172	23,791,270	5.48	1.11
Baring Asia Private Equity Fund VI	2015	Buyout	15,000,000	9,730,055	2,438,197	5,269,945	9,848,615	16.78	1.26
Paine & Partners Capital Fund IV	2015	Buyout	30,000,000	20,033,403	805,848	9,966,597	21,292,172	6.62	1.10
Centerbridge Capital Partners III	2015	Buyout	25,000,000	13,614,788	3,059,202	11,385,212	13,674,475	15.54	1.23
Advent International GPE VIII	2016	Buyout	20,000,000	9,830,000	-	10,170,000	10,482,890	n/a	1.04
Nautic Partners VIII	2016	Buyout	20,000,000	5,680,817	3,281,956	14,319,183	5,990,172	n/a	1.63
Southvest Partners VII	2016	Buyout	37,500,000	3,963,508	941,378	33,536,492	1,034,952	n/a	0.50
RLH IV	2017	Buyout	40,000,000	1,279,288	-	38,720,712	38,720,049	n/a	0.71
MHR Institutional Partners III	2006	Debt	20,000,000	20,800,000	20,764,995	7,000,000	9,002,132	6.95	1.43
WLR Recovery Fund IV	2007	Debt	8,000,000	7,277,318	9,260,089	722,682	719,830	7.87	1.37
Oaktree European Principal Fund III	2011	Debt	20,000,000	17,150,000	8,488,700	2,850,000	19,025,819	12.01	1.60
Centerbridge Special Credit Partners II	2012	Debt	25,000,000	22,500,000	15,695,140	2,500,000	8,511,885	1.99	1.08
Garrison Opportunity Fund IV	2014	Debt	30,000,000	23,913,341	(498,315)	6,086,659	27,355,640	5.41	1.12
CSIP V	2016	Debt	30,000,000	11,880,870	751,871	18,119,130	12,442,817	n/a	1.11
Tenex Capital Partners II	2016	Debt	25,000,000	9,601,524	714,865	15,398,476	9,691,226	7.57	1.08
Virgo Societas Partnership IV (Offshore), L.P.	2017	Debt	50,000,000	22,326,873	-	27,673,127	21,072,773	n/a	0.94
Davidson Kempner L-T Opps. IV	2018	Debt	50,000,000	2,500,000	-	47,500,000	2,518,264	n/a	1.01
Owl Rock Capital Corporation	2018	Debt	50,000,000	10,676,622	-	39,323,378	10,482,753	n/a	0.98
First Reserve Fund X	2004	Energy	20,000,000	19,999,999	36,485,800	1	69,497	31.03	1.83
Kayne Anderson Energy Fund III	2005	Energy	15,000,000	15,965,344	15,214,110	300,000	130,085	-2.16	0.96
First Reserve Fund XI	2006	Energy	20,000,000	22,125,580	14,833,318	-	1,081,080	-8.32	0.72
Kayne Anderson Energy Fund IV	2007	Energy	15,000,000	16,605,519	16,631,275	-	1,232,155	2.49	1.08
EnCap Energy Capital Fund IX	2013	Energy	18,000,000	19,208,194	12,207,020	1,980,000	12,987,293	14.57	1.31
EnCap Energy Capital Fund X	2015	Energy	25,000,000	18,426,739	3,579,408	6,573,261	17,409,163	13.14	1.14
EnCap Energy Capital Fund XI	2017	Energy	50,000,000	3,534,835	-	46,465,165	2,897,922	n/a	0.82
Collier V	2006	Secondaries	15,000,000	12,620,912	16,067,595	2,379,088	1,874,280	8.13	1.42
W Capital II	2007	Secondaries	15,000,000	14,896,718	19,748,146	103,282	1,187,393	10.58	1.41
Alta BioPharma Partners III	2003	Venture Capital	15,000,000	14,250,000	20,297,956	750,000	507,043	5.81	1.46
Granite Global Ventures II	2004	Venture Capital	15,000,000	14,333,510	21,812,249	666,490	2,339,862	6.66	1.69
Leapfrog Ventures II	2005	Venture Capital	10,000,000	9,490,000	6,811,564	510,000	3,976,276	2.13	1.14
Alta Partners VIII	2006	Venture Capital	15,000,000	15,000,000	26,523,437	-	6,950,924	16.39	2.23
Castile Ventures III	2006	Venture Capital	5,000,000	5,009,730	1,396,371	-	688,775	-16.77	0.42
Focus Ventures III	2006	Venture Capital	15,000,000	15,000,000	6,480,361	-	1,854,538	-9.94	0.56
GGV III	2006	Venture Capital	15,000,000	14,625,748	36,810,243	374,252	5,156,545	18.34	2.87
Point 406 Ventures I	2006	Venture Capital	10,000,000	10,950,534	8,474,403	400,000	9,030,597	8.11	1.60
Point Judith Venture Fund II	2006	Venture Capital	5,000,000	6,199,776	2,305,610	50,000	5,031,874	2.81	1.18
Lighthouse Capital Partners VI	2007	Venture Capital	15,000,000	14,250,000	19,719,297	750,000	496,873	6.79	1.42
Paladin III	2008	Venture Capital	10,000,000	12,917,504	9,042,075	400,000	8,865,963	7.44	1.39
Industry Ventures Partnership Holdings III	2014	Venture Capital	25,000,000	21,569,363	3,763,454	3,430,637	25,039,363	13.41	1.34
Industry Ventures Partnership Holdings III C	2015	Venture Capital	15,000,000	8,025,424	110,218	6,974,576	10,847,890	27.90	1.37
Industry Ventures Partnership Holdings IV	2015	Venture Capital	10,000,000	3,450,000	40,923	6,550,000	3,982,532	17.56	1.17
Other funds in aggregate**	various		100,000,000	102,337,452	81,827,078	14,513,287	36,864,440		
<b>Total</b>			<b>\$ 1,635,968,194</b>	<b>\$ 1,300,974,995</b>	<b>\$ 1,278,563,573</b>	<b>\$ 440,476,227</b>	<b>\$ 683,836,842</b>		

\*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, Summit Partners Credit Fund, Summit Partners Credit Fund II, Thomas, McNeerney & Partners, Thomas McNeerney & Partners II and Wellspring Capital Partners III.

## Section X.

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### Real Estate Returns

# PORTFOLIO SUMMARY

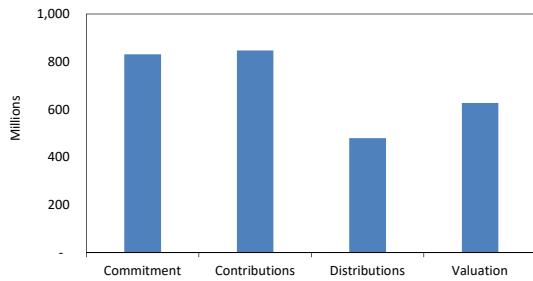
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All Portfolio Investments - Real Estate <sup>(1)</sup>

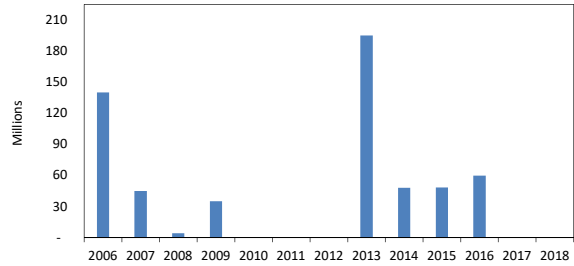
## Performance Summary

Asset Class	Investment Type	Number of Investments <sup>(4)</sup>	Commitment	Contributions <sup>(2), (3)</sup>	Distributions <sup>(3)</sup>	Adjusted Valuation	Multiple of Cost	IRR	TWR
Real Estate Funds	Core	8	414,873,657	481,286,635	306,228,982	432,845,327	1.5x	5.5%	5.7%
	Non-Core	21	415,260,817	364,827,336	173,568,232	193,993,623	1.0x	0.2%	2.9%
<b>Total: Real Estate Funds</b>		<b>29</b>	<b>830,134,474</b>	<b>846,113,971</b>	<b>479,797,214</b>	<b>626,838,950</b>	<b>1.3x</b>	<b>4.3%</b>	<b>5.0%</b>
<b>Total:</b>		<b>29</b>	<b>830,134,474</b>	<b>846,113,971</b>	<b>479,797,214</b>	<b>626,838,950</b>	<b>1.3x</b>	<b>4.3%</b>	<b>5.0%</b>

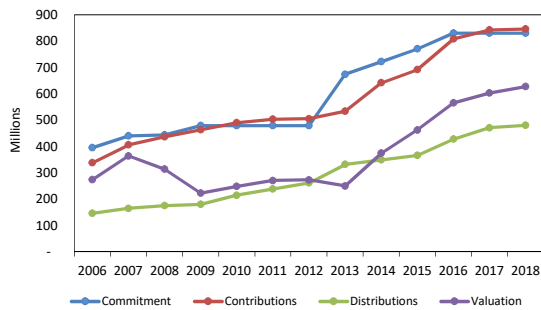
## Cash Flow and Valuation Summary



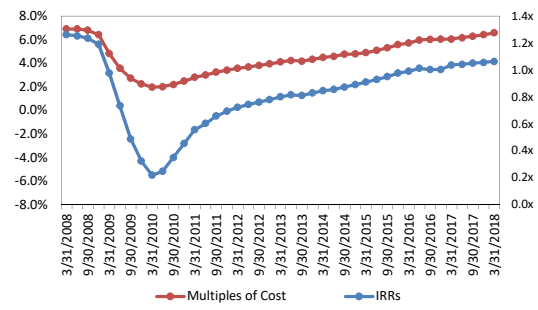
## Commitment by Vintage Year



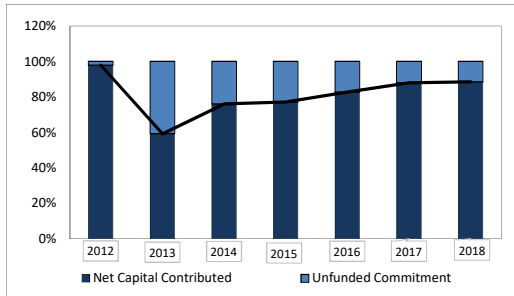
## Historical Cash Flows and Valuation



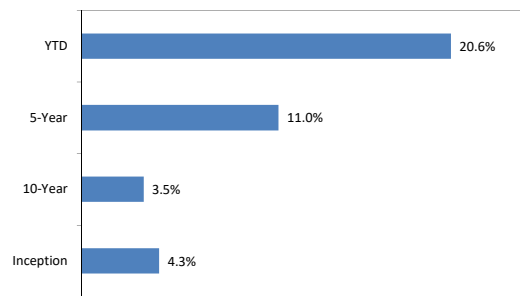
## Historical Performance



## Historical Percent Funded



## Period IRRs <sup>(5)</sup>



<sup>(1)</sup> Investment information listed as of March 31, 1989 through March 31, 2018 and includes those investments which have been liquidated.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> As of March 31, 2018 there are five core funds and eleven non-core funds.

<sup>(5)</sup> The YTD IRR presented is an annualized percentage. The IRR on an unannualized basis for 1Q18 is 4.8%.

**Employees' Retirement System of Rhode Island Real Estate Performance**  
**3/31/2018**

Current Partnerships	Vintage Year/Initial Investment	Type	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Valuation (\$)	Cumulative Performance*	
				Amount Drawn	Amount Distributed	Amount Unfunded		Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	2010	Core	69,873,660	69,873,660	18,229,395	-	103,923,643	11.2	1.5
Heitman America Real Estate Trust	2014	Core	60,000,000	60,000,000	10,368,989	-	80,207,573	10.2	1.3
JP Morgan Strategic Property Fund	2006	Core	75,000,000	75,000,000	29,014,048	-	108,145,514	6.3	1.7
Morgan Stanley Prime Property Fund	2005	Core	35,000,000	35,000,000	22,397,626	-	63,774,648	7.4	2.1
Prudential (PRISA)	2005	Core	50,000,000	50,000,000	21,499,902	-	76,793,949	5.4	1.8
Magna Hotel Fund III	2008	Value-Add	4,000,000	3,426,573	5,622,431	573,427	388,506	15.2	1.8
IC Berkeley Partners III	2013	Value-Add	18,000,000	16,038,326	12,209,760	1,961,674	12,860,986	22.6	1.6
Exeter Industrial Value Fund III	2014	Value-Add	30,000,000	29,099,454	7,244,061	900,546	44,912,351	32.3	1.8
Waterton Fund XII	2014	Value-Add	35,000,000	33,565,414	6,399,296	1,434,586	40,147,875	16.2	1.3
Crow Holdings Retail Fund	2015	Value-Add	24,000,000	20,935,313	2,499,549	3,064,687	22,130,703	11.2	1.2
IC Berkeley Partners IV	2016	Value-Add	30,000,000	8,814,545	1,783,071	21,185,455	9,037,155	3.3	1.0
TriCon Capital Fund VII	2005	Opportunistic	15,000,000	14,571,533	4,220,556	428,467	992,435	-16.9	0.3
JP Morgan Alternative Property Fund	2006	Opportunistic	20,000,000	20,000,000	14,750,429	-	192,853	-4.4	0.7
GEM Realty Fund V	2013	Opportunistic	50,000,000	39,874,323	7,421,000	10,125,677	47,186,095	13.0	1.3
Lone Star Real Estate Fund IV	2015	Opportunistic	24,260,817	18,230,068	8,142,624	6,030,749	15,515,874	20.6	1.3
GEM Realty Fund VI	2017	Opportunistic	20,000,000	1,000,000	-	19,000,000	628,790	n/a	n/a
<b>Total</b>			<b>\$ 560,134,477</b>	<b>\$ 495,429,209</b>	<b>\$ 171,802,737</b>	<b>\$ 64,705,268</b>	<b>\$ 626,838,950</b>		

\*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 XI.

