

**STATE OF RHODE ISLAND  
INVESTMENT COMMISSION MEETING**

**DATA AT  
December 31<sup>st</sup>, 2017**

**January 24<sup>th</sup>, 2018  
MEETING**

**MEMBERS OF THE STATE INVESTMENT COMMISSION**

**Honorable Seth Magaziner, Chair**

**Mr. Robert K. Benson  
Mr. J. Michael Costello  
Mr. Thomas P. Fay  
Ms. Karen Hammond  
Mr. Frank J. Karpinski**

**Ms. Marie Langlois  
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, January 24<sup>th</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
  - State Investment Commission Meeting held on December 6th, 2017\*
- General Consultant Finalist Presentation\*
  - Discussion of current general consultant \*\*
- Review of 401a/457b Investment Lineup \*
  - Tiffany Spudich, Capitol Cities
- Legal Counsel Report
- Chief Investment Officer Report
- Treasurer's General Comments

\* Commission members may be asked to vote on this item.

\*\*The Commission may seek to convene into executive session pursuant to R.I.G.L. 42-46-5(a)(1).

**POSTED ON January 19, 2018**

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Michael Villapiano at (401) 574-9144 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, December 6th, 2017

9:00 a.m.

Executive Conference Room, Department of Administration

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:03, Wednesday, December 6<sup>th</sup>, 2017 in the Executive Conference Room, Department of Administration.

### I. Roll Call of Members

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

Also in attendance: Mr. Tom Lynch, Cliffwater; Mr. Alec Stais, Chief Investment Officer; Ms. Sally Dowling, Adler, Pollock & Sheehan, legal counsel; Mr. Doug Moseley, Mr. William Forde, Mr. Kevin Leonard and Mr. Phil Nelson, NEPC; Mr. Patrick Siewert, and Ms. Jessica Brennan, Carlyle; Mr. Doug Ostrover and Ms. Natalie Oelkers, Owl Rock; Tiffany Spudich and Peter Harvey, Capital Cities; and other members of the Treasurer's staff.

Treasurer Magaziner called the meeting to order at 9:03 a.m.

### II. Approval of Minutes

On a motion by Ms. Hammond and seconded by Mr. Fay it was unanimously

**VOTED: to approve the draft minutes of the October 25th, 2017 meeting of the State Investment Commission.**

### III. Private Credit Investment Recommendation, Owl Rock

Treasurer Magaziner introduced Doug Ostrover and Natalie Oelkers from Owl Rock. Mr. Lynch explained how Owl Rock was an opportunity for the Private Credit bucket filling a Direct Lending allocation. He highlighted the sponsored lending nature of Owl Rock. Mr. Ostrover gave a brief overview of the past thirty years of his professional career, most of it in alternative financing before he founded Owl Rock. He gave a description of Direct Lending and why he became so excited about it that he wanted to start Owl Rock. Based on where the market is today, Mr. Ostrover's belief is that Private Equity firms will need over one trillion dollars of debt over the next five years. Mr. Ostrover gave the history of the members of his team to emphasize their abilities. He added that his firm joined a space in the market lending to larger companies which gives them fewer competitors. Mr. Ostrover mentioned the importance of his portfolio's loan to value ratio and the goal to keep their portfolio ratio at or below 50%. He wrapped his presentation up explaining where the attribution of their returns would come from. Mr. Lynch added that Owl Rock is a Business Development Company and different than a typical fund with their exit strategy of going public.

The Board asked questions.

On a motion by Ms. Reback and seconded by Ms. Maxfield, it was unanimously

**VOTED: that the Employees' Retirement System of the State of Rhode Island make a commitment up to \$50 million in Owl Rock, subject to legal and investment staff review and submission of required Subscription documents following the date of this resolution.**

#### **IV. Private Equity Investment Recommendation, Carlyle Asia V**

Mr. Lynch introduced Jessica Brennan and Patrick Siewert from Carlyle. Ms. Brennan thanked the Plan for their ongoing partnership and support since 2014. She continued to give some history on Carlyle Asia and describe Mr. Siewert's background to the Board. Mr. Siewert gave the numbers behind the impressive track record of their Asian funds. He commented on how their portfolio's realized losses have been very low over their history and industry leading. He also noted on how their cash distributions are industry leading, which is unique in Asia. He highlighted that their team has had great longevity at the firm working together since Carlyle Asia II. Mr. Siewert explained that the strategy and sectors the fund will invest in will be the same as previous funds. He noted that a differentiator of their strategy is exiting to trade buyers and not exiting with an IPO into the public markets. He associated attribution to 2/3 revenue growth and 1/3 cost reduction. Furthermore, he explained how in each fund they have been able to find some cheaper purchase price multiples around the 6-7X EBITDA range, much less expensive than the US. He predicted that 50% of the world's GDP growth will come from Asia within the next decade and that investing in their fund will give the Plan exposure to that. Mr. Siewert explained that they plan to participate in the growth by implementing disciplined systems at their portfolio companies. Mr. Siewert noted that there is such rapid growth in Asia, he does not remember the last time that a portfolio company let employees go. Mr. Siewert stated that a good opportunity lies in partnering with multinationals that are attempting to expand their Asian footprint. He concluded by noting the loosely defined geographic breakdown of their portfolio.

The Board asked questions.

On a motion by Ms. Reback and seconded by Ms. Hammond, it was unanimously

**VOTED: that the Employees' Retirement System of the State of Rhode Island make a commitment up to \$50 million in Carlyle Asia V, subject to legal and investment staff review and submission of required Subscription documents following the date of this resolution.**

#### **V. 529 Plan Semiannual Update, Capital Cities**

Treasurer Magaziner invited Tiffany Spudich to speak to the Board. Ms. Spudich gave an overview of Capital Cities relationship with the Plan. She noted that they oversaw the transition of the 529 Plan to Invesco a year ago. Ms. Spudich highlighted the strong performance of momentum stocks over the past year and the muted returns of bonds. She noted that the easy to understand menu of investment options follows best practice for direct plans. She touched on how different target-based funds had varying performance depending on their allocations. Also, she commented that returns were in line with expectations.

The Board asked questions. Ms. Spudich noted that in the advisor plans there are more active strategies than in direct plans. Treasurer Magaziner applauded the 529 Plan's Silver and Bronze MorningStar ratings and he and Ms. Spudich are hopeful that the ratings will increase with more consistency over time.

#### **VI. General Consultant Search**

Treasurer Magaziner explained that it's good practice to put vendor and consultant relationships out to bid periodically. As a result, he had vowed to do that during his term. He noted that the discussion would focus

on the post currently manned by PCA as the General Consultant to the Defined Benefit Plan. He thanked Mr. Fay and Ms. Maxfield for being part of the committee that analyzed and vetted applicant proposals. Treasurer Magaziner explained that the committee's findings led to bringing NEPC to the meeting today. Consequently, Doug Moseley, Kevin Leonard, Will Forde and Phil Nelson from NEPC gave an overview of their firm. Together they explained the asset allocation strategy NEPC believes in, the processes the group implements, and the various types of research they perform.

The Board asked questions.

**The Employees' Retirement System of the State of Rhode Island decided to postpone any decision on the general consultant to the Defined Benefit Plan, pending further review of the matter.**

## **VII. Consideration of 2018 Meeting Schedule**

The Board reviewed proposed dates for 2018 meetings.

On a motion by Mr. Fay and seconded by Ms. Hammond, it was unanimously

**VOTED: that the Employees' Retirement System of the State of Rhode Island schedule their meetings for calendar year 2018 at the proposed dates.**

## **VIII. Legal Counsel Report**

There was no legal counsel report.

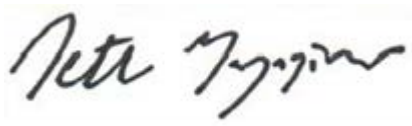
## **IX. Chief Investment Officer Report**

Mr. Stais noted that we are making progress towards our actual allocations hitting our targets. He gave credit for the plan's positive performance to the continued strong performance of equity markets. He highlighted that we have beaten our benchmark across different lookback periods, but it has been harder to beat the 60/40 equities to bonds index because of our diversification. He commented that our Quality Value Momentum factor tilt has been carried by momentum as the driving factor of performance. His last remark was that our Crisis Protection Class would be fully funded the next week.

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

Treasurer Magaziner thanked the Board and Staff for their hard work over the year and accredited the Plan's strong performance to them. He noted that the execution of the asset allocation transition is on target as well as the plan to add more staff to the investment team. There being no other business to come before the Board, on a motion by Mr. Fay and seconded by Ms. Reback the meeting adjourned at 12:04 P.M.

Respectfully submitted,



**Seth Magaziner,  
General Treasurer**

## Section III.

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### Staff Summary





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

Seth Magaziner

General Treasurer

January 17, 2018

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

This is to certify that the amounts so listed below belong to the credit of the Employees' Retirement, Municipal Employees', State Police and Judicial Retirement Systems of the State of Rhode Island at the close of business on December 31, 2017.

**Employees' Retirement System of Rhode Island  
Composite Reporting Investment Valuation  
December 31, 2017**

Asset Class	Base Market Value
<b>Grand Total</b>	<b>8,420,932,978</b>
CASH EQUIVALENT*	370,678,065
EQUITY HEDGE FUNDS**	303,679,224
GLOBAL PUBLIC EQUITY	3,835,163,299
CREDIT	349,845,064
INFLATION-LINKED BDS	198,011,913
PRIVATE EQUITY**	599,759,522
REAL ESTATE**	593,465,168
REAL RET HEDGE FUNDS**	288,805,772
INFRASTRUCTURE**	279,573,618
US TRADITIONAL FIXED	934,649,133
CPC PROGRAM	667,302,200

Plan Allocations	%	Base Market Value
<b>Grand Total</b>	<b>100.00%</b>	<b>8,420,932,978</b>
STATE EMP RET PLAN	74.82%	6,300,612,126
MUNI EMP RET PLAN	18.49%	1,557,103,054
TEACHER'S SURVIVOR BENEFIT	3.89%	327,547,616
STATE POLICE RET PL	1.64%	137,810,749
JUDICIAL RET PLAN	0.86%	72,513,551
NON-CONTRIB JUD RET	0.01%	708,209
NON-CONT ST POL RET	0.29%	24,637,673

\* 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

## December 2017

On the month, the total portfolio value increased by approximately \$80.6 million. The month's \$91.5 million of positive investment performance was offset by \$10.8 million of transfers to meet pension payroll in excess of pension contributions. On a percentage basis, the portfolio increased 1.10% net of fees, underperforming both the total plan benchmark and the 60% global equity/40% fixed income benchmark, which returned 1.18% and 1.15%, respectively.