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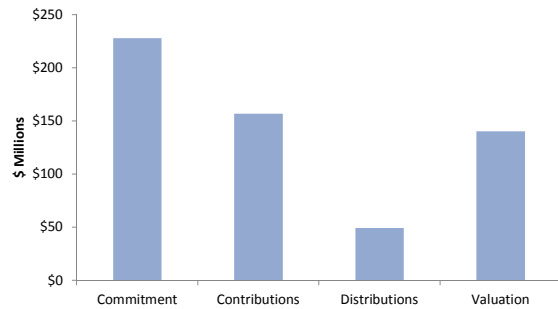
### Infrastructure Returns

**Portfolio Summary**  
3/31/2018  
All Private Infrastructure

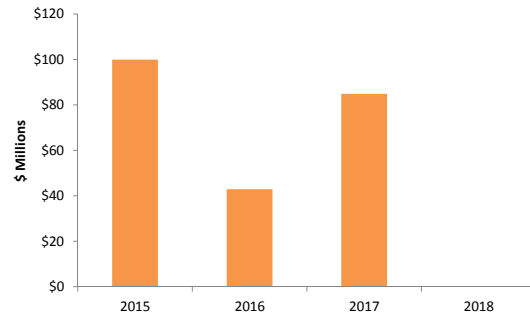
Investment	Commitment	Contributions	Distributions	Reported Valuation	Multiple of Cost*	Since Inception IRR*	QTD IRR*
IFM Global Infrastructure	50,000,000	50,000,000	9,542,718	57,705,494	1.34	9.6%	8.1%
ISQ Global Infrastructure Fund	50,000,000	55,766,918	21,453,937	44,712,028	1.19	15.7%	1.6%
ISQ Global Infrastructure Fund II	40,000,000	-	-	(768,080)	-	-	-
Stonepeak Infrastructure Fund II	43,000,000	41,914,076	18,397,344	29,287,672	1.14	14.4%	-0.7%
Stonepeak Infrastructure Fund II Master Co-Investment	10,000,000	8,241,807	9,708	8,564,312	1.04	9.5%	1.0%
Stonepeak Infrastructure Fund III	35,000,000	1,016,730	-	911,702	-	-	-
<b>Total</b>	<b>228,000,000</b>	<b>156,939,531</b>	<b>49,403,707</b>	<b>140,413,128</b>	<b>1.21</b>	<b>11.3%</b>	<b>3.1%</b>

\* Net of fees and expenses

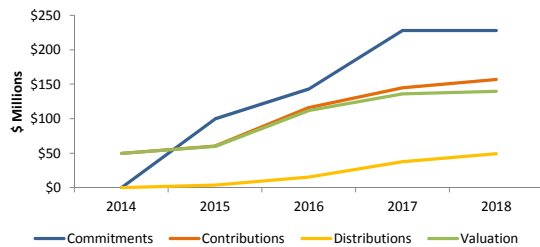
### Cash Flow and Valuation Summary



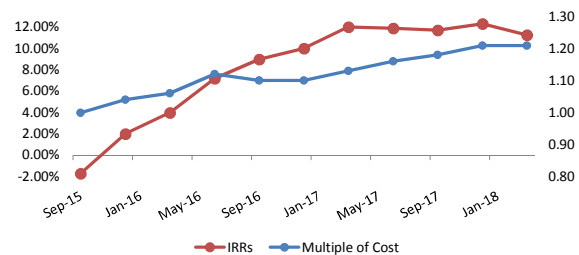
### Commitment by Vintage Year



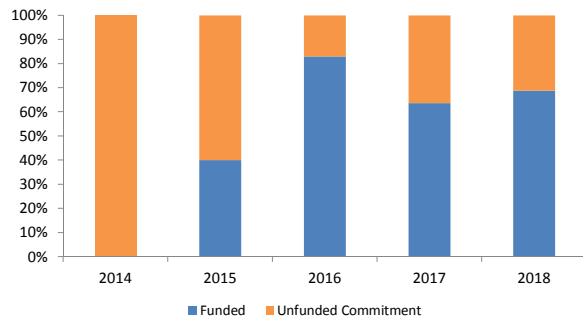
### Historical Cash Flows and Valuations



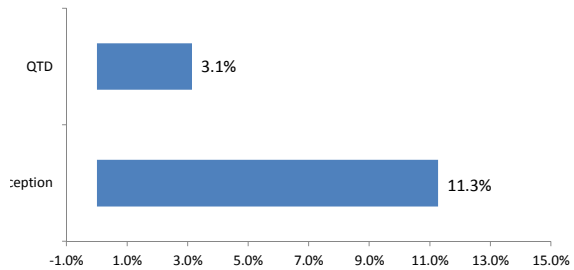
### Historical Performance



### Historical Percent Funded



### Period IRRs





**Employees' Retirement System of Rhode Island Private Infrastructure Performance  
3/31/2018**

Current Partnerships	Vintage Year/Initial Investment		Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)			Valuation (\$)	Cumulative Performance*	
				Amount Drawn	Amount Distributed	Amount Unfunded		Net IRR (%)	Net Multiple of Investment
IFM Global Infrastructure, L.P.	2015	Core	50,000,000	50,000,000	8,227,293	-	57,705,494	9.6	1.3
ISQ Global Infrastructure Fund, L.P.	2015	Value-Add	50,000,000	55,766,918	20,952,395	15,185,477	44,712,028	17.2	1.3
ISQ Global Infrastructure Fund II, L.P.		Value-Add	40,000,000					n/a	n/a
Stonepeak Infrastructure Fund II, L.P.	2016	Opportunistic	43,000,000	41,914,076	15,583,146	19,468,714	29,287,672	14.4	1.1
Stonepeak Infrastructure Fund II-C	2016	Opportunistic	10,000,000	8,241,807	9,708	1,758,193	8,564,312	9.5	1.0
Stonepeak Infrastructure Fund III	2018	Opportunistic	\$ 35,000,000	\$ 1,016,730	\$ -	\$ 33,983,270	\$ 911,702	n/a	n/a
<b>Total</b>			<b>\$ 228,000,000</b>	<b>\$ 156,939,531</b>	<b>\$ 44,772,542</b>	<b>\$ 70,395,654</b>	<b>\$ 141,181,208</b>		

## Section XII.

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### Cash Flow

# Monthly Valuation Change

Period : 2018-07-01 - 2018-07-31

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
<b>Grand Total</b>		<b>8,402,331,369.03</b>	<b>125,214,821.35</b>	<b>(22,013,029.00)</b>	<b>8,299,129,576.68</b>
<b>Total Global Equity</b>		<b>4,207,842,826.30</b>	<b>117,148,649.22</b>	<b>214,325.62</b>	<b>4,090,479,851.46</b>
<b>Global Equity</b>		<b>3,948,400,691.63</b>	<b>116,782,973.79</b>	<b>214,325.62</b>	<b>3,831,403,392.22</b>
	SSGA R3000 INDEX	1,351,088,093.91	43,537,870.44	39,442.98	1,307,510,780.49
	SSGA MSCI EAFE	790,753,916.28	18,867,840.92	62,488.93	771,823,586.43
	SSGA MSCI CANADA	97,002,444.55	2,322,167.12	7,443.32	94,672,834.11
	SSGA MSCI EM	443,968,330.61	9,531,372.44	104,950.39	434,332,007.78
	QVM TILT	1,265,587,906.28	42,523,722.87	0.00	1,223,064,183.41
<b>Global Equity Hedge Funds</b>		<b>259,442,134.67</b>	<b>365,675.43</b>	<b>0.00</b>	<b>259,076,459.24</b>
	DAVIDSON KEMPNER	88,090,727.25	328,757.30	0.00	87,761,969.95
	ELLIOTT ASSOCIATES	106,432,645.68	(1,497,544.77)	0.00	107,930,190.45
	INDUS ASIA PACIFIC	341,287.78	(423.63)	0.00	341,711.41
	PFM DIVERSIFIED	174.44	0.00	0.00	174.44
	SAMLYN ON/OFFSHORE	578.08	0.32	0.00	577.76
	VIKING GLOBAL EQUITI	63,430,932.52	1,522,133.81	0.00	61,908,798.71
	LUXOR CAP PTNS LP	1,145,581.90	12,752.40	0.00	1,132,829.50
	ESG CBE FUND LP	207.02	0.00	0.00	207.02
<b>Private Equity</b>		<b>504,443,464.32</b>	<b>2,830,812.52</b>	<b>(3,896,802.46)</b>	<b>505,509,454.26</b>
<b>Private Equity</b>		<b>504,443,464.32</b>	<b>2,830,812.52</b>	<b>(3,896,802.46)</b>	<b>505,509,454.26</b>
	PRIVATE EQUITY	504,443,464.32	2,830,812.52	(3,896,802.46)	505,509,454.26
<b>Total Fixed Income</b>		<b>921,692,959.08</b>	<b>612,614.04</b>	<b>(9,678,979.07)</b>	<b>930,759,324.11</b>
<b>Fixed Income</b>		<b>921,692,959.08</b>	<b>612,614.04</b>	<b>(9,678,979.07)</b>	<b>930,759,324.11</b>
	MACKAY SHIELDS	454,694,508.34	336,875.94	(5,856,364.35)	460,213,996.75
	PYRAMIS GLOBAL ADV	466,998,450.74	275,738.10	(3,822,614.72)	470,545,327.36
<b>Total Real Return</b>		<b>1,156,838,143.15</b>	<b>13,182,183.77</b>	<b>(8,028,710.84)</b>	<b>1,151,684,670.22</b>
<b>Alternative Absolute Return</b>		<b>211,810,828.65</b>	<b>455,262.81</b>	<b>0.00</b>	<b>211,355,565.84</b>
	BREXAN HOWARD	4,329.08	2.24	0.00	4,326.84
	DE SHAW	112,689,991.60	1,655,937.67	0.00	111,034,053.93
	OZ DOMESTIC PTRS	186.78	0.00	0.00	186.78
	WINTON FUTURE FD	38,932,420.82	(179,699.03)	0.00	39,112,119.85
	GRAHAM ABS RETURN	60,183,900.37	(1,020,978.07)	0.00	61,204,878.44
<b>Alternative Fixed Income</b>		<b>72,529,480.54</b>	<b>317,278.81</b>	<b>0.00</b>	<b>72,212,201.73</b>
	CAPULA GLOBAL	72,456,134.70	316,902.11	0.00	72,139,232.59
	CLAREN ROAD CR. FUND	73,345.84	376.70	0.00	72,969.14
<b>Credit</b>		<b>359,183,773.58</b>	<b>2,496,270.37</b>	<b>(4,437,019.60)</b>	<b>361,124,522.81</b>
	PIMCO	186,325,332.31	1,512,447.57	(2,675,000.00)	187,487,884.74
	WAMCO	172,858,441.27	983,822.80	(1,762,019.60)	173,636,638.07
<b>GILBs</b>		<b>201,427,666.10</b>	<b>(817,381.31)</b>	<b>(19,905.21)</b>	<b>202,264,952.62</b>
	BROWN BROTHERS HARR	201,427,666.10	(817,381.31)	(19,905.21)	202,264,952.62
<b>Publicly Traded Infrastructure</b>		<b>311,886,394.28</b>	<b>10,730,753.09</b>	<b>(3,571,786.03)</b>	<b>304,727,427.22</b>
	PRIV INFRASTR AGGR	146,973,892.97	520,772.00	(3,571,786.03)	150,024,907.00
	HARVEST FUND ADVISOR	164,912,501.31	10,209,981.09	0.00	154,702,520.22
<b>Total Cash</b>		<b>22,287,910.60</b>	<b>(181,456.49)</b>	<b>5,522,062.63</b>	<b>16,947,304.46</b>
<b>Cash Accounts</b>		<b>22,287,910.60</b>	<b>(181,456.49)</b>	<b>5,522,062.63</b>	<b>16,947,304.46</b>
	ERSRI CASH	17,838,304.60	(181,456.49)	5,735,091.63	12,284,669.46
	CITIZENS CASH	4,449,606.00	0.00	(213,029.00)	4,662,635.00
<b>Total Other</b>		<b>3,665,519.65</b>	<b>(683,178.67)</b>	<b>(9,000,000.00)</b>	<b>13,348,698.32</b>

# Monthly Valuation Change

Period : 2018-07-01 - 2018-07-31

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Other		3,665,519.65	(683,178.67)	(9,000,000.00)	13,348,698.32
	RUSSELL OVERLAY FD	3,665,519.65	(683,178.67)	(9,000,000.00)	13,348,698.32
Total Miscellaneous		392,167.07	40,355.62	0.00	351,811.45
Miscellaneous Accounts		392,167.07	40,355.62	0.00	351,811.45
	RI TRANS ACCT	5,190.79	53.08	0.00	5,137.71
	SHOTT CAPITAL	331,359.78	40,793.12	0.00	290,566.66
	NON-US EQUITY TRANS	44,022.74	(173.75)	0.00	44,196.49
	FIXED INC TRANS	11,593.76	(316.83)	0.00	11,910.59
*unclassified		1,585,168,378.86	(7,735,158.66)	2,855,075.12	1,590,048,462.40
*Unclassified		1,585,168,378.86	(7,735,158.66)	2,855,075.12	1,590,048,462.40
	ERSRI SMA CASH	253,042,336.63	537,007.28	5,400,000.00	247,105,329.35
	MACKAY LONG DURATION	160,272,272.09	(2,501,414.59)	0.00	162,773,686.68
	WAMCO LONG DURATION	159,977,966.38	(2,513,845.38)	0.00	162,491,811.76
	CPC CB LLC	96,818,023.72	(1,808,962.12)	0.00	98,626,985.84
	CPC QIS LLC	99,732,232.20	(1,158,167.95)	0.00	100,890,400.15
	CPC AP LLC	102,292,894.74	(195,894.89)	0.00	102,488,789.63
	PRIVATE CREDIT	100,858,922.08	0.00	287,468.06	100,571,454.02
	OPPORTUNISTIC PRV CR	28,898,249.00	(93,881.01)	(1,744,201.00)	30,736,331.01
	CORE REAL ESTATE	431,978,538.72	0.00	(1,431,352.73)	433,409,891.45
	NON CORE REAL ESTATE	151,296,943.30	0.00	343,160.79	150,953,782.51

CASH FLOW ANALYSIS - INCOME & EXPENSES

Employees Retirement System

FISCAL YEAR 2019

	FY 2018-19												
	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 2018
MEMBER BENEFITS	833,982,084	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,500,000	69,482,084
ADMINISTRATIVE EXPENSES	9,525,725	1,255,280.98	1,021,300	529,120	1,264,456	523,667	661,953	855,600	497,568	844,408	1,200,489	473,241	398,643
INVESTMENT EXPENSES	22,873,288	270,376	10,424,015	3,807,683	2,045,442	2,252,368	708,685	(955)	574,291	875,124	77,109	1,034,676	804,475
TOTAL OUTFLOW	866,381,098	71,025,657	80,945,315	73,836,803	72,809,898	72,276,035	70,870,638	70,354,645	70,571,859	71,219,532	70,777,598	71,007,916	70,685,202
CONTRIBUTIONS	505,817,411	54,595,381	44,734,514	41,272,504	42,480,747	40,865,166	47,531,440	47,242,656	41,926,087	45,184,050	24,149,562	22,954,146	52,881,158
OTHER INCOME*	63,351,313	3,138,460	13,807,256	14,038,691	2,870,790	14,041,528	(10,388,798)	(461,275)	8,186,393	9,405,337	3,322,153	3,119,643	2,271,136
TOTAL INCOME	569,168,724	57,733,841	58,541,770	55,311,195	45,351,537	54,906,694	37,142,642	46,781,381	50,112,480	54,589,387	27,471,715	26,073,789	55,152,294
DIFFERENCE	(297,212,374)	(13,291,816)	(22,403,546)	(18,525,608)	(27,458,361)	(17,369,341)	(33,727,996)	(23,573,264)	(20,459,379)	(16,630,145)	(43,305,882)	(44,934,127)	(15,532,909)

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 2018
MEMBER BENEFITS	98,346,928	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000	8,146,928
ADMINISTRATIVE EXPENSES	2,244,318	298,439	242,816	125,497	299,070	123,576	155,785	201,000	116,695	197,622	278,994	109,981	94,842
INVESTMENT EXPENSES	5,416,858	64,281	2,478,330	903,107	483,790	531,519	166,784	(224)	134,689	204,810	17,920	240,459	191,394
TOTAL OUTFLOW	106,008,103	8,562,720	10,921,146	9,228,603	8,982,860	8,855,095	8,522,569	8,400,775	8,451,384	8,602,432	8,496,914	8,550,440	8,433,164
CONTRIBUTIONS	65,850,988	5,597,269	5,857,272	5,099,829	6,369,814	5,329,289	5,854,840	5,485,021	4,955,181	5,693,573	4,943,375	5,317,956	5,347,569
OTHER INCOME*	14,956,377	746,159	3,282,702	3,329,698	679,002	3,313,551	(2,444,924)	(108,364)	1,919,961	2,201,187	772,070	725,007	540,330
TOTAL INCOME	80,807,365	6,343,428	9,139,974	8,429,527	7,048,816	8,642,840	3,409,916	5,376,657	6,875,142	7,894,760	5,715,445	6,042,963	5,887,899
DIFFERENCE	(25,200,737)	(2,219,292)	(1,781,172)	(799,077)	(1,934,044)	(212,255)	(5,112,653)	(3,024,118)	(1,576,242)	(707,672)	(2,781,469)	(2,507,478)	(2,545,265)

CASH FLOW ANALYSIS - INCOME & EXPENSES

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 2018
MEMBER BENEFITS	5,999,263	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	499,263
ADMINISTRATIVE EXPENSES	201,685	26,577	21,565	11,140	26,530	10,986	13,802	17,789	10,305	17,434	12,525	24,574	8,458
INVESTMENT EXPENSES	484,110	5,724	220,101	80,165	42,917	47,252	14,777	(20)	11,894	18,068	24,584	1,578	17,069
TOTAL OUTFLOW	6,685,057	532,302	741,665	591,305	569,447	558,238	528,579	517,770	522,199	535,501	537,109	526,152	524,790
CONTRIBUTIONS	5,883,767	527,408	316,594	332,007	290,687	447,000	417,169	556,883	638,832	799,691	640,662	490,527	426,307
OTHER INCOME*	1,398,254	66,448	291,537	295,564	60,234	294,578	(216,615)	(9,591)	169,546	194,181	84,619	68,003	99,750
TOTAL INCOME	7,282,021	593,856	608,131	627,571	350,921	741,578	200,554	547,292	808,378	993,872	725,281	558,530	526,057
DIFFERENCE	596,964	61,555	(133,534)	36,266	(218,526)	183,339	(328,024)	29,523	286,179	458,371	188,172	32,378	1,267

**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 2018
MEMBER BENEFITS	3,296,301	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	271,301
ADMINISTRATIVE EXPENSES	104,628	14,070	11,402	5,885	13,828	5,793	7,265	9,360	5,424	9,164	12,882	5,078	4,476
INVESTMENT EXPENSES	253,529	3,031	116,375	42,351	22,369	24,915	7,778	(10)	6,261	9,498	827	11,103	9,033
TOTAL OUTFLOW	3,654,457	292,100	402,777	323,236	311,197	305,708	290,042	284,350	286,685	293,662	288,709	291,181	284,811
CONTRIBUTIONS	3,943,374	380,045	236,017	260,088	267,842	271,001	270,000	286,056	664,755	504,423	292,786	294,092	216,269
OTHER INCOME*	725,804	35,178	154,145	156,146	31,395	155,323	(114,013)	(5,046)	89,242	102,077	35,649	33,476	52,233
TOTAL INCOME	4,669,178	415,223	390,162	416,234	299,237	426,324	155,987	281,010	753,997	606,500	328,435	327,568	268,502
DIFFERENCE	1,014,720	123,122	(12,614)	92,998	(11,960)	120,616	(134,055)	(3,340)	467,313	312,837	39,725	36,387	(16,308)

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

## FISCAL YEAR 2018

## DIRECT BILLED INVESTMENT MANAGER FEES, PROFESSIONAL FEES &amp; OPERATING EXPENSES

## ERSRI &amp; MERSRI

## ACCRUAL BASIS

	Actual Jul 17	Actual Aug	Actual Sept	Actual Oct	Actual Nov	Actual Dec	Actual Jan 18	Actual Feb	Projected Mar	Projected Apr	Projected May	Projected June	Projected TOTAL
<b>EQUITIES US</b>													
SSGA Russell 3000			41,941			41,602			37,937			39,443	160,923
Shott Capital/Hamilton Lane			10,797			1,364			1,087			539	13,788
SSGA QVM Tilt			<u>121,825</u>			<u>124,353</u>			<u>124,256</u>			<u>115,000</u>	<u>485,434</u>
			174,563			167,319			163,281			161,782	181,511
<b>FIXED INCOME</b>													
Pyramis			158,892			159,089			157,734			170,000	645,715
Mackay Shields			161,197			149,208			170,000			170,000	650,405
Brown Bros.TIPS/GILB			74,186			68,794			63,102			77,000	283,082
			394,275			377,091			390,836			417,000	1,579,202
<b>INT'L EQUITIES</b>													
SSGA MSCI EAFE			58,822			61,940			71,248			62,489	254,499
SSGA MSCI CAD			8,000			8,333			8,206			7,443	31,983
SSGA MSCI Emerg Mkts			<u>93,947</u>			<u>90,521</u>			<u>96,777</u>			<u>104,950</u>	<u>386,196</u>
			160,769			160,794			176,232			174,883	672,678
<b>CREDIT</b>													
WAMCO			115,575			111,879			108,385			108,461	444,300
PIMCO			<u>125,861</u>			<u>122,220</u>			<u>118,394</u>			<u>130,000</u>	<u>496,475</u>
			241,436			234,099			226,779			238,461	940,775
<b>Infrastructure</b>													
Harvest Partners			277,776			268,080			269,214			275,283	1,090,353
<b>Long Duration</b>													
WAMCO			9,119			20,530			31,868			30,738	92,255
Mackay Shields			<u>12,388</u>			<u>23,204</u>			<u>25,000</u>			<u>32,175</u>	<u>92,768</u>
			21,507			43,734			56,868			62,913	185,023
<b>REAL ESTATE</b>													
Direct Billed Real Estate	193,678	0	0	961,509	75,189	0	507,227	1,253,625	795,073	524,996	7,309,818	264,586	11,885,701
<b>ALTERNATIVE INVESTMENTS</b>													
Direct Billed Private Equity	142,868	1,309,667	97,602	147,522	652,829	(1,214)	393,361	1,610,162	1,805,947	4,319,796	5,958,287	79,530	16,516,357
<b>SUB TOTAL-INV MGMT FEES</b>	336,546	1,309,667	1,367,929	1,109,032	728,018	1,249,903	900,588	2,863,787	3,884,229	4,844,792	13,268,105	1,674,438	33,051,598
<b>PROFESSIONAL FEES</b>													
Legal	8,475	11,258	10,736	50,339	15,170	6,514	2,588	4,663	11,832	10,327	7,892	15,569	155,361
BNY Mellon - Custodial	40,636	39,239	40,247	44,474	40,140	46,222	44,254	38,731	41,190	39,000	39,000	39,000	492,133
Cliffwater	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	33,333	33,333	441,667
PCA/Russell/Aberdeen/NEPC	21,283	21,458	98,845	26,487	91,768	94,464	43,734	40,314	101,424	63,997	45,440	169,236	818,449
Payden & Rygel	23,293	24,373	22,973	23,139	25,446	23,187	23,186	26,124	23,988	23,600	22,583	23,400	285,292
PCA Real Estate	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>125,004</u>
	141,603	144,245	220,718	192,356	220,441	218,304	161,678	157,748	226,352	184,841	158,665	290,956	2,317,906
<b>OPERATING EXPENSE</b>													
Retirement Transfers	359,498	488,767	677,553	721,761	837,137	896,040	648,915	901,064	834,367	696,560	650,150	1,361,470	9,073,281
Other Expense	6,270	0	0	14,463	21,750	7,245	0	2,500	7,020	0	2,976	25,244	87,468
	365,768	488,767	677,553	736,224	858,887	903,285	648,915	903,564	841,387	696,560	653,126	1,386,714	9,160,749
<b>TOTAL:</b>	843,917	1,942,678	2,266,200	2,037,612	1,807,345	2,371,492	1,711,180	3,925,099	4,951,968	5,726,192	14,079,896	3,352,107	44,530,253

Note: Numbers in bold are actual.

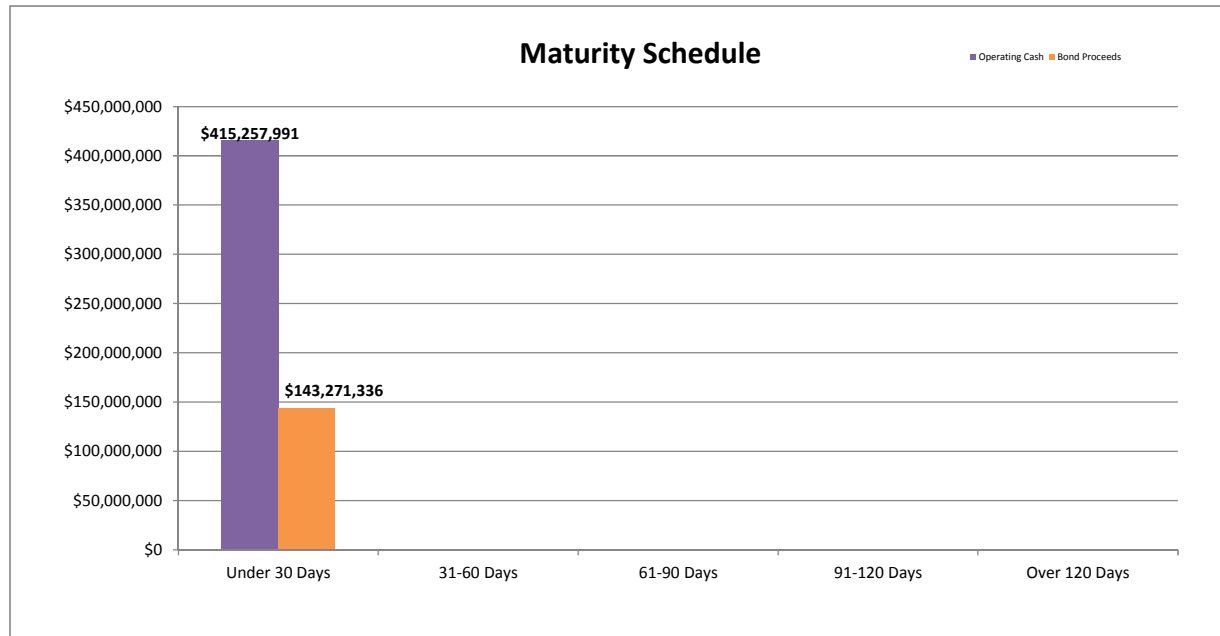
## Section XIII.