The plan's return was partially driven by strong performance across its global equity allocation, which returned 1.54%. The plan's international equity allocation returned 2.32%, beating its benchmark return of 2.24% as well as the plan's domestic equity allocation, which returned 0.99%. The fund's private infrastructure investment returned -0.17%, underperforming its benchmark's 0.26% return. The CPC's systematic trend allocation returned 1.94%, although it underperformed its benchmark's return of 2.31%. Fiscal year to date, the systematic trend followers have earned 15.14%, significantly exceeding their benchmark's return of 9.77% over the same timeframe.

Calendar year-to-date, the total portfolio has increased by \$724.9 million, with net gains of \$1.09 billion offset by \$366.5 million of transfers to help meet pension payment requirements. The portfolio's 14.48% net return outperformed the strategic benchmark of 14.39%, but lagged the 60/40 return of 15.41%, over the period.

Fiscal year-to-date through December, the total portfolio value increased by approximately \$379.9 million. The period's \$576.3 million of positive investment performance was offset by \$196.4 million of transfers to meet pension payroll in excess of pension contributions. The portfolio increased 7.25% net of fees, beating the plan benchmark of 7.08%, and the 60% global equity/40% fixed income benchmark return of 7.14%.

Over a 3-year time frame, the ERSRI portfolio outperformed at 7.02% net of fees versus the plan benchmark of 6.69% and the 60/40 portfolio which earned 6.57%. Over a 5-year time frame, the ERSRI portfolio earned 7.88% net of fees, outperforming the plan benchmark return of 7.87% and 60/40 benchmark, which posted 7.37%.

## Section IV.

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### Asset Allocation

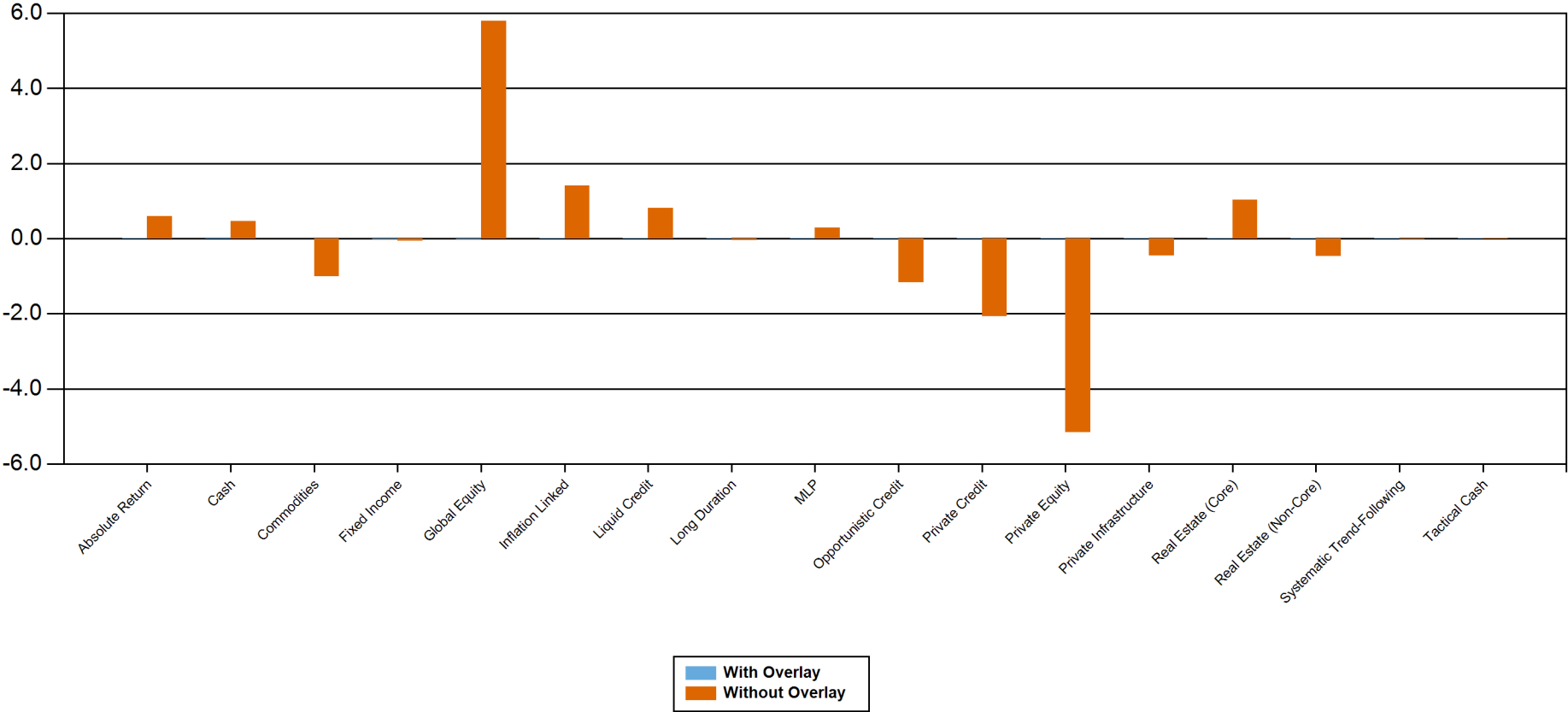
# Asset Summary

Balance Date: 12/29/2017



<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>8,393.2</b>	<b>100.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>8,393.2</b>	<b>100.0 %</b>	<b>8,393.3</b>	<b>100.0 %</b>	<b>8,393.3</b>	<b>100.00 %</b>
<b>Cash</b>	<b>39.6</b>	<b>0.5 %</b>	<b>-36.2</b>	<b>-0.4 %</b>	<b>3.4</b>	<b>0.0 %</b>	<b>1.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.00 %</b>
Cash	39.6	0.5 %	-36.2	-0.4 %	3.4	0.0 %	1.0	0.0 %	0.0	0.00 %
<b>Equity</b>	<b>4,333.8</b>	<b>51.6 %</b>	<b>12.4</b>	<b>0.1 %</b>	<b>4,346.3</b>	<b>51.8 %</b>	<b>4,347.6</b>	<b>51.8 %</b>	<b>4,280.6</b>	<b>51.00 %</b>
Global Equity	3,843.7	45.8 %	12.4	0.1 %	3,856.1	45.9 %	3,857.4	46.0 %	3,357.3	40.00 %
Private Equity	490.1	5.8 %	0.0	0.0 %	490.1	5.8 %	490.1	5.8 %	923.3	11.00 %
<b>Fixed</b>	<b>1,935.7</b>	<b>23.1 %</b>	<b>23.8</b>	<b>0.3 %</b>	<b>1,959.5</b>	<b>23.3 %</b>	<b>1,960.7</b>	<b>23.4 %</b>	<b>1,930.5</b>	<b>23.00 %</b>
Fixed Income	960.2	11.4 %	23.8	0.3 %	984.0	11.7 %	985.2	11.7 %	965.2	11.50 %
Inflation Linked	202.8	2.4 %	0.0	0.0 %	202.8	2.4 %	202.8	2.4 %	83.9	1.00 %
Liquid Credit	362.8	4.3 %	0.0	0.0 %	362.8	4.3 %	362.8	4.3 %	293.8	3.50 %
Long Duration	332.0	4.0 %	0.0	0.0 %	332.0	4.0 %	332.0	4.0 %	335.7	4.00 %
Private Credit	77.9	0.9 %	0.0	0.0 %	77.9	0.9 %	77.9	0.9 %	251.8	3.00 %
<b>Other</b>	<b>2,084.1</b>	<b>24.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,084.1</b>	<b>24.8 %</b>	<b>2,084.1</b>	<b>24.8 %</b>	<b>2,182.3</b>	<b>26.00 %</b>
Absolute Return	595.4	7.1 %	0.0	0.0 %	595.4	7.1 %	595.4	7.1 %	545.6	6.50 %
Commodities	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	83.9	1.00 %
MLP	150.7	1.8 %	0.0	0.0 %	150.7	1.8 %	150.7	1.8 %	125.9	1.50 %
Opportunistic Credit	28.7	0.3 %	0.0	0.0 %	28.7	0.3 %	28.7	0.3 %	125.9	1.50 %
Private Infrastructure	129.8	1.5 %	0.0	0.0 %	129.8	1.5 %	129.8	1.5 %	167.9	2.00 %
Real Estate (Core)	422.1	5.0 %	0.0	0.0 %	422.1	5.0 %	422.1	5.0 %	335.7	4.00 %
Real Estate (Non-Core)	170.3	2.0 %	0.0	0.0 %	170.3	2.0 %	170.3	2.0 %	209.8	2.50 %
Systematic Trend-Following	334.9	4.0 %	0.0	0.0 %	334.9	4.0 %	334.9	4.0 %	335.7	4.00 %
Tactical Cash	252.2	3.0 %	0.0	0.0 %	252.2	3.0 %	252.2	3.0 %	251.8	3.00 %

Percent Deviation from Overlay Target



Total Absolute Notional Value: 36.2 (USD)

# Asset Summary

Balance Date: 12/29/2017



<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>8,393.3</b>	<b>100.0 %</b>	<b>4,333.8</b>	<b>51.6 %</b>	<b>1,935.7</b>	<b>23.1 %</b>	<b>2,084.1</b>	<b>24.8 %</b>	<b>39.6</b>	<b>0.5 %</b>
<b>Cash</b>	<b>25.8</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>25.8</b>	<b>0.3 %</b>
Cash Acct (Pooled Trust)	16.1	0.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	16.0	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	9.8	0.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	9.8	0.1 %
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>4,333.9</b>	<b>51.6 %</b>	<b>4,333.8</b>	<b>51.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.1</b>	<b>0.0 %</b>
<b>Global Equity</b>	<b>3,843.8</b>	<b>45.8 %</b>	<b>3,843.7</b>	<b>45.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.1</b>	<b>0.0 %</b>
Global Equity Transition	0.1	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.1	0.0 %
QVM Tilt	1,217.2	14.5 %	1,217.2	14.5 %	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	1.8	0.0 %	1.8	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Emerging Mkts	371.2	4.4 %	371.2	4.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI Canada	114.2	1.4 %	114.2	1.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI EAFE	936.3	11.2 %	936.3	11.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Russell 3000	1,203.0	14.3 %	1,203.0	14.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Private Equity</b>	<b>490.1</b>	<b>5.8 %</b>	<b>490.1</b>	<b>5.8 %</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	490.1	5.8 %	490.1	5.8 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Fixed</b>	<b>1,935.7</b>	<b>23.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>1,935.7</b>	<b>23.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Fixed Income</b>	<b>960.2</b>	<b>11.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>960.2</b>	<b>11.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
MacKay Shields Core	475.0	5.7 %	0.0	0.0 %	475.0	5.7 %	0.0	0.0 %	0.0	0.0 %
Pyramis Core	485.2	5.8 %	0.0	0.0 %	485.2	5.8 %	0.0	0.0 %	0.0	0.0 %
<b>Inflation Linked</b>	<b>202.8</b>	<b>2.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>202.8</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	202.8	2.4 %	0.0	0.0 %	202.8	2.4 %	0.0	0.0 %	0.0	0.0 %
<b>Liquid Credit</b>	<b>362.8</b>	<b>4.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>362.8</b>	<b>4.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
PIMCO	190.0	2.3 %	0.0	0.0 %	190.0	2.3 %	0.0	0.0 %	0.0	0.0 %
WAMCO	172.9	2.1 %	0.0	0.0 %	172.9	2.1 %	0.0	0.0 %	0.0	0.0 %
<b>Long Duration</b>	<b>332.0</b>	<b>4.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>332.0</b>	<b>4.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Mackay Long Duration	166.2	2.0 %	0.0	0.0 %	166.2	2.0 %	0.0	0.0 %	0.0	0.0 %
WAMCO Long Duration	165.8	2.0 %	0.0	0.0 %	165.8	2.0 %	0.0	0.0 %	0.0	0.0 %
<b>Private Credit</b>	<b>77.9</b>	<b>0.9 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>77.9</b>	<b>0.9 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Private Credit	77.9	0.9 %	0.0	0.0 %	77.9	0.9 %	0.0	0.0 %	0.0	0.0 %
<b>Other</b>	<b>2,097.8</b>	<b>25.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,084.1</b>	<b>24.8 %</b>	<b>13.8</b>	<b>0.2 %</b>
<b>Tactical Cash</b>	<b>252.2</b>	<b>3.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>252.2</b>	<b>3.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
ERSRI SMA CASH	252.2	3.0 %	0.0	0.0 %	0.0	0.0 %	252.2	3.0 %	0.0	0.0 %
<b>Absolute Return</b>	<b>609.1</b>	<b>7.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>595.4</b>	<b>7.1 %</b>	<b>13.8</b>	<b>0.2 %</b>
Brevan Howard LP	18.4	0.2 %	0.0	0.0 %	0.0	0.0 %	18.4	0.2 %	0.0	0.0 %
Brigade Levered Capital	3.2	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	3.2	0.0 %
Capula Global Relative Value	70.6	0.8 %	0.0	0.0 %	0.0	0.0 %	70.6	0.8 %	0.0	0.0 %
Claren Road Cr Fund	0.9	0.0 %	0.0	0.0 %	0.0	0.0 %	0.9	0.0 %	0.0	0.0 %
D.E. Shaw Composite Fund	106.0	1.3 %	0.0	0.0 %	0.0	0.0 %	106.0	1.3 %	0.0	0.0 %

# Asset Summary

Balance Date: 12/29/2017

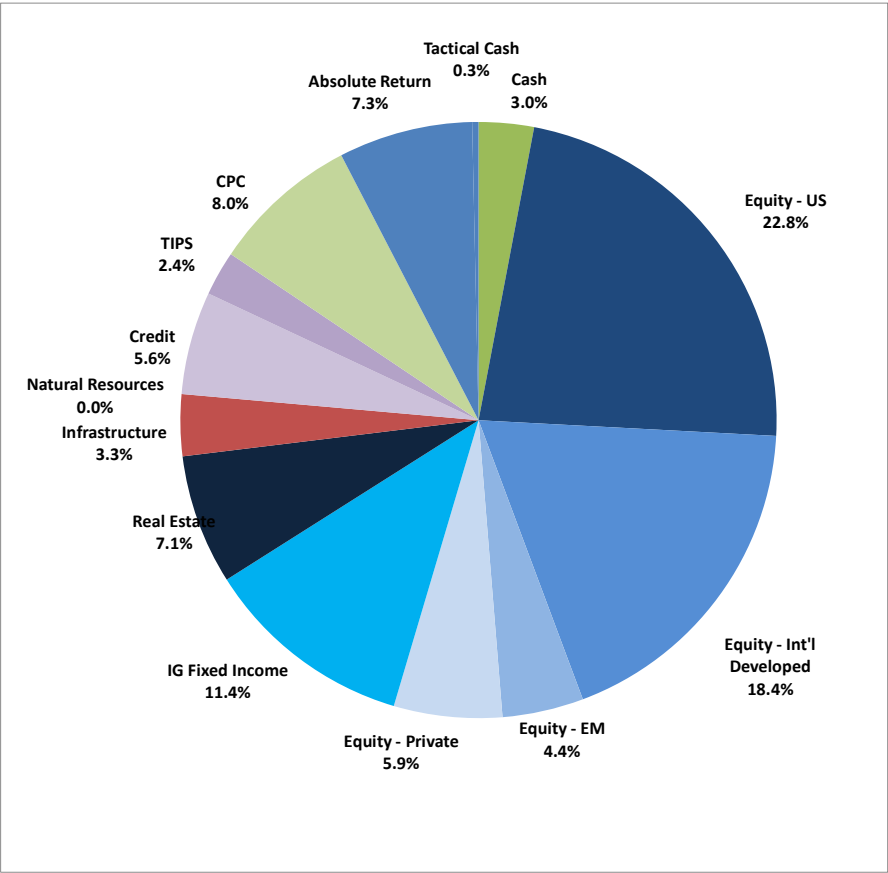


<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
Davidson Kempner	85.4	1.0 %	0.0	0.0 %	0.0	0.0 %	85.4	1.0 %	0.0	0.0 %
Elliot Associates, LP	103.0	1.2 %	0.0	0.0 %	0.0	0.0 %	103.0	1.2 %	0.0	0.0 %
ESG	1.1	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	1.1	0.0 %
Graham Global	57.8	0.7 %	0.0	0.0 %	0.0	0.0 %	57.8	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	5.9	0.1 %	0.0	0.0 %	0.0	0.0 %	5.9	0.1 %	0.0	0.0 %
Oz Domestic Partners II	5.5	0.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	5.5	0.1 %
PFM Diversified Fund LP	3.9	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	3.9	0.0 %
Samlyn Onshore Fund LP	49.9	0.6 %	0.0	0.0 %	0.0	0.0 %	49.9	0.6 %	0.0	0.0 %
Viking Global Equities	59.7	0.7 %	0.0	0.0 %	0.0	0.0 %	59.7	0.7 %	0.0	0.0 %
Winton Futures Ltd Fund	37.4	0.4 %	0.0	0.0 %	0.0	0.0 %	37.4	0.4 %	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>150.7</b>	<b>1.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>150.7</b>	<b>1.8 %</b>	<b>0.0</b>	<b>0.0 %</b>
Harvest Fund Advisor	150.7	1.8 %	0.0	0.0 %	0.0	0.0 %	150.7	1.8 %	0.0	0.0 %
<b>Opportunistic Credit</b>	<b>28.7</b>	<b>0.3 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>28.7</b>	<b>0.3 %</b>	<b>0.0</b>	<b>0.0 %</b>
Opportunistic Private Credit	28.7	0.3 %	0.0	0.0 %	0.0	0.0 %	28.7	0.3 %	0.0	0.0 %
<b>Private Infrastructure</b>	<b>129.8</b>	<b>1.5 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>129.8</b>	<b>1.5 %</b>	<b>0.0</b>	<b>0.0 %</b>
Priv Listed Infrastructure	129.8	1.5 %	0.0	0.0 %	0.0	0.0 %	129.8	1.5 %	0.0	0.0 %
<b>Real Estate (Core)</b>	<b>422.1</b>	<b>5.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>422.1</b>	<b>5.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Core Real Estate	422.1	5.0 %	0.0	0.0 %	0.0	0.0 %	422.1	5.0 %	0.0	0.0 %
<b>Real Estate (Non-Core)</b>	<b>170.3</b>	<b>2.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>170.3</b>	<b>2.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
Non-Core Real Estate	170.3	2.0 %	0.0	0.0 %	0.0	0.0 %	170.3	2.0 %	0.0	0.0 %
<b>Systematic Trend-Following</b>	<b>334.9</b>	<b>4.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>334.9</b>	<b>4.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
CPC AP LLC	111.8	1.3 %	0.0	0.0 %	0.0	0.0 %	111.8	1.3 %	0.0	0.0 %
CPC CB LLC	111.0	1.3 %	0.0	0.0 %	0.0	0.0 %	111.0	1.3 %	0.0	0.0 %
CPC QIS LLC	112.1	1.3 %	0.0	0.0 %	0.0	0.0 %	112.1	1.3 %	0.0	0.0 %