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### Short-Term Investments



### Short-Term Investment Maturity Schedule & SIC Compliance Report at July 31, 2018



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

Vendor	CD	CDARS	Money Mkt	CoD	OSIP	Total (\$)
Guidelines-Total/Vendor	50%/20%	50%/20%	75%/35%	75%/35%	50%/50%	
OSIP	0	0	0	0	207,107,153	207,107,153
	0%	0%	0%	0%	50%	49.9%
Bank RI	0	0	10,123,201	0	0	10,123,201
	0%	0%	2%	0%	0%	2.4%
Santander Bank	0	0	0	2,160,757	0	2,160,757
	0%	0%	0%	1%	0%	0.5%
People's Credit Union	0	0	0	1,825,438	0	1,825,438
	0%	0%	0%	0%	0%	0.44%
Navigant Credit Union	0	0	0	4,910,074	0	4,910,074
	0%	0%	0%	1%	0%	1.18%
Bristol County Savings Bk	0	4,183,170	0	0	0	4,183,170
	0%	1%	0%	0%	0%	1.01%
Centreville Bank	0	7,633,342	15,037,426	0	0	22,670,768
	0%	2%	4%	0%	0%	5.46%
Citizens Bank	0	0	0	29,614,909	0	29,614,909
	0%	0%	0%	7%	0%	7.1%
Webster Bank	0	0	0	34,597,082	0	34,597,082
	0%	0%	0%	8%	0%	8.3%
Customers Bank	0	0	0	61,498,001	0	61,498,001
	0%	0%	0%	15%	0%	14.8%
Washington Trust	0	21,277,269	0	2,564,377	0	23,841,646
	0%	5%	0%	1%	0%	5.7%
TD Bank	0	0	0	12,725,793	0	12,725,793
	0%	0%	0%	3%	0%	3.1%
<b>TOTALS</b>	-	<b>33,093,781</b>	<b>25,160,627</b>	<b>149,896,431</b>	<b>207,107,153</b>	<b>415,257,991</b>

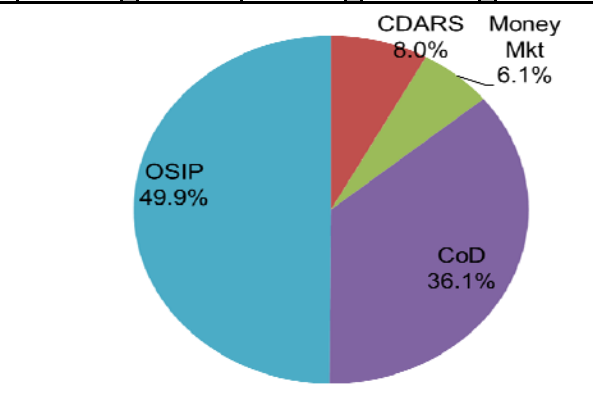
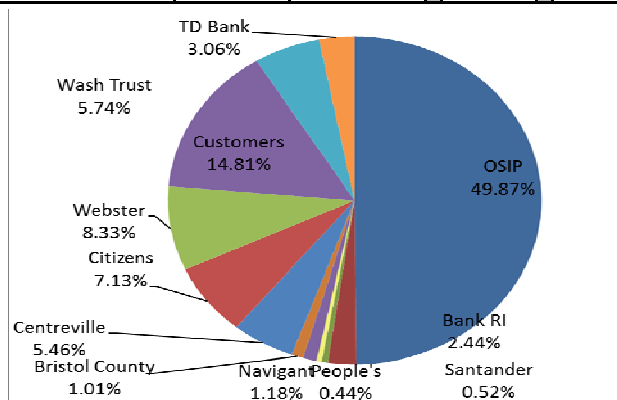
**State of Rhode Island**  
**Short Term Cash Monthly Performance**  
**Performance for**  
**July 01, 2018 to July 31, 2018**

Fund Name	Beginning Balance		Ending Balance		Average Daily Balance		Earnings	Yield(Annual)
GENERAL FUND	\$	232,547,778.91	\$	122,448,883.01	\$	201,890,410.26	\$ 312,655.05	1.8234%
H.A.V.A	\$	301.26	\$	301.63	\$	301.62	\$ 0.38	1.4834%
GENERAL FUND (HIST PRES)	\$	551,532.18	\$	552,426.92	\$	552,395.52	\$ 973.54	2.0751%
HISTORIC TAX CREDITS	\$	10,727,666.92	\$	10,740,744.46	\$	10,740,133.86	\$ 18,928.62	2.0751%
HIGHWAY FUND	\$	97,010,762.52	\$	91,361,051.49	\$	89,288,302.00	\$ 155,234.07	2.0470%
T.D.I. RESERVE (DET)	\$	103,758,547.79	\$	93,092,458.01	\$	97,707,907.84	\$ 120,947.65	1.4575%
RICAP GL FUND 21	\$	31,416,110.41	\$	29,619,937.84	\$	35,753,715.07	\$ 52,905.99	1.7423%
BOND CAPITAL FUND	\$	49,546.09	\$	53,178.40	\$	1,698,269.73	\$ 2,168.71	1.5036%
R.I. CLEAN WATER ACT	\$	3,258,882.17	\$	3,263,821.04	\$	3,263,649.66	\$ 5,312.52	1.9166%
STATE LOTTERY FUND	\$	19,113,510.79	\$	20,266,255.28	\$	22,835,969.14	\$ 38,870.37	2.0042%
ASSESSED FRINGE BEN ADM	\$	514,514.41	\$	14,579.05	\$	211,344.32	\$ 276.36	1.5396%
AUTO EQUIPMENT SERVICE	\$	1,001,270.54	\$	501,354.30	\$	517,462.11	\$ 657.88	1.4969%
HEALTH INSURANCE FUND	\$	28,336,462.98	\$	28,384,351.97	\$	26,479,671.24	\$ 45,102.48	2.0055%
FLEET REVOLVING LOAN FUND	\$	1,292,463.07	\$	1,294,056.52	\$	1,293,998.54	\$ 1,797.50	1.6356%
EMPLOYEES RETIREMENT	\$	649,709.48	\$	2,154,615.96	\$	7,218,836.12	\$ 9,175.16	1.4965%
MUNICIPAL EMPLOYEES RET.	\$	352,559.26	\$	254,107.21	\$	2,486,263.14	\$ 3,166.21	1.4994%
RETIREE HEALTH FUND	\$	2,726,138.94	\$	1,728,143.76	\$	1,986,126.80	\$ 2,525.63	1.4972%
BOG RETIREE FUND	\$	501,395.02	\$	1,437.84	\$	130,464.74	\$ 166.21	1.5000%
RIPTA HEALTH FUND	\$	2,558,119.89	\$	2,261,397.02	\$	2,377,428.55	\$ 3,022.70	1.4970%
PERMANENT SCHOOL FUND	\$	1,984,732.26	\$	1,787,952.04	\$	1,955,582.81	\$ 3,446.20	2.0749%
TEACHER RETIREE HEALTH FUND	\$	2,655,365.10	\$	4,458,696.36	\$	4,284,299.93	\$ 6,289.41	1.7285%
RI ST POL RETIREE HEALTH	\$	726,362.65	\$	226,452.69	\$	355,470.36	\$ 452.26	1.4980%
RI LEG RETIREE HEALTH	\$	839.82	\$	840.86	\$	840.83	\$ 1.07	1.4983%
RI JUDICIAL RETIREE HEALTH	\$	41,021.18	\$	41,071.75	\$	41,070.07	\$ 52.21	1.4968%
UNIVERSITY COLLEGE	\$	1,509,001.04	\$	9,875.58	\$	1,042,074.62	\$ 1,829.81	2.0675%
INDUS. BLDG. & MTG. INS.	\$	738,800.64	\$	739,999.18	\$	739,957.11	\$ 1,304.10	2.0751%
Operating Funds Totals	\$	544,023,395.32	\$	415,257,990.17	\$	514,851,945.99	\$ 787,262.09	1.800%
BOND CCDL 2006 SERIES C	\$	492,149.70	\$	492,149.70	\$	492,611.06	\$ 867.36	2.0731%
GO BND-NTAX 2007 SERIES A	\$	366,001.70	\$	124,237.53	\$	155,787.99	\$ 273.92	2.0702%
CCDL10B BOND CAPITAL COMPONENT	\$	950,000.00	\$	950,000.00	\$	950,890.57	\$ 1,674.27	2.0731%
CCDL10C	\$	163,241.38	\$	163,506.20	\$	163,496.90	\$ 288.15	2.0751%
CCDL2011A	\$	4,392,511.80	\$	4,391,866.36	\$	4,396,532.46	\$ 7,740.32	2.0729%
CCDL2012B	\$	6,092,902.03	\$	6,092,902.03	\$	6,098,613.80	\$ 10,738.06	2.0731%
GO CCDL 2013A	\$	2,700,000.00	\$	2,700,000.00	\$	2,702,531.10	\$ 4,758.45	2.0731%
GO CCDL 2014A	\$	94,193.10	\$	94,193.10	\$	94,281.40	\$ 166.00	2.0731%
GO CCDL 2014B	\$	40,664.27	\$	40,664.27	\$	40,702.39	\$ 71.67	2.0732%
GO CCDL 2016A	\$	10,671,358.56	\$	10,665,737.12	\$	10,678,246.93	\$ 18,798.46	2.0728%
GO CCDL 2016B	\$	3,646,405.85	\$	3,643,140.85	\$	3,646,991.51	\$ 6,421.37	2.0731%
GO CCDL 2017	\$	9,362,124.77	\$	9,209,515.49	\$	9,238,093.63	\$ 16,265.45	2.0731%
CCDL99A 1999A	\$	206,569.39	\$	206,569.39	\$	206,763.04	\$ 364.06	2.0732%
CLEAN WATER 2007 SERIES A	\$	205,772.34	\$	205,772.34	\$	205,965.24	\$ 362.65	2.0731%
CCDL2011A CLEAN WATER COMPONENT	\$	1,236,000.00	\$	1,236,000.00	\$	1,237,158.68	\$ 2,178.31	2.0731%
GO CCDL 2018A	\$	69,417,663.95	\$	67,955,082.08	\$	68,213,018.09	\$ 120,095.83	2.0730%
GO CCDL 2018B	\$	35,100,000.00	\$	35,100,000.00	\$	35,132,859.65	\$ 61,859.85	2.0731%
Bond Proceeds Fund Totals	\$	145,137,558.84	\$	143,271,336.46	\$	143,654,544.44	\$ 252,924.18	2.073%
TANS PROCEEDS	\$	-	\$	-	\$	-	\$ -	
Grand Totals	\$	689,160,954.16	\$	558,529,326.63	\$	658,506,490.43	\$ 1,040,186.27	1.860%

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

**Issuer Credit Rating  
July 31, 2018**

Issuer	Type of Instrument*	M/E % Portfolio	Issuer Ratings			S-T Debt Rating			L-T Debt Rating		Credit Outlook	Rating
			Moody's	Moody's	S&P	Moody's	S&P		S&P		S&P	Veribanc
Bank of America	-	0.0%	Baa1	P-2	A-2		A3	A-		Stable		GREEN/*
Bank RI	3,4	2.4%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**
Bristol County Sav. Bank	4	1.0%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**
Centerville Bank	4	5.5%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**/BB
Citizens Bank	4	7.1%	Baa1	P-2	A-2		A1	BBB+		Stable		GREEN/*
Customers Bank	4	14.8%	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	1.2%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**
Ocean State Inv. Pool	6	49.9%	N/R	N/R	N/R		N/R	N/R		N/R		N/R
People's Credit Union	4	0.4%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**
Santander Bank	4	0.5%	A3	P-2	A-2		A3	A-		Stable		GREEN/*
TD Bank	4	3.1%	Aa2	P-1	A-1+		Aa2	AA-		Stable		GREEN/**
Washington Trust	4,7	5.7%	N/R	N/R	N/R		N/R	N/R		N/R		GREEN/**
Webster Bank	4	8.3%	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** - Possess many favorable investment attributes  
**Baa** - Medium-grade obligations  
**Ba** - Possess 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 susceptible to adverse effects of changes in financial 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 XIV.

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### Defined Contribution Plan



# 2018 401(a) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Mgr. Ticker	Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		
TIAA Stable Value								0.18	1.17	2.00		1.93		1.91				1.90	03/31/12
FIXED INCOME																			
Intermediate-Term Bond																			
Vanguard Total Bond Market Index Adm	VBTLX	5.42	198,044.90	0.05	0.05	2	-	0.04	(1.60)	(0.53)	56	1.67	49	2.20	51	3.66	65	3.97	11/12/01
BBgBarc US Agg Float Adj TR USD								0.04	(1.63)	(0.45)		1.74		2.26					
Intermediate-Term Bond Median				0.81	0.67			0.10	(1.57)	(0.49)		1.65		2.23		4.03			
Intermediate-Term Bond Number of Funds		1060	1016	1060	1060	1060				1021	1020	969	968	927	926	823	822		
Inflation-Protected Bond																			
PIMCO Real Return Instl	PRRIX	10.58	10,553.09	0.64	0.45	32	-	(0.32)	(0.57)	2.05	36	1.97	15	1.64	18	3.36	5	5.75	01/29/97
BBgBarc US Treasury US TIPS TR USD								(0.48)	(0.51)	2.11		1.93		1.68		3.03			
Inflation-Protected Bond Median				0.79	0.60			(0.37)	(0.54)	1.70		1.47		1.13		2.49			
Inflation-Protected Bond Number of Funds		243	238	243	243	243				238	238	232	232	219	219	158	158		
EQUITY																			
Large Cap Blend - Index																			
Vanguard Institutional Index I	VINIX	17.58	223,489.08	0.04	0.04	2	-	3.72	6.45	14.33	28	11.90	11	13.39	11	10.17	18	9.85	07/31/90
S&P 500 TR USD								3.72	6.47	14.37		11.93		13.42		10.17			
Vanguard FTSE Social Index Inv	VFTSX	2.58	4,627.93	0.20	0.20	8	-	3.63	6.96	15.50	13	11.79	15	14.11	3	10.72	8	4.63	05/31/00
Spliced Social Index*****								3.63	7.08	15.65		12.00		14.36		10.96			
Russell 3000 TR USD								3.32	6.64	14.78		11.58		13.29		10.23			
Large Blend Median				1.01	0.89			0.53	1.76	13.03		10.26		12.16		9.19			
Large Blend Number of Funds		1340	1298	1338	1338	1338				1303	1302	1223	1222	1155	1155	1029	1022		
Mid-Cap Blend																			
Vanguard Mid Cap Index Institutional	VMCIX	20.17	97,856.81	0.04	0.04	1	-	2.60	5.23	12.10	48	9.22	42	12.31	20	10.11	37	10.01	05/21/98
Spliced Mid Cap Index*								2.57	5.24	12.12		9.25		12.35		10.14			
CRSP US Mid Cap TR USD								2.57	5.24	12.12		9.25		12.35		10.00			
Mid-Cap Blend Median				1.11	1.00			2.43	3.74	10.76		7.83		10.55		9.30			
Mid-Cap Blend Number of Funds		441	423	441	441	441				438	438	392	392	371	371	318	318		
Small Blend																			
Vanguard Small Cap Index I	VSCIX	2.25	90,743.06	0.04	0.04	1	-	1.84	7.94	16.51	36	10.47	36	12.41	26	11.29	18	9.24	07/07/97
Spliced Small Cap Index**								1.83	7.91	16.47		10.43		12.39		11.20			
CRSP US Small Cap TR USD								1.83	7.91	16.47		10.43		12.39		11.59			
Small Blend Median				1.27	1.13			1.72	7.33	14.75		9.58		11.21		9.97			
Small Blend Number of Funds		779	762	779	779	779				766	766	709	709	649	649	551	551		