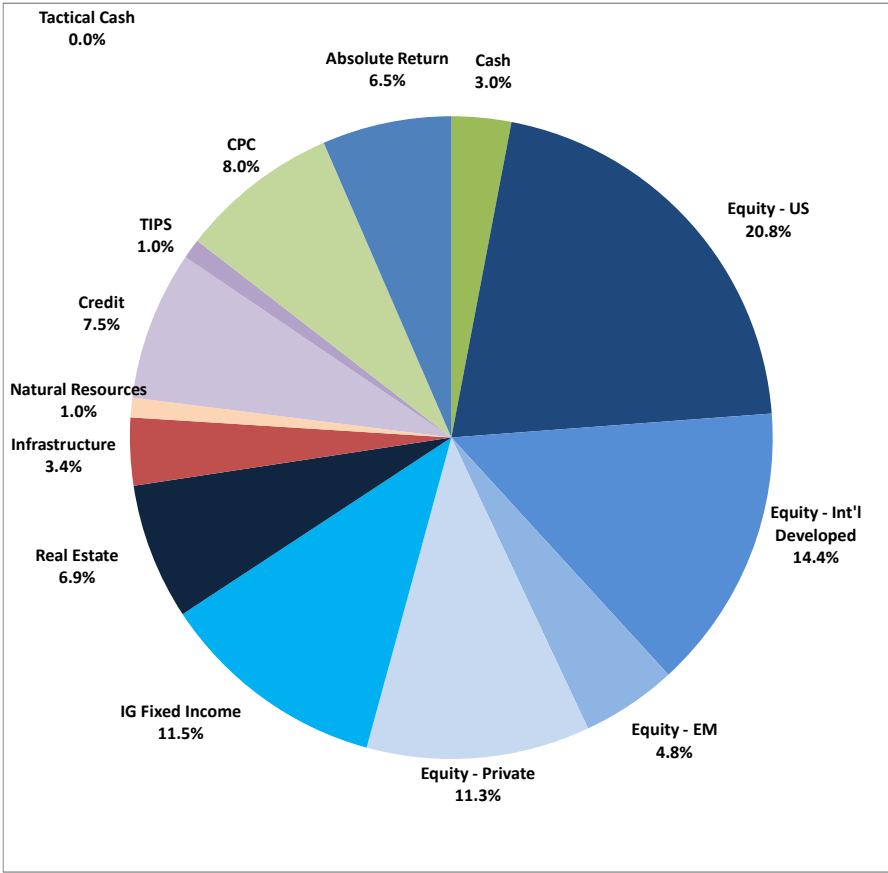
ERSRI Portfolio

%%% - as of December 31, 2017

Actual Allocation



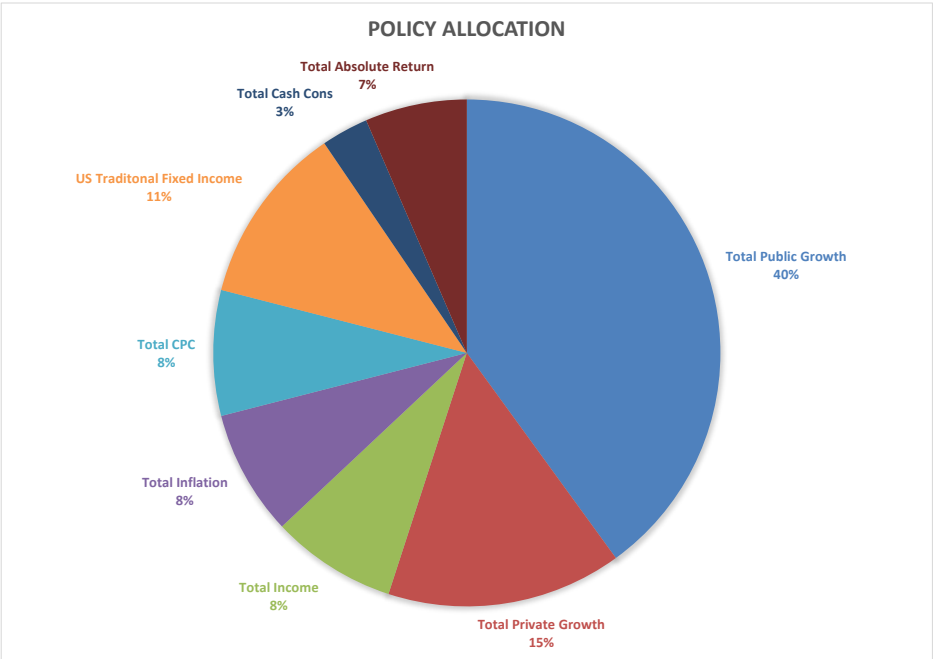
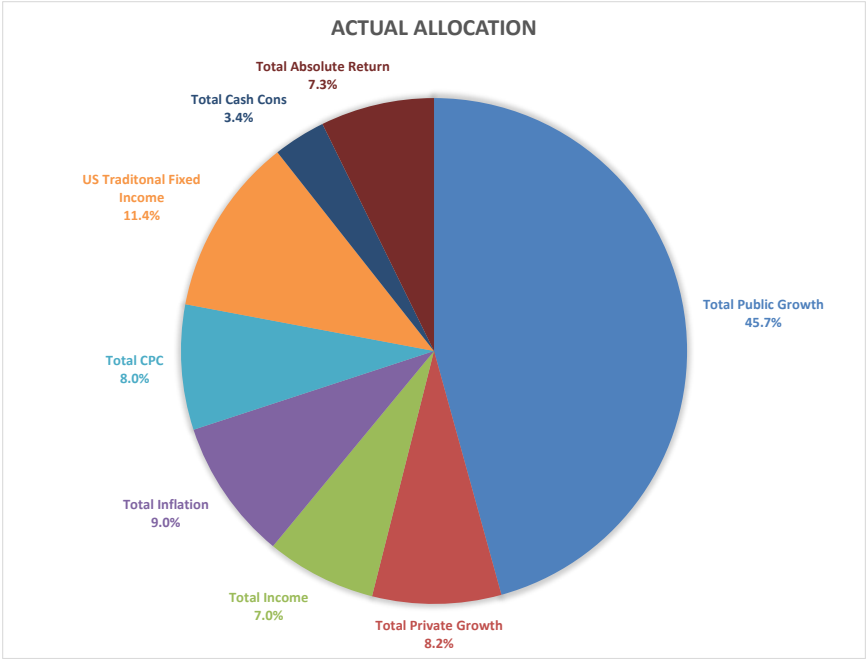
Policy Allocation





ERSRI Portfolio

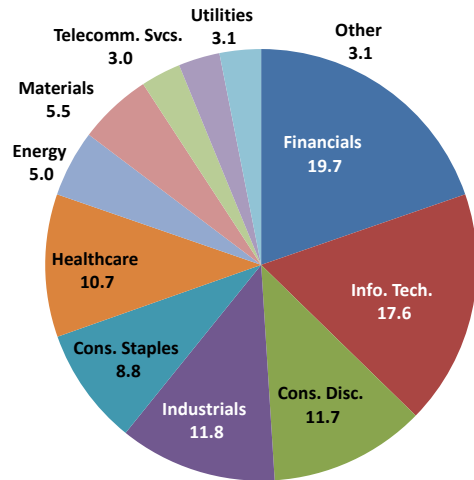
%%% - as of December 31, 2017



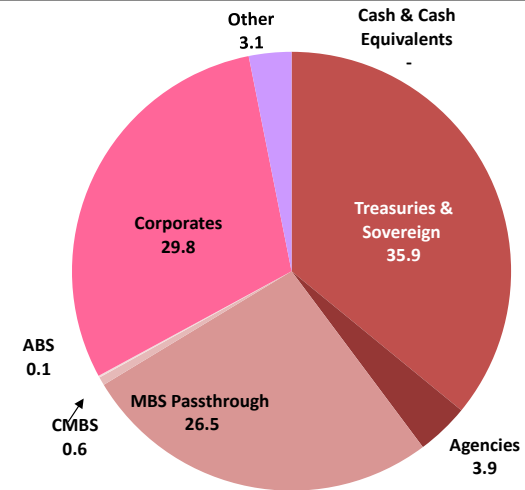
## ERSRI Asset Allocation Public-Asset Portfolios

%% - as of December 31, 2017

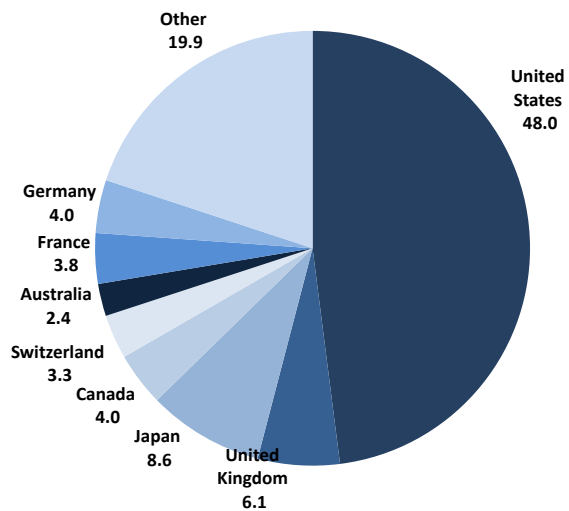
### Global Public Equity - by Industry Sector