# 2018 401(a) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		
Foreign Large Blend																			
Schwab International Index	SWISX	1.25	4,472.62	0.06	0.06	2	-	2.75	0.19	6.43	50	4.83	45	6.31	41	2.70	47	4.48	05/19/97
MSCI EAFE NR USD								2.46	(0.36)	6.84		4.90		6.44		2.84			
Foreign Large Blend Median				1.16	1.00			2.45	(0.95)	6.05		4.30		5.93		2.57			
Foreign Large Blend Number of Funds		771	728	771	771	771				748	748	675	675	635	635	521	521		
Diversified Emerging Mkts																			
Vanguard Emerging Mkts Stock Idx Adm	VEMAX	9.92	82,884.85	0.14	0.14	1	-	3.19	(4.26)	6.29	53	3.55	72	4.32	56	1.78	55	5.51	06/23/06
Spliced Emerging Markets Index***								2.82	(4.56)	6.53		3.49		4.28		1.90			
FTSE EMs AC China A Inclusion NR USD								2.81	(4.58)	6.49		3.16		4.73		2.44			
FTSE Emerging NR USD								3.32	(3.83)	7.29		4.23		4.73		2.28			
MSCI EM NR USD								2.20	(4.61)	8.20		5.60		5.01		2.26			
Diversified Emerging Mkts Median				1.65	1.32			1.96	(5.57)	6.78		5.19		4.60		2.13			
Diversified Emerging Mkts Number of Funds		824	762	824	824	824				795	795	732	732	574	574	301	300		
Lifecycle																			
Vanguard Target Retire Inc Trust I				0.07	0.07			0.90	0.82	4.02		4.22		4.86		5.15		4.97	6/22/2007
Vanguard Target Retirement Income Composite								0.86	0.83	4.20		4.33		4.99		5.17			
Target-Date Retirement Median					0.72			3.62	5.50	3.44		3.60		4.22		4.53			
Target-Date Retirement Number of Funds					199	199				193	193	181	181	159	159	126	126		
Vanguard Target Retire 2015 Trust I				0.07	0.07			1.23	1.25	5.44		5.22		6.52		6.05		5.00	6/28/2007
Vanguard Target Retirement 2015 Composite								1.17	1.24	5.64		5.33		6.64		6.00			
Target-Date 2015 Median					0.65			1.32	0.97	5.04		4.98		6.08		5.35			
Target-Date 2015 Number of Funds					151	151				141	141	123	123	97	97	69	69		
Vanguard Target Retire 2020 Trust I				0.07	0.07			1.62	1.72	6.78		6.17		7.55		6.53		5.32	6/22/2007
Vanguard Target Retirement 2020 Composite								1.55	1.69	6.97		6.29		7.67		6.59			
Target-Date 2020 Median					0.72			2.42	(2.18)	5.57		5.15		6.32		5.40			
Target-Date 2020 Number of Funds					268	268				256	256	229	229	195	195	150	150		
Vanguard Target Retire 2025 Trust I				0.07	0.07			1.89	2.02	7.70		6.78		8.22		6.82		5.39	6/28/2007
Vanguard Target Retirement 2025 Composite								1.83	2.01	7.93		6.90		8.35		6.89			
Target-Date 2025 Median					0.71			1.68	1.62	6.72		5.96		7.12		5.94			
Target-Date 2025 Number of Funds					238	238				226	226	201	201	172	172	104	104		



# 2018 401(a) Performance Summary

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date	
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile			
	Vanguard Target Retire 2030 Trust I			0.07	0.07			2.12	2.34	8.52		7.28		8.81		7.05			5.47	6/28/2007
	Vanguard Target Retirement 2030 Composite							2.05	2.33	8.80		7.41		8.96		7.13				
	Target-Date 2030 Median				0.76			1.91	1.98	7.86		6.51		7.74		6.04				
	Target-Date 2030 Number of Funds				257	257				245	245	219	219	185	185	140	140			
	Vanguard Target Retire 2035 Trust I			0.07	0.07			2.34	2.66	9.37		7.78		9.41		7.39			5.67	6/28/2007
	Vanguard Target Retirement 2035 Composite							2.26	2.63	9.65		7.91		9.56		7.46				
	Target-Date 2035 Median				0.74			2.17	2.48	9.06		7.14		8.46		6.51				
	Target-Date 2035 Number of Funds				233	233				221	221	196	196	167	167	99	99			
	Vanguard Target Retire 2040 Trust I			0.07	0.07			2.57	2.97	10.22		8.25		9.90		7.71			5.98	6/28/2007
	Vanguard Target Retirement 2040 Composite							2.48	2.93	10.51		8.40		10.07		7.78				
	Target-Date 2040 Median				0.77			2.36	2.69	9.50		7.35		8.76		6.54				
	Target-Date 2040 Number of Funds				257	257				245	245	219	219	185	185	140	140			
	Vanguard Target Retire 2045 Trust I			0.07	0.07			2.72	3.13	10.60		8.50		10.05		7.79			6.02	6/28/2007
	Vanguard Target Retirement 2045 Composite							2.62	3.12	10.93		8.68		10.24		7.86				
	Target-Date 2045 Median				0.75			2.47	2.89	10.06		7.89		9.17		6.77				
	Target-Date 2045 Number of Funds				233	233				221	221	196	196	167	167	98	98			
	Vanguard Target Retire 2050 Trust I			0.07	0.07			2.72	3.15	10.60		8.47		10.04		7.80			6.07	6/28/2007
	Vanguard Target Retirement 2050 Composite							2.62	3.12	10.93		8.68		10.24		7.86				
	Target-Date 2050 Median				0.77			2.52	2.90	10.14		7.73		9.24		6.86				
	Target-Date 2050 Number of Funds				253	253				241	241	215	215	181	181	107	107			
	Vanguard Target Retire 2055 Trust I			0.07	0.07			2.73	3.16	10.60		8.47		10.02					10.28	10/5/2010
	Vanguard Target Retirement 2055 Composite							2.62	3.12	10.93		8.68		10.24						
	Target-Date 2055 Median				0.75			2.51	3.00	10.31		7.97		9.35		6.66				
	Target-Date 2055 Number of Funds				233	233				219	219	194	194	135	135	9	9			
	Vanguard Target Retirement 2060 Trust I			0.07	0.07			2.72	3.17	10.62		8.47		10.02					10.09	3/1/2012
	Vanguard Target Retirement 2060 Composite							2.62	3.12	10.93		8.68		10.24						
	Target-Date 2060+ Median				0.75			2.54	3.18	10.70		8.44		9.47						
	Target-Date 2060+ Number of Funds				218	218				181	181	75	75	8	8	0	0			
	Vanguard Target Retirement 2065 Trust I			0.07	0.07			2.70	3.20										12.77	7/7/2017
	Vanguard Target Retirement 2060 Composite							2.62	3.12	10.93										
	Target-Date 2060+ Median				0.75			2.54	3.18	10.70		8.44		9.47						
	Target-Date 2060+ Number of Funds				218	218				181	181	75	75	8	8	0	0			



# 2018 401(a) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Mgr. Ticker	AUM Tenure	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns	1mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	10 Year	%ile	Since Incep.	Incep. Date

Source: Morningstar & TIAA-CREF

Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 7/31/2018. All other data as of 6/30/2018.

**VA = Variable Annuity**

Since Incep. = Since Inception D Incep. Date = Inception Date

Vanguard Index Information from 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-CREF'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-cref.org/public/assetmanagement](http://www.tiaa-cref.org/public/assetmanagement)

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio, Sharpe ratio and standard deviation are calculated by TIAA-CREF and may differ based on calculation methods

**Fee Disclosures: 1 The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.**

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

\*\*\*\*Adjusted Total Return is based on the Account's Total Return published in the Account's historical financial statements dating back to inception. The components of the Account's financial statements upon which the Adjusted Total Return is based excludes certain cash and short term securities and expenses associated with the liquidity guarantee because the constituents of the NFI-ODCE do not have this unique product feature. See Appendix A for a full reconciliation of the historical calculation.

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



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

**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 TIAACREF Website at [www.tiaa-cref.org](http://www.tiaa-cref.org), or call 877 518-9161.**

Annuity account options are available through annuity contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals, and offer a variety of income options, including lifetime income. Payments from the variable annuity accounts are not guaranteed and will rise or fall based on investment performance.

For the variable annuity accounts, we estimate expenses for the plan year based on projected expense and asset levels. Differences between estimated and actual expenses are adjusted quarterly and reflected in current investment results. Historically, the adjusting payments have resulted in both upward and downward adjustments.

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 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.

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**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.**

**You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to [tiaacref.org](http://tiaacref.org) for product and fund prospectuses that contains this and other information. Please read the prospectuses carefully before investing.**

Morningstar is an independent service that rates mutual funds and variable annuities, based on risk-adjusted returns. Although Morningstar data is gathered from reliable sources, neither Morningstar nor TIAA-CREF can guarantee its completeness and accuracy. Morningstar does not rate money market accounts, and the other TIAA-CREF mutual fund accounts are too new to be rated. Past performance does not guarantee future results. Accumulation net asset values and returns will vary.

For each fund/account with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's/account's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Where applicable, Morningstar's performance rankings are based on linked performance that considers the differences in expense ratios, while actual performance data shown does not reflect such differences. The top 10 percent of funds/accounts in a category receive five stars, the next 22.5 percent receive four stars, and the next 35 percent receive three stars, the next 22.5 percent receive two stars and the bottom 10 percent receive one star. (Each share class is counted as a fraction of one fund/account within this scale and rated separately, which may cause slight variations in the distribution percentages.) Morningstar proprietary ratings on U.S.-domiciled funds/accounts reflect historical risk-adjusted performance, are subject to change every month. They are derived from a weighted average of the performance figures associated with its three-, five- and ten-year (if applicable) Morningstar Rating metrics. Please note, Morningstar now rates group variable annuities within the open-end mutual fund universe.

## **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-CREF, 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.

TIAA-CREF 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 a hypothetical investor over the requested time period. So the return for one year is calculated using the same formula as one month. TIAA-CREF calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns include dividends and capital gains.

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**  
**Market Value as of 7/31/2018**  
**Plan Balance Summary**

401(a)/414(h)(2) - 405868 STATE OF RHODE ISLAND DEFINED CONTRIBUTION RETIREMENT PLAN

<b><i>Ticker</i></b>	<b><i>Investment Name</i></b>	<b><i>Asset Class Description</i></b>	<b><i>Current Account Balance Amount</i></b>
PRRIX	PIMCO Real Return Inst Class	Fixed Income	\$5,618,810.68
SWISX	Schwab International Index Fd	Equities	\$6,558,229.32
TSVX#	TIAA STABLE VALUE	Guaranteed	\$11,222,226.85
VBTLX	Vanguard Ttl Bd Mkt Idx Adm	Fixed Income	\$6,005,483.98
VEMAX	Vanguard Emr Mkts Stk Idx Adm	Equities	\$4,830,894.76
VFTSX	Vanguard FTSE Social Index Inv	Equities	\$2,068,857.88
VINIX	Vanguard Inst Idx Inst	Equities	\$26,038,648.50
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$10,315,206.86
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$10,554,070.72
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$40,194,265.58
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$95,600,685.64
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$117,847,687.11
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$126,747,871.97
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$137,921,421.95
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$111,639,169.26
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$83,995,399.04
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$49,231,283.59
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$19,081,734.09
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$2,436,317.13
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$114,854.15
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$11,305,604.34
			<b>\$879,328,723.40</b>

**State of Rhode Island**  
**Market Value as of 7/31/2018**  
**Plan Balance Summary**

401(a) - Rhode Island FICA 406403 Alternative RET Income Security Program

<i><b>Ticker</b></i>	<i><b>Investment Name</b></i>	<i><b>Asset Class Description</b></i>	<i><b>Current Account Balance Amount</b></i>
TSVX#	TIAA STABLE VALUE	Guaranteed	\$3,716.17
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$12,706.81
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$1,422,408.51
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$139,332.89
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$146,601.59
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$92,804.25
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$67,230.18
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$101,162.58
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$109,486.85
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$230,241.04
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$584,340.43
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$45,471.44
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$16,435.24
			<b>\$2,971,937.98</b>

## Disclosures

TIAA-CREF 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.

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**You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877- 518-9161 for a prospectus that contains this and other information. Please read the prospectus carefully before investing.**

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## Section XV.