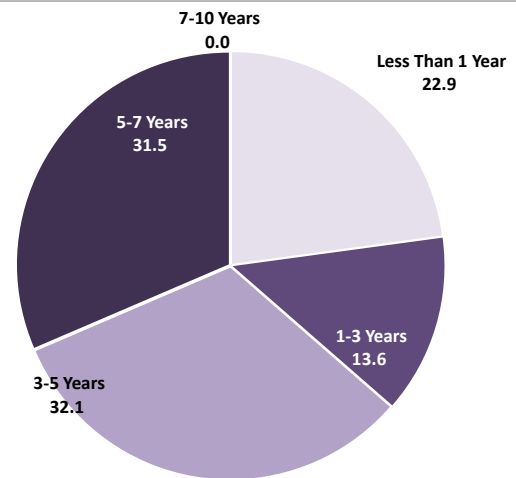
### Core Fixed Income - by Type



### Global Public Equity - by Geography



### Inflation-Linked Bonds - by Duration



## ERSRI Asset Allocation Tracking

Functional Bucket	Aggregate Asset Class	Aggregate Allocation Weight	Asset Class	(a) Asset Allocation	(b) Actual exposure as of 12/31/17	(b) - (a)
GROWTH	Global Equity	40.0%	US Equity	20.8%	22.8%	2.0%
			International Developed Equity	14.4%	18.4%	4.0%
			EM Equity	4.8%	4.4%	-0.4%
	Private Growth	15.0%	PE	11.3%	5.9%	-5.4%
			Non-core RE	2.3%	2.0%	-0.2%
			Opp Private Credit	1.5%	0.3%	-1.2%
			HY Infra REITs	1.0%	1.8%	0.8%
INCOME	Income	8.0%	REITs	1.0%	0.0%	-1.0%
			Liquid Credit	2.8%	4.3%	1.5%
			Private Credit	3.2%	0.9%	-2.3%
STABILITY	CPC	8.0%	Treasury Duration	4.0%	3.9%	-0.1%
			Systematic Trend	4.0%	4.0%	0.0%
	Inflation Protection	8.0%	Core RE	3.6%	5.0%	1.4%
			Private Infra	2.4%	1.5%	-0.9%
			TIPS	1.0%	2.4%	1.4%
			Nat' Resources	1.0%	0.0%	-1.0%
	Volatility Protection	21.0%	IG Fixed Income	11.5%	11.4%	-0.1%
			Absolute Return	6.5%	7.3%	0.8%
			Cash	3.0%	3.0%	0.0%
OTHER	Short-term Tactical	n/a	ST Tactical Cash	0.0%	0.3%	0.3%
		n/a	Russell Overlay	0.0%	0.1%	0.1%
TOTAL	Total	100.0%		100.0%	100.0%	0.0%

## Section V.

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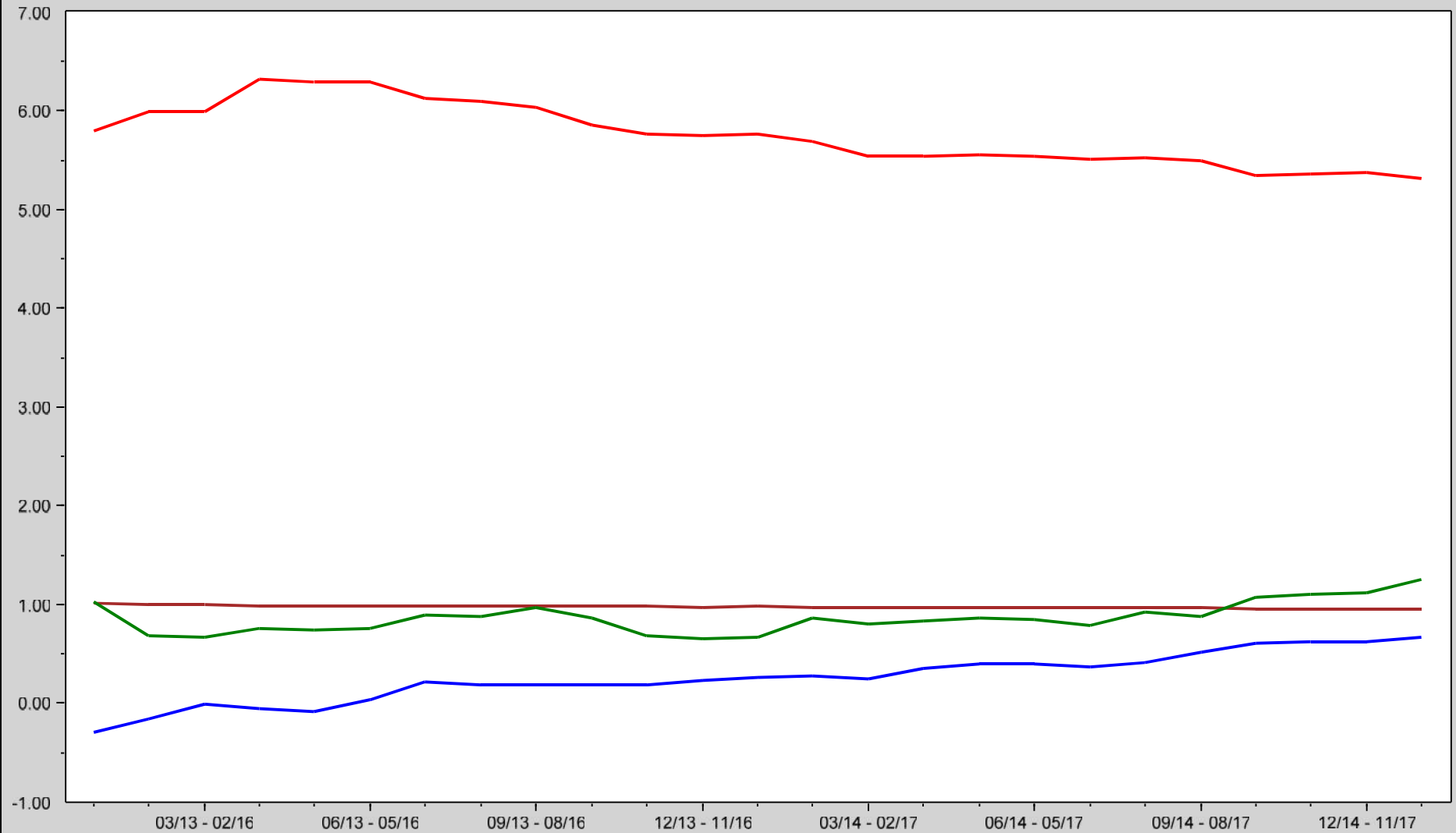
### Risk Overview

# Historical Risk - Three Year Rolling Periods

TOTAL PLAN

5 Years Ending December 31, 2017

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

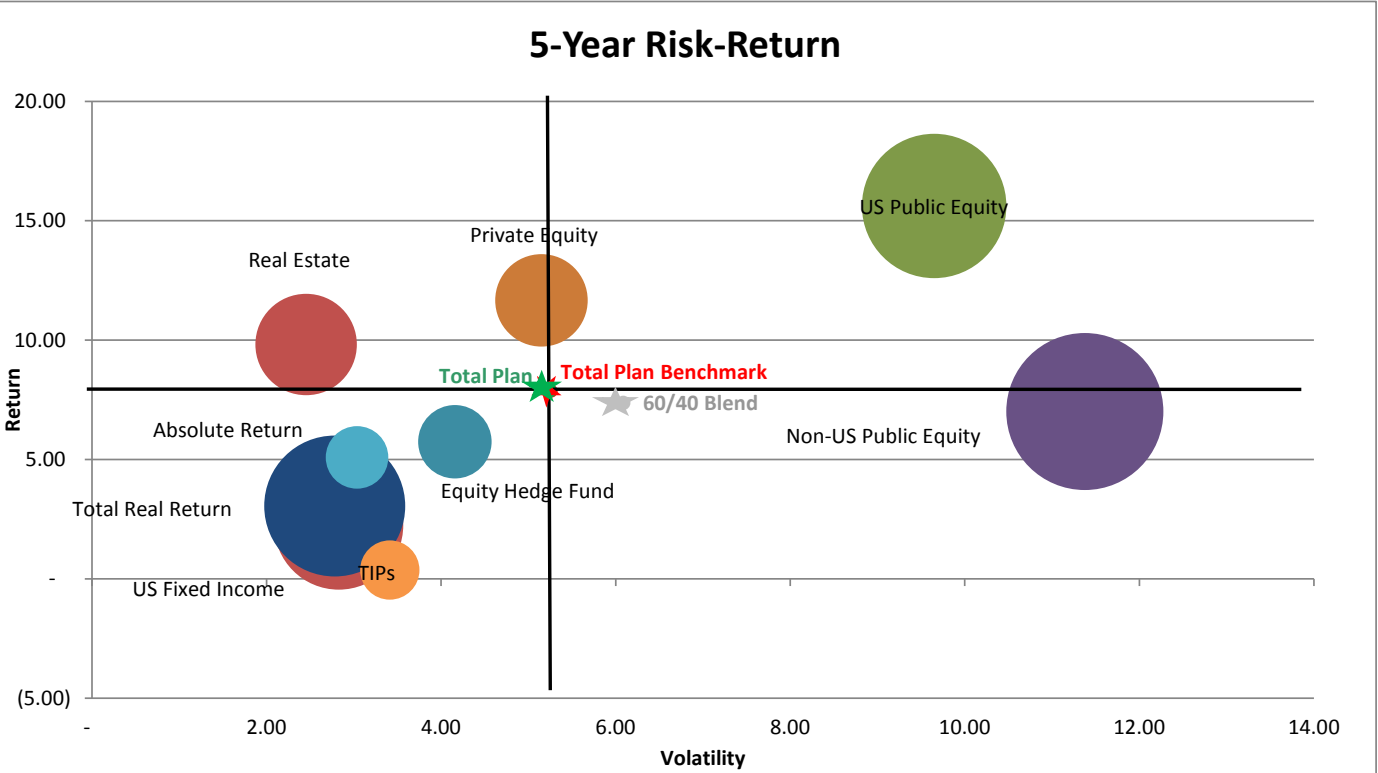
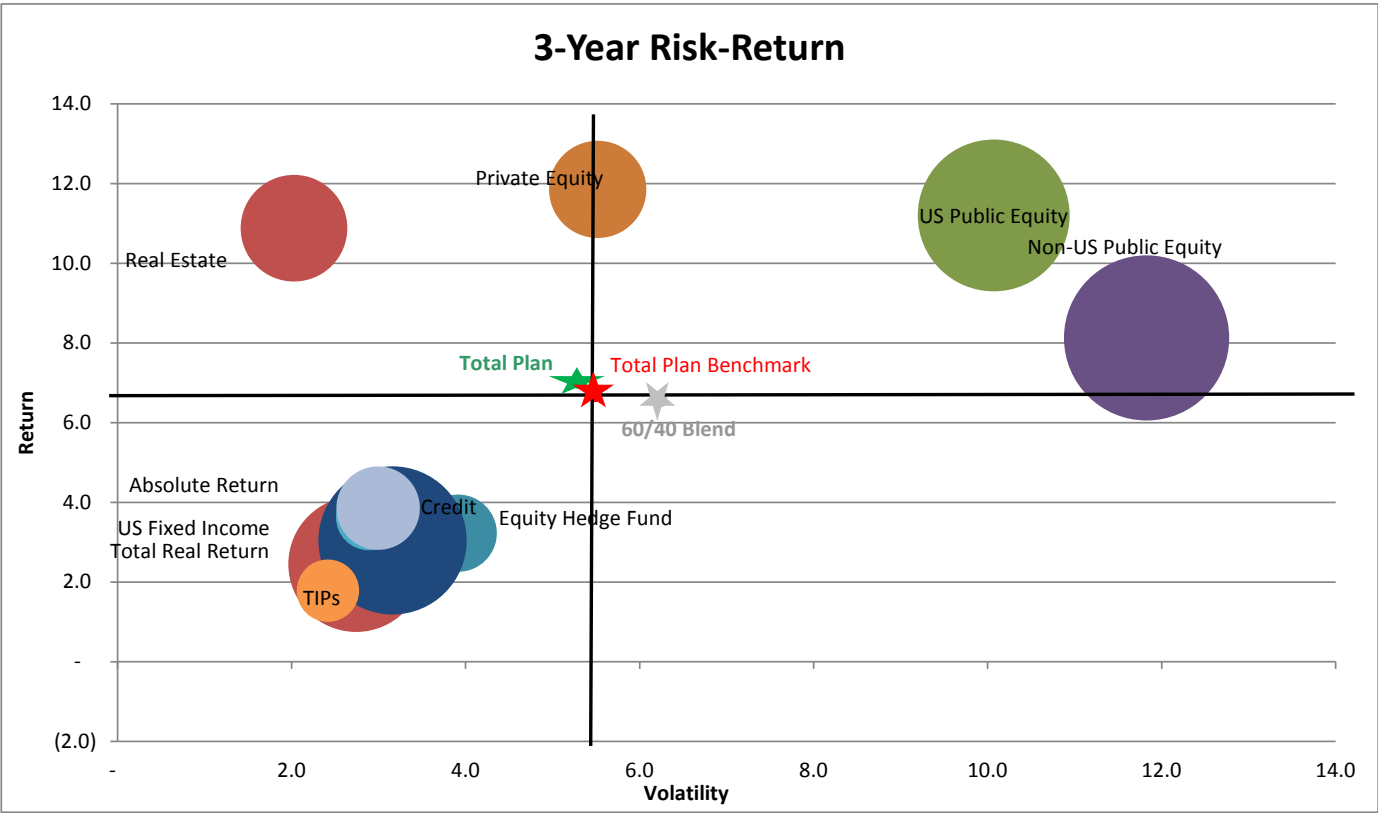
## Risk Exposures

### 3 Years Ending December 31, 2017

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
US Public Equity	11.20	10.07	0.91	-0.82	0.17	2.12
Non-US Public Equity	8.13	11.83	1.09	0.13	0.26	2.13
Equity Hedge Funds	3.23	3.91	0.22	-0.35	0.03	1.09
TOTAL PRIVATE EQUITY	11.63	5.40	-0.04	-0.16	0.05	1.16
Traditional Fixed Income	2.45	2.74	0.01	0.98	-0.03	-0.09
TOTAL REAL ESTATE	10.88	2.03	-0.01	0.25	-0.04	-0.52
Real Return Hedge Funds	3.89	2.46	0.08	-0.03	0.01	0.25
Inflation-Linked Bonds	1.78	2.42	0.02	0.69	-0.00	0.17
Cash	0.84	0.25	0.01	-0.00	0.00	0.08
Russell Overlay Fd	-0.01	0.09	-0.00	-0.00	-0.00	-0.03
TOTAL PLAN	7.02	5.31	0.51	-0.06	0.11	1.22

## 5 Years Ending December 31, 2017 Comparison

	TOTAL PLAN	Total Plan Benchmark	60/40 Blend
Ann Return	7.88	7.87	7.37
Ann Ex Ret vs Mkt	0.01		
Ann Tracking Error	0.83		
Ann Std Dev	5.25	5.26	6.09
Beta	0.99		
R-Squared	0.98		
Ann Alpha	0.12		
Ann Sharpe Ratio	1.42	1.42	1.16





**3 Years Ending December 31, 2017**  
**Correlation**

Ann Return

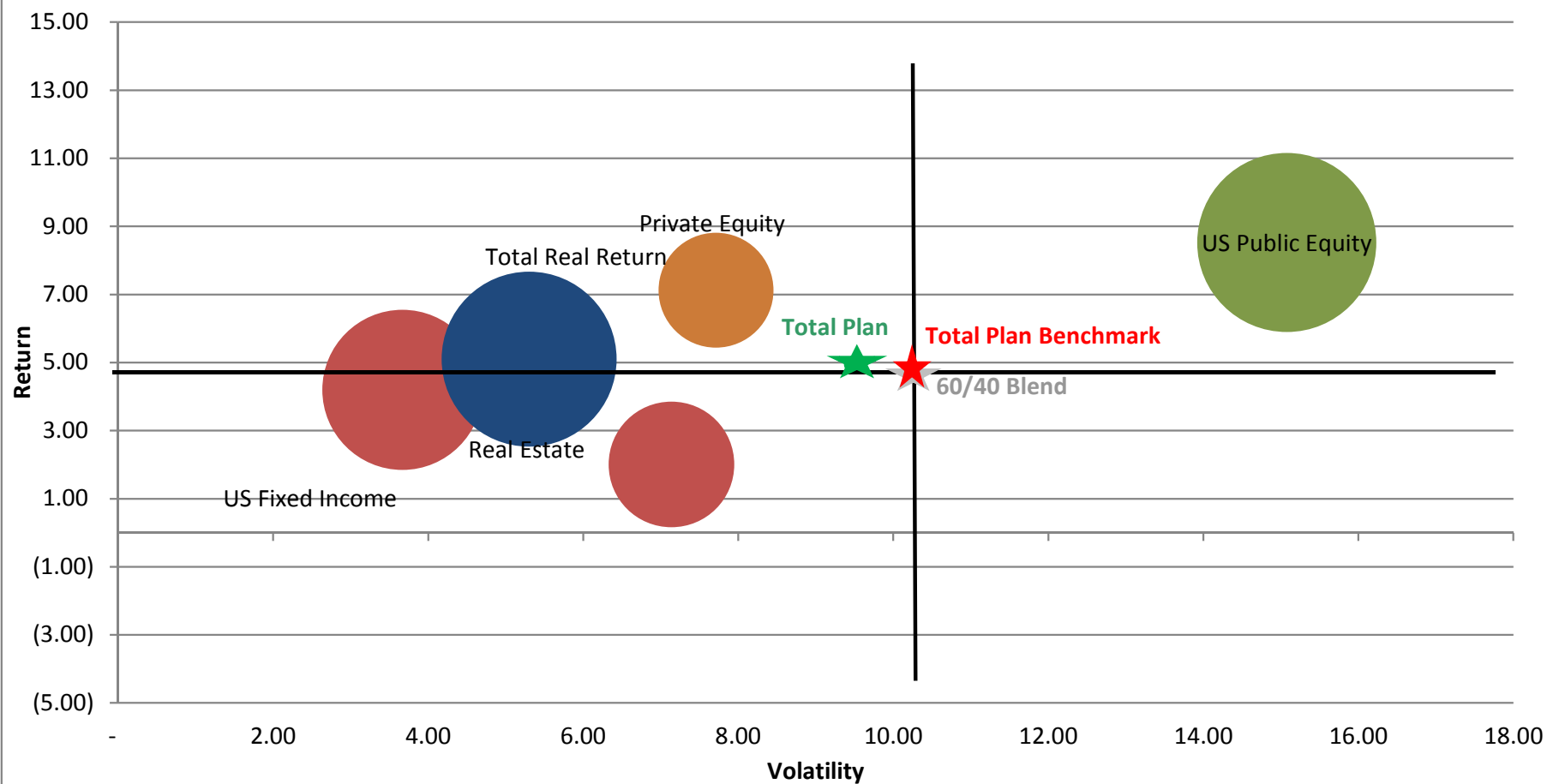
	US Pub EQ	Non-US Pub EQ	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
<b>US Pub</b>	1.00										
<b>Non-US P</b>	0.79	1.00									
<b>Eq HF</b>	0.56	0.54	1.00								
<b>PE</b>	-0.04	-0.09	0.04	1.00							
<b>FI</b>	-0.12	0.15	-0.18	-0.09	1.00						
<b>RE</b>	-0.09	0.01	-0.14	-0.23	0.31	1.00					
<b>RR HF</b>	0.40	0.25	0.46	-0.04	0.01	0.08	1.00				
<b>TIPS</b>	-0.10	0.23	-0.27	-0.11	0.82	0.31	0.08	1.00			
<b>Cash</b>	0.35	0.47	0.40	0.14	0.08	-0.25	0.17	-0.02	1.00		
<b>Overlay</b>	-0.20	-0.14	-0.30	-0.06	0.07	0.21	-0.10	0.06	-0.19	1.00	
<b>Total</b>	0.92	0.95	0.61	-0.01	0.09	-0.02	0.40	0.13	0.47	-0.18	1.00
<b>Tot BM</b>	0.91	0.96	0.57	-0.09	0.11	-0.03	0.32	0.15	0.44	-0.19	0.99