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### 457 Plans



# 2018 457(b) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Mgr. Ticker	Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		
TIAA Traditional RCP								0.28	1.94	3.30		3.45		3.50		3.56		3.72	06/01/06
Current crediting rate = 3.50																			
FIXED INCOME																			
Intermediate-Term Bond																			
PIMCO Total Return Instl	PTTRX	3.83	70,555.04	0.51	0.46	25	-	0.22	(1.49)	(0.12)	31	2.10	27	2.49	33	4.85	12	7.14	05/11/87
BBgBarc US Agg Bond TR USD								0.02	(1.59)	(0.40)		1.72		2.27		3.72			
Vanguard Total Bond Market Index Adm	VBTLX	5.42	198,044.90	0.05	0.05	2	-	0.04	(1.60)	(0.53)	56	1.67	49	2.20	51	3.66	65	3.97	11/12/01
BBgBarc US Agg Float Adj TR USD								0.04	(1.63)	(0.45)		1.74		2.26					
Intermediate-Term Bond Median				0.81	0.67			0.10	(1.57)	(0.49)		1.65		2.23		4.03			
Intermediate-Term Bond Number of Funds		1060	1016	1060	1060	1060					1021	1020	969	968	927	926	823	822	
Inflation-Protected Bond																			
American Century Inflation-Adjs Bond R6	AIADX	16.67	2,831.84	0.22	0.22	9	-	(0.26)	(0.71)	1.78	49	1.82	30	1.28	42	2.67	45	1.25	07/28/17
BBgBarc US Treasury US TIPS TR USD								(0.48)	(0.51)	2.11		1.93		1.68		3.03			
Inflation-Protected Bond Median				0.79	0.60			(0.37)	(0.12)	1.70		1.47		1.13		2.49			
Inflation-Protected Bond Number of Funds		243	238	243	243	243					238	238	232	232	219	219	158	158	
EQUITY																			
Large Cap Blend - Index																			
Vanguard Institutional Index I	VINIX	17.58	223,489.08	0.04	0.04	2	-	3.72	6.45	14.33	28	11.90	11	13.39	11	10.17	18	9.85	07/31/90
S&P 500 TR USD								3.72	6.47	14.37		11.93		13.42		10.17			
Vanguard FTSE Social Index Inv	VFTSX	2.58	4,627.93	0.20	0.20	8	-	3.63	6.96	15.50	13	11.79	15	14.11	3	10.72	8	4.63	05/31/00
Spliced Social Index***								3.63	7.08	15.65		12.00		14.36		10.96			
Russell 3000 TR USD								3.32	6.64	14.78		11.58		13.29		10.23			
Large Blend Median				1.01	0.89			0.53	1.76	13.03		10.26		12.16		9.19			
Large Blend Number of Funds		1340	1298	1338	1338	1338					1303	1302	1223	1222	1155	1155	1029	1022	
Mid-Cap Blend																			
Vanguard Mid Cap Index Institutional	VMCIX	20.17	97,856.81	0.04	0.04	1	-	2.60	5.23	12.10	48	9.22	42	12.31	20	10.11	37	10.01	05/21/98
Spliced Mid Cap Index*								2.57	5.24	12.12		9.25		12.35		10.14			
CRSP US Mid Cap TR USD								2.57	5.24	12.12		9.25		12.35		10.00			
Mid-Cap Blend Median				1.11	1.00			2.43	3.74	10.76		7.83		10.55		9.30			
Mid-Cap Blend Number of Funds		441	423	441	441	441					438	438	392	392	371	371	318	318	





# 2018 457(b) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)		
As of 7/31/2018	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018										Since Incep.	Incep. Date
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile				
Small Blend																					
Vanguard Small Cap Index I	VSCIX	2.25	90,743.06	0.04	0.04	1	-	1.84	7.94	16.51	36	10.47	36	12.41	26	11.29	18	9.24	07/07/97		
Spliced Small Cap Index**								1.83	7.91	16.47		10.43		12.39		11.20					
CRSP US Small Cap TR USD								1.83	7.91	16.47		10.43		12.39		11.59					
Small Blend Median				1.27	1.13			1.72	7.33	14.75		9.58		11.21		9.97					
Small Blend Number of Funds		779	762	779	779	779				766	766	709	709	649	649	551	551				
Foreign Large Blend																					
Schwab International Index	SWISX	1.25	4,472.62	0.06	0.06	2	-	2.75	0.19	6.43	50	4.83	45	6.31	41	2.70	47	4.48	05/19/97		
MSCI EAFE NR USD								2.46	(0.36)	6.84		4.90		6.44		2.84					
Foreign Large Blend Median				1.16	1.00			2.45	(0.95)	6.05		4.30		5.93		2.57					
Foreign Large Blend Number of Funds		771	728	771	771	771				748	748	675	675	635	635	521	521				
Foreign Large Growth																					
American Funds Europacific Growth R6	RERGX	26.58	163,874.66	0.49	0.49	3	-	2.13	(0.27)	9.35	52	6.51	44	8.34	28	4.82	24	9.86	05/01/09		
MSCI ACWI Ex USA NR USD								2.39	(1.46)	7.28		5.07		5.99		2.54					
Foreign Large Growth Median				1.24	1.10			2.13	(0.75)	10.43		6.14		7.44		3.97					
Foreign Large Growth Number of Funds		432	408	432	432	432				429	429	383	383	369	369	314	304				
Lifecycle																					
Vanguard Target Retire Inc Trust I				0.07	0.07			0.90	0.82	4.02		4.22		4.86		5.15		4.97	6/22/2007		
Vanguard Target Retirement Income Composite								0.86	0.83	4.20		4.33		4.99		5.17					
Target-Date Retirement Median					0.72			3.62	5.50	3.44		3.60		4.22		4.53					
Target-Date Retirement Number of Funds					199	199				193	193	181	181	159	159	126	126				
Vanguard Target Retire 2015 Trust I				0.07	0.07			1.23	1.25	5.44		5.22		6.52		6.05		5.00	6/28/2007		
Vanguard Target Retirement 2015 Composite								1.17	1.24	5.64		5.33		6.64		6.00					
Target-Date 2015 Median					0.65			1.32	0.97	5.04		4.98		6.08		5.35					
Target-Date 2015 Number of Funds					151	151				141	141	123	123	97	97	69	69				
Vanguard Target Retire 2020 Trust I				0.07	0.07			1.62	1.72	6.78		6.17		7.55		6.53		5.32	6/22/2007		
Vanguard Target Retirement 2020 Composite								1.55	1.69	6.97		6.29		7.67		6.59					
Target-Date 2020 Median					0.72			2.42	(2.18)	5.57		5.15		6.32		5.40					
Target-Date 2020 Number of Funds					268	268				256	256	229	229	195	195	150	150				
Vanguard Target Retire 2025 Trust I				0.07	0.07			1.89	2.02	7.70		6.78		8.22		6.82		5.39	6/28/2007		
Vanguard Target Retirement 2025 Composite								1.83	2.01	7.93		6.90		8.35		6.89					
Target-Date 2025 Median					0.71			1.68	1.62	6.72		5.96		7.12		5.94					
Target-Date 2025 Number of Funds					238	238				226	226	201	201	172	172	104	104				



# 2018 457(b) Performance Summary

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date	
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile			
	Vanguard Target Retire 2030 Trust I			0.07	0.07			2.12	2.34	8.52		7.28		8.81		7.05			5.47	6/28/2007
	Vanguard Target Retirement 2030 Composite							2.05	2.33	8.80		7.41		8.96		7.13				
	Target-Date 2030 Median				0.76			1.91	1.98	7.86		6.51		7.74		6.04				
	Target-Date 2030 Number of Funds				257	257				245	245	219	219	185	185	140	140			
	Vanguard Target Retire 2035 Trust I			0.07	0.07			2.34	2.66	9.37		7.78		9.41		7.39			5.67	6/28/2007
	Vanguard Target Retirement 2035 Composite							2.26	2.63	9.65		7.91		9.56		7.46				
	Target-Date 2035 Median				0.74			2.17	2.48	9.06		7.14		8.46		6.51				
	Target-Date 2035 Number of Funds				233	233				221	221	196	196	167	167	99	99			
	Vanguard Target Retire 2040 Trust I			0.07	0.07			2.57	2.97	10.22		8.25		9.90		7.71			5.98	6/28/2007
	Vanguard Target Retirement 2040 Composite							2.48	2.93	10.51		8.40		10.07		7.78				
	Target-Date 2040 Median				0.77			2.36	2.69	9.50		7.35		8.76		6.54				
	Target-Date 2040 Number of Funds				257	257				245	245	219	219	185	185	140	140			
	Vanguard Target Retire 2045 Trust I			0.07	0.07			2.72	3.13	10.60		8.50		10.05		7.79			6.02	6/28/2007
	Vanguard Target Retirement 2045 Composite							2.62	3.12	10.93		8.68		10.24		7.86				
	Target-Date 2045 Median				0.75			2.47	2.89	10.06		7.89		9.17		6.77				
	Target-Date 2045 Number of Funds				233	233				221	221	196	196	167	167	98	98			
	Vanguard Target Retire 2050 Trust I			0.07	0.07			2.72	3.15	10.60		8.47		10.04		7.80			6.07	6/28/2007
	Vanguard Target Retirement 2050 Composite							2.62	3.12	10.93		8.68		10.24		7.86				
	Target-Date 2050 Median				0.77			2.52	2.90	10.14		7.73		9.24		6.86				
	Target-Date 2050 Number of Funds				253	253				241	241	215	215	181	181	107	107			
	Vanguard Target Retire 2055 Trust I			0.07	0.07			2.73	3.16	10.60		8.47		10.02					10.28	10/5/2010
	Vanguard Target Retirement 2055 Composite							2.62	3.12	10.93		8.68		10.24						
	Target-Date 2055 Median				0.75			2.51	3.00	10.31		7.97		9.35		6.66				
	Target-Date 2055 Number of Funds				233	233				219	219	194	194	135	135	9	9			
	Vanguard Target Retirement 2060 Trust I			0.07	0.07			2.72	3.17	10.62		8.47		10.02					10.09	3/1/2012
	Vanguard Target Retirement 2060 Composite							2.62	3.12	10.93		8.68		10.24						
	Target-Date 2060+ Median				0.75			2.54	3.18	10.70		8.44		9.47						
	Target-Date 2060+ Number of Funds				218	218				181	181	75	75	8	8	0	0			
	Vanguard Target Retirement 2065 Trust I			0.07	0.07			2.70	3.20										12.77	7/7/2017
	Vanguard Target Retirement 2060 Composite							2.62	3.12	10.93										
	Target-Date 2060+ Median				0.75			2.54	3.18	10.70		8.44		9.47						
	Target-Date 2060+ Number of Funds				218	218				181	181	75	75	8	8	0	0			



# 2018 457(b) Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 7/31/2018	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 6/30/2018								Since Incep.	Incep. Date
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		

Source: Morningstar & TIAA-CREF

Data for 1-month and YTD return as of 7/31/2018. All other data as of 6/30/2018.

Since Incep. = Since Inception Date

Incep. Date = Inception Date

*In a multi-share situation, Morningstar will adjust the performance history of the original portfolio to reflect any differences in fees between the original share class and the new share class.*

Vanguard Index Information from 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

"Since Inception" performance is calculated from this date.

For definitions please visit [www.tiaa-cref.org/public/assetmanagement](http://www.tiaa-cref.org/public/assetmanagement)

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio, Sharpe ratio and standard deviation are calculated by TIAA-CREF and may differ based on calculation methods

**Fee Disclosures:** 1 The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.

2 Accumulations in mutual funds not managed by TIAA-CREF 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

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

**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 TIAACREF Website at [www.tiaa-cref.org](http://www.tiaa-cref.org), or call 877 518-9161.**

Annuity account options are available through annuity contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals, and offer a variety of income options, including lifetime income. Payments from the variable annuity accounts are not guaranteed and will rise or fall based on investment performance.

For the variable annuity accounts, we estimate expenses for the plan year based on projected expense and asset levels. Differences between estimated and actual expenses are adjusted quarterly and reflected in current investment results. Historically, the adjusting payments have resulted in both upward and downward adjustments.

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 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.

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**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.**

**You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to [tiaacref.org](http://tiaacref.org) for product and fund prospectuses that contains this and other information. Please read the prospectuses carefully before investing.**

Morningstar is an independent service that rates mutual funds and variable annuities, based on risk-adjusted returns. Although Morningstar data is gathered from reliable sources, neither Morningstar nor TIAA-CREF can guarantee its completeness and accuracy. Morningstar does not rate money market accounts, and the other TIAA-CREF mutual fund accounts are too new to be rated. Past performance does not guarantee future results. Accumulation net asset values and returns will vary.

For each fund/account with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's/account's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Where applicable, Morningstar's performance rankings are based on linked performance that considers the differences in expense ratios, while actual performance data shown does not reflect such differences. The top 10 percent of funds/accounts in a category receive five stars, the next 22.5 percent receive four stars, and the next 35 percent receive three stars, the next 22.5 percent receive two stars and the bottom 10 percent receive one star. (Each share class is counted as a fraction of one fund/account within this scale and rated separately, which may cause slight variations in the distribution percentages.) Morningstar proprietary ratings on U.S.-domiciled funds/accounts reflect historical risk-adjusted performance, are subject to change every month. They are derived from a weighted average of the performance figures associated with its three-, five- and ten-year (if applicable) Morningstar Rating metrics. Please note, Morningstar now rates group variable annuities within the open-end mutual fund universe.

## **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-CREF, 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.

TIAA-CREF 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 a hypothetical investor over the requested time period. So the return for one year is calculated using the same formula as one month. TIAA-CREF calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns include dividends and capital gains.