**5 Years Ending December 31, 2017**  
**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>	0.77	1.00									
<b>Eq HF</b>	0.63	0.53	1.00								
<b>PE</b>	0.01	0.02	0.07	1.00							
<b>FI</b>	-0.01	0.25	-0.11	-0.09	1.00						
<b>RE</b>	0.14	0.20	0.07	-0.13	0.43	1.00					
<b>RR HF</b>	0.40	0.29	0.56	-0.02	0.06	0.12	1.00				
<b>TIPS</b>	0.09	0.37	-0.04	-0.04	0.81	0.52	0.16	1.00			
<b>Cash</b>	0.08	0.10	0.03	-0.02	0.01	-0.13	0.08	-0.08	1.00		
<b>Overlay</b>	-0.05	-0.05	-0.04	-0.03	-0.12	0.10	0.04	0.04	-0.07	1.00	
<b>Total</b>	0.91	0.95	0.64	0.08	0.21	0.23	0.42	0.33	0.09	-0.06	1.00
<b>Tot BM</b>	0.91	0.95	0.61	0.00	0.20	0.19	0.36	0.30	0.08	-0.06	0.99

## 10-Year Risk-Return



**10 Years Ending December 31, 2017**  
**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>	0.19	---	---	1.00							
<b>FI</b>	0.30	---	---	-0.02	1.00						
<b>RE</b>	0.00	---	---	0.20	-0.18	1.00					
<b>RR HF</b>	---	---	---	---	---	---	---				
<b>TIPS</b>	---	---	---	---	---	---	---	---			
<b>Cash</b>	-0.16	---	---	-0.18	-0.12	-0.02	---	---	1.00		
<b>Overlay</b>	---	---	---	---	---	---	---	---	---	---	
<b>Total</b>	0.96	---	---	0.26	0.46	0.01	---	---	-0.19	---	1.00
<b>Tot BM</b>	0.96	---	---	0.18	0.46	-0.01	---	---	-0.19	---	0.99

## Section VI.

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### Performance Overview

## TOTAL NET OF FEES

12/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
<b>US Public Equity</b> <i>Russell 3000 Index</i>	<b>1,203,152,151</b>	<b>14</b>	<b>0.99</b> 1.00	<b>21.14</b> 21.13	<b>11.20</b> 11.20	<b>21.14</b> 21.13	<b>11.20</b> 11.12	<b>15.62</b> 15.58	<b>8.52</b> 8.60	<b>8.41</b> 8.41	<b>8/1/2007</b> 8/1/2007
<b>Non-US Public Equity</b> <i>Total International Equity BM</i>	<b>1,423,376,255</b>	<b>17</b>	<b>2.32</b> 2.24	<b>27.76</b> 27.19	<b>11.83</b> 11.48	<b>27.76</b> 27.19	<b>8.13</b> 7.83	<b>7.01</b> 6.80		<b>9.62</b> 8.82	<b>5/1/2009</b> 5/1/2009
QVM Tilt <i>MSCI World Net Dividend Index</i>	1,217,169,285	14	1.12 1.35	23.36 22.40	11.72 10.61	23.36 22.40				16.29 15.70	10/1/2015 10/1/2015
<b>TOTAL PUBLIC GROWTH</b> <i>MSCI All Country World Net Index</i>	<b>3,843,697,692</b>	<b>46</b>	<b>1.54</b> 1.61	<b>24.11</b> 23.97	<b>11.71</b> 11.21	<b>24.11</b> 23.97	<b>9.60</b> 9.30	<b>11.23</b> 10.80	<b>5.99</b> 4.65	<b>4.98</b>	<b>7/1/2000</b> 7/1/2000
Private Equity <i>ILPA All Fds BM 1Q Lag 2</i>	493,311,720	6	0.75 0.75	19.69 16.53	9.85 9.33	19.69 16.53	11.85 10.51	11.67 14.47	7.12 9.48	9.43	2/1/1989 2/1/1989
Non Core Real Estate	170,327,530	2	0.00		8.22					8.22	7/1/2017
Opportunistic Private Credit <i>ILPA Distressed BM 1Q Lag</i>	28,711,446	0	0.00 0.00		11.31 9.67					11.31 9.67	7/1/2017 7/1/2017
<b>TOTAL PRIVATE GROWTH</b>	<b>692,350,696</b>	<b>8</b>	<b>0.53</b>		<b>9.51</b>					<b>9.51</b>	<b>7/1/2017</b>
<b>TOTAL GROWTH COMPOSITE</b>	<b>4,536,048,388</b>	<b>54</b>	<b>1.38</b>		<b>11.37</b>					<b>11.37</b>	<b>7/1/2017</b>
Harvest Fund Advisor <i>Alerian MLP Index</i>	150,662,975	2	5.54 4.74	-5.26 -6.52	-2.48 -3.97	-5.26 -6.52	-7.61 -9.33			-7.61 -9.33	1/1/2015 1/1/2015
<b>Credit Aggregate</b> <i>Credit Aggregate</i>	<b>363,183,097</b>	<b>4</b>	<b>0.27</b> 0.32	<b>3.54</b> 4.27	<b>2.18</b> 2.02	<b>3.54</b> 4.27	<b>3.85</b> 4.73			<b>3.16</b> 4.17	<b>5/1/2013</b> 5/1/2013
Private Credit <i>S&amp;P LSTA Lev Loans + 3%</i>	77,869,227	1	0.00 0.63		3.51 3.29					3.51 3.29	7/1/2017 7/1/2017
<b>TOTAL INCOME</b> <i>Income Aggregate BM</i>	<b>591,715,299</b>	<b>7</b>	<b>1.51</b> 1.26		<b>1.10</b> 1.40					<b>1.10</b> 1.40	<b>7/1/2017</b> 7/1/2017
<b>CPC Long Duration</b> <i>Barclays US Treasury LT Index</i>	<b>331,989,336</b>	<b>4</b>	<b>1.73</b> 1.72		<b>2.66</b> 2.96					<b>1.44</b> 1.87	<b>6/1/2017</b> 6/1/2017
<b>CPC Trend Following</b> <i>Credit Suisse Liquid Alt Beta</i>	<b>340,743,289</b>	<b>4</b>	<b>1.94</b> 2.31		<b>15.14</b> 9.77					<b>11.40</b> 7.60	<b>6/1/2017</b> 6/1/2017
<b>CPC Total Program</b>	<b>672,732,625</b>	<b>8</b>	<b>1.84</b>		<b>8.77</b>					<b>6.36</b>	<b>6/1/2017</b>

## TOTAL NET OF FEES

12/31/2017

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%	129,603,027	2	-0.17 0.26	12.45 6.11	4.73 2.57	12.45 6.11				7.60 5.73	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	423,137,638	5	0.25 0.25		3.16 3.31					3.16 3.31	7/1/2017 7/1/2017
<b>Inflation-Linked Bonds</b> Total Inflation Linked Custom	<b>202,806,594</b>	<b>2</b>	<b>0.52</b> 0.48	<b>1.73</b> 1.90	<b>1.26</b> 1.24	<b>1.73</b> 1.90	<b>1.78</b> 1.90	<b>0.37</b> 0.49		<b>3.74</b> 3.74	<b>11/1/2009</b> 11/1/2009
<b>TOTAL INFLATION</b> Inflation Protection Custom BM	<b>755,547,259</b>	<b>9</b>	<b>0.25</b> 0.33		<b>2.81</b> 2.64					<b>2.81</b> 2.64	<b>7/1/2017</b> 7/1/2017
<b>Absolute Return</b> HFRI Fund of Funds Composite Index	<b>611,217,149</b>	<b>7</b>	<b>0.34</b> 0.90		<b>3.77</b> 4.39					<b>3.77</b> 4.39	<b>7/1/2017</b> 7/1/2017
<b>Traditional Fixed Income</b> Bloomberg Barclays U.S. Aggregate Bond Index	<b>960,240,532</b>	<b>11</b>	<b>0.49</b> 0.46	<b>3.99</b> 3.54	<b>1.52</b> 1.24	<b>3.99</b> 3.54	<b>2.45</b> 2.24	<b>2.25</b> 2.10	<b>4.20</b> 4.01	<b>5.18</b> 5.03	<b>7/1/2000</b> 7/1/2000
<b>Total Cash and Other Funds</b>	<b>291,619,067</b>	<b>3</b>	<b>0.30</b>	<b>-1.64</b>	<b>-0.28</b>	<b>-1.64</b>	<b>0.55</b>	<b>1.25</b>		<b>1.38</b>	<b>11/1/2012</b>
<b>Russell Overlay Fd</b>	<b>9,805,545</b>	<b>0</b>	<b>0.01</b>	<b>-0.09</b>	<b>-0.07</b>	<b>-0.09</b>	<b>-0.01</b>	<b>0.02</b>		<b>-0.06</b>	<b>9/1/2008</b>
<b>TOTAL VOL PROTECTION</b>	<b>1,863,076,749</b>	<b>22</b>	<b>0.41</b>		<b>1.83</b>					<b>1.83</b>	<b>7/1/2017</b>
<b>TOTAL STABILITY COMPOSITE</b>	<b>3,291,356,633</b>	<b>39</b>	<b>0.62</b>		<b>2.72</b>					<b>2.72</b>	<b>7/1/2017</b>
<b>TOTAL PLAN</b> <sup>1</sup> Total Plan Benchmark 60/40 Blend	<b>8,420,929,978</b>	<b>100</b>	<b>1.10</b> 1.18 1.15	<b>14.48</b> 14.39 15.41	<b>7.25</b> 7.08 7.14	<b>14.48</b> 14.39 15.41	<b>7.02</b> 6.69 6.57	<b>7.88</b> 7.87 7.37	<b>4.94</b> 4.80 4.75	<b>5.17</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>7,097,969,390</b>	<b>84</b>	<b>1.24</b> 1.21	<b>14.66</b> 14.45	<b>7.37</b> 6.93	<b>14.66</b> 14.45	<b>6.44</b> 6.11	<b>7.47</b> 7.30	<b>4.80</b> 4.44	<b>6.50</b>	<b>4/1/1996</b> 4/1/1996