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**  
**Market Value as of 7/31/2018**  
**Plan Balance Summary**

457(b) - Plan 407359

State of Rhode Island 457(b) Deferred Compensation Plan

<i><b>Ticker</b></i>	<i><b>Investment Name</b></i>	<i><b>Asset Class Description</b></i>	<i><b>Current Account Balance Amount</b></i>
AIADX	American Century Inf Adj Bd R6	Fixed Income	\$551,171.58
PTTRX	PIMCO Total Return Instl	Fixed Income	\$599,393.02
RERGX	American EuroPac Growth R6	Equities	\$1,739,350.22
SWISX	Schwab International Index Fd	Equities	\$186,962.68
TIAA#	TIAA Traditional Benefit Responsive 2	Guaranteed	\$3,724,598.68
VBTLX	Vanguard Ttl Bd Mkt Idx Adm	Fixed Income	\$99,225.49
VFTSX	Vanguard FTSE Social Index Inv	Equities	\$255,645.19
VINIX	Vanguard Inst Idx Inst	Equities	\$9,475,728.09
VLC1#	VALIC Fixed-Interest Opt 3%	Guaranteed	\$8,968,944.65
VLC2#	VALIC Fixed-Interest Opt 1.5%	Guaranteed	\$84,417.64
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$5,069,136.32
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$3,176,407.19
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$5,646.34
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$548,940.86
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$83,233.76
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$523,827.28
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$197,242.45
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$16,226.05
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$56,088.61
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$57,461.14
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$934.30
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$0.00
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$52,653.25
			<b>\$35,473,234.79</b>

## Disclosures

TIAA-CREF 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.

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**You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877- 518-9161 for a prospectus that contains this and other information. Please read the prospectus carefully before investing.**

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# 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.*

Name	Cumulative Total Returns				Average Annual Total Returns				
	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr
DOW JONES INDUSTRIAL AVERAGE	07/31/2018	4.83	5.80	4.07	06/30/2018	16.31	14.07	12.96	10.78
BLOOMBERG BARCLAYS U.S. AGGREGATE BOND INDEX	07/31/2018	0.02	0.61	-1.59	06/30/2018	-0.40	1.72	2.27	3.72
NASDAQ COMPOSITE INDEX	07/31/2018	2.19	8.86	11.77	06/30/2018	23.60	15.96	18.54	13.87
RUSSELL 2000 INDEX	07/31/2018	1.74	8.69	9.54	06/30/2018	17.57	10.96	12.46	10.60
S&P 500 INDEX	07/31/2018	3.72	6.87	6.47	06/30/2018	14.37	11.93	13.42	10.17

Investment Name	Cumulative Total Returns				Average Annual Total Returns					Fees			
	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
<b>Stock Investments</b>													
<b>Large Cap</b>													
FID 500 INDEX INST	07/31/2018	3.73	6.87	6.46	06/30/2018	14.35	11.90	13.39	10.15	10.30	--	0.01% on 08/01/2018	02/17/1988
FID CONTRAFUND K	07/31/2018	1.94	7.08	11.70	06/30/2018	24.13	15.00	16.14	11.02	12.66	--	0.65% on 03/01/2018	05/17/1967
FID LARGE CAP STOCK	07/31/2018	4.37	7.03	5.63	06/30/2018	12.11	9.60	12.26	10.80	8.67	--	0.67% on 06/29/2018	06/22/1995
INVESCO DIVRS DIV R6	07/31/2018	3.30	3.80	1.13	06/30/2018	2.88	6.90	9.54	9.35	7.90	--	0.44% on 02/28/2018	12/31/2001
VANG FTSE SOCIAL IDX	07/31/2018	3.63	7.23	6.96	06/30/2018	15.50	11.79	14.11	10.72	4.63	--	0.20% on 12/21/2017	05/31/2000
<b>Mid-Cap</b>													
FID LOW PRICED STK K	07/31/2018	1.20	1.09	2.13	06/30/2018	13.07	8.17	10.66	10.30	13.71	--	0.58% on 08/29/2017	12/27/1989
FID MID CAP IDX PR	07/31/2018	2.49	5.55	4.85	06/30/2018	12.30	9.53	12.17	--	14.44	--	0.03% on 08/01/2018	09/08/2011
<b>Small Cap</b>													
FID SM CAP IDX PR	07/31/2018	1.75	8.70	9.61	06/30/2018	17.73	11.16	12.67	--	15.18	--	0.03% on 08/01/2018	09/08/2011
<b>International</b>													
FID INTL INDEX PR	07/31/2018	2.57	-0.81	-0.04	06/30/2018	6.60	4.93	6.47	2.99	5.02	--	0.04% on 08/01/2018	11/05/1997
HARBOR INTL INST	07/31/2018	1.65	0.09	0.31	06/30/2018	4.48	2.86	4.87	2.76	10.58	--	0.81% on 03/01/2018	12/29/1987

Investment Name	Cumulative Total Returns				Average Annual Total Returns					Fees			
	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
<b>Blended Investments*</b>													
<b>Others</b>													
FID FREEDOM 2005 K	07/31/2018	0.65	1.05	0.56	06/30/2018	4.55	4.60	5.24	4.50	4.90	--	0.43% on 05/30/2018	11/06/2003
FID FREEDOM 2010 K	07/31/2018	0.83	1.27	0.83	06/30/2018	5.64	5.33	6.23	5.30	6.47	--	0.46% on 05/30/2018	10/17/1996
FID FREEDOM 2015 K	07/31/2018	1.07	1.56	1.25	06/30/2018	6.61	6.04	6.91	5.56	5.92	--	0.50% on 05/30/2018	11/06/2003
FID FREEDOM 2020 K	07/31/2018	1.30	1.76	1.52	06/30/2018	7.32	6.48	7.43	5.66	6.81	--	0.54% on 05/30/2018	10/17/1996
FID FREEDOM 2025 K	07/31/2018	1.42	1.96	1.75	06/30/2018	7.97	6.86	8.16	6.12	6.53	--	0.57% on 05/30/2018	11/06/2003
FID FREEDOM 2030 K	07/31/2018	1.70	2.28	2.28	06/30/2018	9.52	7.86	9.10	6.28	7.01	--	0.61% on 05/30/2018	10/17/1996
FID FREEDOM 2035 K	07/31/2018	1.94	2.63	2.83	06/30/2018	10.89	8.65	9.91	6.69	7.06	--	0.64% on 05/30/2018	11/06/2003
FID FREEDOM 2040 K	07/31/2018	2.10	2.67	2.86	06/30/2018	11.02	8.73	9.98	6.65	4.21	--	0.65% on 05/30/2018	09/06/2000
FID FREEDOM 2045 K	07/31/2018	2.10	2.76	2.93	06/30/2018	11.03	8.72	10.04	6.71	6.17	--	0.65% on 05/30/2018	06/01/2006
FID FREEDOM 2050 K	07/31/2018	2.09	2.71	2.97	06/30/2018	11.03	8.73	10.07	6.54	6.01	--	0.65% on 05/30/2018	06/01/2006
FID FREEDOM 2055 K	07/31/2018	2.07	2.69	2.91	06/30/2018	11.09	8.72	10.16	--	8.63	--	0.65% on 05/30/2018	06/01/2011
FID FREEDOM 2060 K	07/31/2018	2.07	2.65	2.90	06/30/2018	10.99	8.67	--	--	8.50	--	0.65% on 05/30/2018	08/05/2014
FID FREEDOM INC K	07/31/2018	0.42	0.76	0.10	06/30/2018	3.31	3.73	4.05	4.02	4.77	--	0.42% on 05/30/2018	10/17/1996
<b>Bond Investments</b>													
<b>Stable Value</b>													
TRP STABLE VALUE A	07/31/2018	0.00	0.35	1.00	06/30/2018	1.95	1.87	1.92	2.65	4.84	--	0.30% on 12/31/2015	09/12/1988
<b>Income</b>													
FID US BOND IDX PR	07/31/2018	0.14	0.77	-1.59	06/30/2018	-0.62	1.63	2.19	3.55	5.84	--	0.03% on 08/01/2018	03/08/1990
PIM TOTAL RT INST	07/31/2018	0.22	0.68	-1.49	06/30/2018	-0.12	2.10	2.49	4.85	7.14	--	0.55% on 07/30/2018	05/11/1987
<b>Other Investments</b>													
<b>Others</b>													
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.**

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# STATE OF RHODE ISLAND

## Balance by Fund

Data As Of: 07/31/2018

Calendar Day	Plan Number	Plan Name	Fund Code	Fund Name	Fund Ticker Symbol	Fund Type	Participant Count	Market Value	Asset Percentage
7/31/2018	35835	STATE OF RI	338	FID LARGE CAP STOCK	FLCSX	DOMESTIC EQUITY	321	\$8,990,514.92	5.82%
7/31/2018	35835	STATE OF RI	1522	FID INTL INDEX PR	FSIVX	INTERNATIONAL EQUITY	137	\$2,262,679.53	1.46%
7/31/2018	35835	STATE OF RI	2080	FID CONTRAFUND K	FCNKX	DOMESTIC EQUITY	675	\$37,195,759.62	24.08%
7/31/2018	35835	STATE OF RI	2095	FID LOW PRICED STK K	FLPKX	DOMESTIC EQUITY	383	\$11,067,510.40	7.17%
7/31/2018	35835	STATE OF RI	2324	FID US BOND IDX PR	FSITX	BOND	85	\$1,262,298.78	0.82%
7/31/2018	35835	STATE OF RI	2327	FID 500 INDEX INST	FXSIX	DOMESTIC EQUITY	344	\$11,889,207.77	7.70%
7/31/2018	35835	STATE OF RI	2350	FID MID CAP IDX PR	FSCKX	DOMESTIC EQUITY	139	\$1,853,666.72	1.20%
7/31/2018	35835	STATE OF RI	2359	FID SM CAP IDX PR	FSSVX	DOMESTIC EQUITY	166	\$1,623,420.15	1.05%
7/31/2018	35835	STATE OF RI	3019	FID FREEDOM INC K	FNSHX	LIFECYCLE	51	\$1,646,218.22	1.07%
7/31/2018	35835	STATE OF RI	3020	FID FREEDOM 2005 K	FSNJX	LIFECYCLE	12	\$347,463.28	0.22%
7/31/2018	35835	STATE OF RI	3021	FID FREEDOM 2010 K	FSNKX	LIFECYCLE	76	\$3,685,798.15	2.39%
7/31/2018	35835	STATE OF RI	3022	FID FREEDOM 2015 K	FSNLX	LIFECYCLE	52	\$2,988,535.20	1.93%
7/31/2018	35835	STATE OF RI	3023	FID FREEDOM 2020 K	FSNOX	LIFECYCLE	250	\$15,598,535.69	10.10%
7/31/2018	35835	STATE OF RI	3024	FID FREEDOM 2025 K	FSNPX	LIFECYCLE	94	\$3,765,599.18	2.44%
7/31/2018	35835	STATE OF RI	3025	FID FREEDOM 2030 K	FSNQX	LIFECYCLE	260	\$12,316,624.03	7.97%
7/31/2018	35835	STATE OF RI	3026	FID FREEDOM 2035 K	FSNUX	LIFECYCLE	61	\$2,920,883.17	1.89%
7/31/2018	35835	STATE OF RI	3027	FID FREEDOM 2040 K	FSNVX	LIFECYCLE	48	\$1,315,864.28	0.85%
7/31/2018	35835	STATE OF RI	3028	FID FREEDOM 2045 K	FSNZX	LIFECYCLE	54	\$976,138.65	0.63%
7/31/2018	35835	STATE OF RI	3029	FID FREEDOM 2050 K	FNSBX	LIFECYCLE	37	\$268,433.80	0.17%
7/31/2018	35835	STATE OF RI	3030	FID FREEDOM 2055 K	FNSDX	LIFECYCLE	33	\$550,374.87	0.36%
7/31/2018	35835	STATE OF RI	3031	FID FREEDOM 2060 K	FNSFX	LIFECYCLE	13	\$90,581.62	0.06%
7/31/2018	35835	STATE OF RI	BLNK	BROKERAGELINK		OTHER	109	\$12,030,566.17	7.79%
7/31/2018	35835	STATE OF RI	OF1P	PIM TOTAL RT INST	PTTRX	BOND	238	\$6,829,921.13	4.42%
7/31/2018	35835	STATE OF RI	OFHL	HARBOR INTL INST	HAINX	INTERNATIONAL EQUITY	294	\$4,742,694.70	3.07%
7/31/2018	35835	STATE OF RI	OGMU	TRP STABLE VALUE A		STABLE VALUE	307	\$5,955,716.66	3.86%
7/31/2018	35835	STATE OF RI	OK26	INVESCO DIVRS DIV R6	LCEFX	DOMESTIC EQUITY	122	\$2,164,818.92	1.40%
7/31/2018	35835	STATE OF RI	OQPN	VANG FTSE SOCIAL IDX	VFTSX	DOMESTIC EQUITY	32	\$122,707.44	0.08%

# PERFORMANCE UPDATE

## Voya Retirement Insurance and Annuity Company

### STATE OF RHODE ISLAND VK0450

#### Separate Account D

**Average Annual Total Returns as of: 07/31/2018** (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
<b>Stability of Principal</b>									
<i>Stability of Principal</i>									
Voya Fixed Account - 043 (1)(4) <i>This fund is not part of the product's separate account.</i>	0.25	0.75	1.73	3.00	3.00	3.00	3.01		
Voya Fixed Account - 457/401 II A - 4573 (2)(4) <i>This fund is not part of the product's separate account.</i>	0.15	0.44	1.01	1.75	1.91	2.00	2.43		
<b>Bonds</b>									
<i>High Yield Bond</i>									
PGIM High Yield Fund - Class Z - 2482	1.05	1.72	1.68	2.72	6.01	5.44	7.87		03/01/1996
<i>Inflation-Protected Bond</i>									
PIMCO VIT Real Return Portfolio - Administrative Class - 833	-0.27	0.34	-0.70	1.00	1.41	1.06	3.07		09/30/1999
<i>Intermediate-Term Bond</i>									
Voya Intermediate Bond Portfolio - Class I - 004	0.35	0.55	-1.57	-0.66	2.33	3.08	4.47		05/23/1973
Voya U.S. Bond Index Portfolio - Class I - 1554	0.09	0.56	-1.87	-1.33	0.98	1.77	3.24		03/07/2008
<b>Asset Allocation</b>									
<i>Lifecycle</i>									
Voya Solution 2025 Portfolio - Initial Class - 790 (3)	1.74	2.05	1.32	6.83	6.24	6.99	5.92		04/29/2005
Voya Solution 2035 Portfolio - Initial Class - 761 (3)	2.22	2.44	1.82	9.01	7.44	8.15	6.64		04/29/2005
Voya Solution 2045 Portfolio - Initial Class - 764 (3)	2.51	2.57	1.71	9.68	7.79	8.69	6.85		04/29/2005
Voya Solution 2055 Portfolio - Initial Class - 1166 (3)	2.51	2.55	1.67	9.77	7.91	8.81		9.50	03/08/2010



Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
Voya Solution Income Portfolio - Initial Class - 767 (3)	1.07	1.29	0.32	3.66	4.07	4.75	4.83		04/29/2005
<b>Balanced</b>									
<i>Allocation--50% to 70% Equity</i>									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257	2.31	4.15	4.93	10.06	9.03	10.51	9.86		01/24/1989
<b>Large Cap Value</b>									
<i>Large Blend</i>									
Voya Growth and Income Portfolio - Class I - 001	3.51	6.23	4.51	12.46	9.83	10.49	8.97		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class - 829	3.69	6.78	6.25	15.76	12.04	12.65	10.23		05/03/2004
<i>Large Value</i>									
BlackRock Equity Dividend Fund - Institutional Shares - 8518	4.61	5.00	4.12	12.30	11.71	10.75	8.70		11/29/1988
<b>Large Cap Growth</b>									
<i>Large Growth</i>									
Voya Large Cap Growth Portfolio - Institutional Class - 742	3.25	7.78	9.17	21.23	13.28	14.78	13.43		05/03/2004
<b>Small/Mid/Specialty</b>									
<i>Mid-Cap Blend</i>									
Voya Russell™ Mid Cap Index Portfolio - Class I - 1560	2.45	5.43	4.60	12.85	9.59	10.90	10.23		03/04/2008
<i>Mid-Cap Growth</i>									
Principal MidCap Fund - Class R-5 - 3412	2.73	7.34	5.62	13.72	11.06	12.92	12.36		12/06/2000
<i>Small Blend</i>									
Voya Russell™ Small Cap Index Portfolio - Class I - 1563	1.70	8.56	9.34	18.34	11.67	11.01	10.04		03/04/2008
Voya Small Company Portfolio - Class I - 042	1.23	5.72	4.32	12.05	10.72	11.25	10.20		12/27/1996
<b>Global / International</b>									
<i>Foreign Large Blend</i>									
Voya International Index Portfolio - Class I - 1551	2.64	-0.74	-0.14	5.80	4.76	5.37	3.15		03/04/2008
<i>Foreign Large Growth</i>									
American Funds EuroPacific Growth Fund - Class R-4 - 573	2.08	-1.15	-0.03	6.55	6.67	7.37	4.86		04/16/1984
<i>World Large Stock</i>									
VY® Oppenheimer Global Portfolio - Initial Class - 432	2.80	3.92	4.61	15.95	9.64	11.07	9.23		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.

# PERFORMANCE UPDATE

## Voya Retirement Insurance and Annuity Company

### STATE OF RHODE ISLAND VK0450

#### Separate Account D

**Average Annual Total Returns as of: 06/30/2018** (shown in percentages)

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.

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
<b>Stability of Principal</b>									
<i>Stability of Principal</i>									
Voya Fixed Account - 043 (1)(4) <i>This fund is not part of the product's separate account.</i>	0.24	0.74	1.48	3.00	3.00	3.00	3.01		
Voya Fixed Account - 457/401 II A - 4573 (2)(4) <i>This fund is not part of the product's separate account.</i>	0.14	0.43	0.86	1.75	1.92	2.01	2.45		
<b>Bonds</b>									
<i>High Yield Bond</i>									
PGIM High Yield Fund - Class Z - 2482	0.52	1.14	0.61	2.85	5.71	5.63	7.67		03/01/1996
<i>Inflation-Protected Bond</i>									
PIMCO VIT Real Return Portfolio - Administrative Class - 833	0.55	0.62	-0.42	1.79	1.70	1.35	3.03		09/30/1999
<i>Intermediate-Term Bond</i>									
Voya Intermediate Bond Portfolio - Class I - 004	-0.22	-0.58	-1.91	-0.36	2.42	3.10	4.25		05/23/1973
Voya U.S. Bond Index Portfolio - Class I - 1554	-0.11	-0.32	-1.95	-0.98	1.22	1.78	3.20		03/07/2008
<b>Asset Allocation</b>									
<i>Lifecycle</i>									
Voya Solution 2025 Portfolio - Initial Class - 790 (3)	-0.26	0.30	-0.41	6.77	5.99	7.38	5.62		04/29/2005
Voya Solution 2035 Portfolio - Initial Class - 761 (3)	-0.41	0.36	-0.39	8.85	6.98	8.58	6.27		04/29/2005
Voya Solution 2045 Portfolio - Initial Class - 764 (3)	-0.64	0.12	-0.78	9.47	7.27	9.18	6.43		04/29/2005
Voya Solution 2055 Portfolio - Initial Class - 1166 (3)	-0.62	0.10	-0.82	9.63	7.40	9.31		9.27	03/08/2010
Voya Solution Income Portfolio - Initial Class - 767 (3)	-0.18	0.05	-0.73	3.67	4.04	4.98	4.64		04/29/2005
<b>Balanced</b>									
<i>Allocation--50% to 70% Equity</i>									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257	0.98	2.16	2.56	8.31	9.06	10.91	9.59		01/24/1989
<b>Large Cap Value</b>									
<i>Large Blend</i>									
Voya Growth and Income Portfolio - Class I - 001	0.66	2.83	0.97	9.77	8.81	11.07	8.44		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class - 829	0.61	3.37	2.47	13.96	11.46	12.95	9.73		05/03/2004
<i>Large Value</i>									

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
BlackRock Equity Dividend Fund - Institutional Shares - 8518	0.17	2.26	-0.47	9.14	10.71	10.66	7.98		11/29/1988
<b>Large Cap Growth</b>									
<b>Large Growth</b>									
Voya Large Cap Growth Portfolio - Institutional Class - 742	1.14	4.32	5.74	19.99	13.30	15.29	13.40		05/03/2004
<b>Small/Mid/Specialty</b>									
<b>Mid-Cap Blend</b>									
Voya Russell™ Mid Cap Index Portfolio - Class I - 1560	0.61	2.70	2.09	11.69	8.97	11.60	9.68		03/04/2008
<b>Mid-Cap Growth</b>									
Principal MidCap Fund - Class R-5 - 3412	2.24	3.47	2.82	14.00	10.88	13.36	11.56		12/06/2000
<b>Small Blend</b>									
Voya Russell™ Small Cap Index Portfolio - Class I - 1563	0.69	7.69	7.51	17.16	10.61	12.14	10.25		03/04/2008
Voya Small Company Portfolio - Class I - 042	0.40	4.80	3.05	11.05	10.18	12.44	10.32		12/27/1996
<b>Global / International</b>									
<b>Foreign Large Blend</b>									
Voya International Index Portfolio - Class I - 1551	-1.27	-1.85	-2.71	5.89	4.42	5.93	2.52		03/04/2008
<b>Foreign Large Growth</b>									
American Funds EuroPacific Growth Fund - Class R-4 - 573	-2.38	-2.95	-2.07	8.81	5.98	7.80	4.33		04/16/1984
<b>World Large Stock</b>									
VY® Oppenheimer Global Portfolio - Initial Class - 432	-0.41	1.80	1.76	15.72	9.29	11.64	8.81		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

(1)The current rate for the Voya Fixed Account MC 900, Fund 043 is 3.00%, 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 3.00%. 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.

(2)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.

(3)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**

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.

The Voya Solution Portfolios<sup>SM</sup> 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 Voya Solution Portfolios.

(4) 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 CURRENT rate for the Voya Long Term Guaranteed Accumulation Account (4560) is 3.00%, expressed as an annual effective yield, and is guaranteed between 08/01/2018 and 09/29/2023.

Deposits received from 08/01/2018 through 08/31/2018 will receive this rate of interest. The annual rate of interest applied to your account may be higher or lower than the current rate. For more information regarding the GAA rates and terms, call 1-800-GAA-FUND.

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.

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.

**State of RI : Plan Balance By Investment - 07/31/18**

<b>Fund Name</b>	<b>Fund Number</b>	<b>Asset Class</b>	<b>Balance</b>	<b>YTD Contributions</b>	<b>Percent</b>
Voya Solution 2025 Portfolio I	790	Asset Allocation	\$757,065.38	\$56,478.06	0.41%
Voya Solution 2035 Portfolio I	761	Asset Allocation	\$864,873.12	\$83,542.70	0.47%
Voya Solution 2045 Portfolio I	764	Asset Allocation	\$804,286.04	\$94,731.70	0.44%
Voya Solution 2055 Portfolio I	1166	Asset Allocation	\$387,509.42	\$44,479.00	0.21%
Voya Solution Income Prt I	767	Asset Allocation	\$475,015.72	\$31,731.50	0.26%
VY TRowePrice Captl Apprec Pt Inst	1257	Balanced	\$8,348,929.40	\$250,771.29	4.52%
PGIM High Yield Fund Z	2482	Bonds	\$567,636.86	\$27,235.62	0.31%
PIMCO VIT Real Return Portfolio Adm	833	Bonds	\$337,346.46	\$26,707.25	0.18%
Voya Intermediate Bond Port I	4	Bonds	\$6,790,534.91	\$420,892.71	3.68%
Voya U.S. Bond Index Portfolio I	1554	Bonds	\$602,835.58	\$30,193.37	0.33%
American Funds EuroPacific R4	573	Global / International	\$6,112,884.57	\$253,860.16	3.31%
Voya International Index Port I	1551	Global / International	\$388,969.66	\$26,056.39	0.21%
VY Oppenhr Global Port I	432	Global / International	\$7,606,795.68	\$254,358.03	4.12%
Voya Large Cap Growth Port Inst	742	Large Cap Growth	\$11,243,592.39	\$415,442.77	6.08%
BlackRock Equity Dividend Fund Inst	8518	Large Cap Value	\$4,110,296.99	\$145,177.05	2.23%
Voya U.S. Stock Index Port Inst	829	Large Cap Value	\$8,990,521.21	\$293,303.17	4.87%
Voya Growth and Income Port I	1	Other (Unknown)	\$26,944,568.86	\$585,669.23	14.58%
Principal MidCap Fund R5	3412	Small/Mid/Specialty	\$10,213,487.91	\$258,837.38	5.53%
Voya Russell Mid Cap Index Port I	1560	Small/Mid/Specialty	\$1,345,072.10	\$92,333.79	0.73%
Voya Russell Sm Cp Index Port I	1563	Small/Mid/Specialty	\$1,374,704.70	\$89,927.58	0.74%
Voya Small Company Portfolio I	42	Small/Mid/Specialty	\$8,286,550.83	\$225,256.40	4.49%
Voya Fixed Account - 457/401	43	Stability of Principal	\$74,309,308.59	\$273,245.49	40.22%
Voya Fixed Account 457401 II A	4573	Stability of Principal	\$3,821,284.72	\$1,672,761.08	2.07%
Voya Long-Term GAA (4560)	4560	Stability of Principal	\$25,166.86	\$0.00	0.01%
<b>TOTAL</b>			<b>\$184,709,237.96</b>	<b>\$5,652,991.72</b>	

## Section XVI.

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### OPEB Trust

## TOTAL NET OF FEES

7/31/2018

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
Mackay Shields OPEB	97,009,254.7	34.5	0.05	-1.85	0.05	-0.98	1.31	2.20		1.44	5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			0.02	-1.59	0.02	-0.80	1.49	2.25		1.52	5/1/2013
SSGA S&P 500 INDX	184,329,827.2	65.5	3.71	6.44	3.71	16.22	12.53	13.12		13.51	5/1/2011
S&P 500 - Total Return Index			3.72	6.47	3.72	16.24	12.52	13.12		12.88	5/1/2011
<b>Total OPEB</b>	<b>281,339,081.9</b>	<b>100.0</b>	<b>2.43</b>	<b>3.52</b>	<b>2.43</b>	<b>9.99</b>	<b>8.62</b>	<b>9.30</b>		<b>9.25</b>	<b>5/1/2011</b>
OPEB Custom Blend <sup>1</sup>			2.43	3.67	2.43	10.10	8.68	9.33		8.55	5/1/2011

END NOTES

7/31/2018

1	RI7GX0903OPE	OPEB Custom Blend	35% Barclays Aggregate and 65% S&P 500
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**TOTAL NET OF FEES**
**7/31/2018**

Account Name Benchmark Name	Market Value	% of Total	YTD	Month	Cumulative		2017	2016	2015	Inception Date
					6/1/2018 - 6/30/2018	5/1/2018 - 5/31/2018				
Mackay Shields OPEB	97,009,254.7	34.5	-1.85	0.05	-0.21	0.65	3.78	2.28	0.46	5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			-1.59	0.02	-0.12	0.71	3.54	2.65	0.55	5/1/2013
SSGA S&P 500 INDX	184,329,827.2	65.5	6.44	3.71	0.60	2.41	21.80	11.99	1.46	5/1/2011
S&P 500 - Total Return Index			6.47	3.72	0.62	2.41	21.83	11.96	1.38	5/1/2011
<b>Total OPEB</b> <sup>1</sup>	<b>281,339,081.9</b>	<b>100.0</b>	<b>3.52</b>	<b>2.43</b>	<b>0.34</b>	<b>1.79</b>	<b>15.32</b>	<b>8.69</b>	<b>1.16</b>	<b>5/1/2011</b>
OPEB Custom Blend <sup>2</sup>			3.67	2.43	0.36	1.82	15.14	8.77	1.31	5/1/2011

## END NOTES

7/31/2018

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