## END NOTES

12/31/2017

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&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% Commodities

## TOTAL NET OF FEES

12/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2017	2016	2015	Inception Date
				11/1/2017 - 11/30/2017	10/1/2017 - 10/31/2017					
<b>US Public Equity</b>	<b>1,203,152,151</b>	<b>14</b>	<b>0.99</b>	<b>3.04</b>	<b>2.20</b>	<b>21.14</b>	<b>21.14</b>	<b>12.84</b>	<b>0.60</b>	<b>8/1/2007</b>
<i>Russell 3000 Index</i>			<i>1.00</i>	<i>3.04</i>	<i>2.18</i>	<i>21.13</i>	<i>21.13</i>	<i>12.74</i>	<i>0.48</i>	<i>8/1/2007</i>
<b>Non-US Public Equity</b>	<b>1,423,376,255</b>	<b>17</b>	<b>2.32</b>	<b>0.75</b>	<b>1.95</b>	<b>27.76</b>	<b>27.76</b>	<b>5.01</b>	<b>-5.77</b>	<b>5/1/2009</b>
<i>Total International Equity BM</i>			<i>2.24</i>	<i>0.81</i>	<i>1.88</i>	<i>27.19</i>	<i>27.19</i>	<i>4.50</i>	<i>-5.66</i>	<i>5/1/2009</i>
QVM Tilt	1,217,169,285	14	1.12	2.32	2.33	23.36	23.36	7.58		10/1/2015
<i>MSCI World Net Dividend Index</i>			<i>1.35</i>	<i>2.17</i>	<i>1.89</i>	<i>22.40</i>	<i>22.40</i>	<i>7.51</i>		<i>10/1/2015</i>
<b>TOTAL PUBLIC GROWTH</b>	<b>3,843,697,692</b>	<b>46</b>	<b>1.54</b>	<b>2.07</b>	<b>2.17</b>	<b>24.11</b>	<b>24.11</b>	<b>8.78</b>	<b>-2.48</b>	<b>7/1/2000</b>
<i>MSCI All Country World Net Index</i>			<i>1.61</i>	<i>1.94</i>	<i>2.08</i>	<i>23.97</i>	<i>23.97</i>	<i>7.86</i>	<i>-2.36</i>	<i>7/1/2000</i>
Private Equity	493,311,720	6	0.75	2.28	1.66	19.69	19.69	9.19	7.08	2/1/1989
<i>ILPA All Fds BM 1Q Lag 2</i>			<i>0.75</i>	<i>2.35</i>	<i>1.70</i>	<i>16.53</i>	<i>16.53</i>	<i>7.98</i>	<i>7.27</i>	<i>2/1/1989</i>
Non Core Real Estate	170,327,530	2	0.00	1.42	1.59					7/1/2017
Opportunistic Private Credit	28,711,446	0	0.00	5.75	0.00					7/1/2017
<i>ILPA Distressed BM 1Q Lag</i>			<i>0.00</i>	<i>5.75</i>	<i>0.00</i>					<i>7/1/2017</i>
<b>TOTAL PRIVATE GROWTH</b>	<b>692,350,696</b>	<b>8</b>	<b>0.53</b>	<b>2.21</b>	<b>1.57</b>					<b>7/1/2017</b>
<b>TOTAL GROWTH COMPOSITE</b>	<b>4,536,048,388</b>	<b>54</b>	<b>1.38</b>	<b>2.09</b>	<b>2.08</b>					<b>7/1/2017</b>
Harvest Fund Advisor	150,662,975	2	5.54	-1.20	-4.26	-5.26	-5.26	20.64	-31.01	1/1/2015
<i>Alerian MLP Index</i>			<i>4.74</i>	<i>-1.35</i>	<i>-4.14</i>	<i>-6.52</i>	<i>-6.52</i>	<i>18.31</i>	<i>-32.59</i>	<i>1/1/2015</i>
<b>Credit Aggregate</b>	<b>363,183,097</b>	<b>4</b>	<b>0.27</b>	<b>-0.02</b>	<b>0.79</b>	<b>3.54</b>	<b>3.54</b>	<b>9.59</b>	<b>-1.29</b>	<b>5/1/2013</b>
<i>Credit Aggregate</i>			<i>0.32</i>	<i>0.05</i>	<i>0.51</i>	<i>4.27</i>	<i>4.27</i>	<i>9.63</i>	<i>0.49</i>	<i>5/1/2013</i>
Private Credit	77,869,227	1	0.00	0.55	0.00					7/1/2017
<i>S&amp;P LSTA Lev Loans + 3%</i>			<i>0.63</i>	<i>0.20</i>	<i>0.93</i>					<i>7/1/2017</i>
<b>TOTAL INCOME</b>	<b>591,715,299</b>	<b>7</b>	<b>1.51</b>	<b>-0.22</b>	<b>-0.57</b>					<b>7/1/2017</b>
<i>Income Aggregate BM</i>			<i>1.26</i>	<i>-0.16</i>	<i>-0.20</i>					<i>7/1/2017</i>
<b>CPC Long Duration</b>	<b>331,989,336</b>	<b>4</b>	<b>1.73</b>	<b>0.31</b>	<b>-0.09</b>					<b>6/1/2017</b>
<i>Barclays US Treasury LT Index</i>			<i>1.72</i>	<i>0.72</i>	<i>-0.08</i>					<i>6/1/2017</i>
<b>CPC Trend Following</b>	<b>340,743,289</b>	<b>4</b>	<b>1.94</b>	<b>2.91</b>	<b>4.94</b>					<b>6/1/2017</b>
<i>Credit Suisse Liquid Alt Beta</i>			<i>2.31</i>	<i>1.33</i>	<i>2.35</i>					<i>6/1/2017</i>
<b>CPC Total Program</b>	<b>672,732,625</b>	<b>8</b>	<b>1.84</b>	<b>1.62</b>	<b>2.39</b>					<b>6/1/2017</b>



## TOTAL NET OF FEES

12/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2017	2016	2015	Inception Date
				11/1/2017 - 11/30/2017	10/1/2017 - 10/31/2017					
Priv Listed Infrastructure CPI + 4%	129,603,027	2	-0.17 0.26	0.10 0.31	2.58 0.26	12.45 6.11	12.45 6.11	13.35 6.07		3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	423,137,638	5	0.25 0.25	0.35 0.35	0.99 1.20					7/1/2017 7/1/2017
<b>Inflation-Linked Bonds</b> Total Inflation Linked Custom	<b>202,806,594</b>	<b>2</b>	<b>0.52</b> 0.48	<b>-0.09</b> -0.11	<b>0.17</b> 0.16	<b>1.73</b> 1.90	<b>1.73</b> 1.90	<b>3.91</b> 4.01	<b>-0.26</b> -0.15	<b>11/1/2009</b> 11/1/2009
<b>TOTAL INFLATION</b> Inflation Protection Custom BM	<b>755,547,259</b>	<b>9</b>	<b>0.25</b> 0.33	<b>0.19</b> 0.21	<b>0.98</b> 0.84					<b>7/1/2017</b> 7/1/2017
<b>Absolute Return</b> HFRI Fund of Funds Composite Index	<b>611,217,149</b>	<b>7</b>	<b>0.34</b> 0.90	<b>0.23</b> -0.05	<b>0.57</b> 1.16					<b>7/1/2017</b> 7/1/2017
<b>Traditional Fixed Income</b> Bloomberg Barclays U.S. Aggregate Bond Index	<b>960,240,532</b>	<b>11</b>	<b>0.49</b> 0.46	<b>-0.10</b> -0.13	<b>0.08</b> 0.06	<b>3.99</b> 3.54	<b>3.99</b> 3.54	<b>3.15</b> 2.65	<b>0.25</b> 0.55	<b>7/1/2000</b> 7/1/2000
<b>Total Cash and Other Funds</b>	<b>291,619,067</b>	<b>3</b>	<b>0.30</b>	<b>-0.25</b>	<b>-0.20</b>	<b>-1.64</b>	<b>-1.64</b>	<b>3.33</b>	<b>0.03</b>	<b>11/1/2012</b>
<b>Russell Overlay Fd</b>	<b>9,805,545</b>	<b>0</b>	<b>0.01</b>	<b>-0.02</b>	<b>-0.02</b>	<b>-0.09</b>	<b>-0.09</b>	<b>0.06</b>	<b>0.00</b>	<b>9/1/2008</b>
<b>TOTAL VOL PROTECTION</b>	<b>1,863,076,749</b>	<b>22</b>	<b>0.41</b>	<b>-0.03</b>	<b>0.17</b>					<b>7/1/2017</b>
<b>TOTAL STABILITY COMPOSITE</b>	<b>3,291,356,633</b>	<b>39</b>	<b>0.62</b>	<b>0.25</b>	<b>0.57</b>					<b>7/1/2017</b>
<b>TOTAL PLAN</b> <sup>1</sup> Total Plan Benchmark 60/40 Blend	<b>8,420,929,978</b>	<b>100</b>	<b>1.10</b> 1.18 1.15	<b>1.23</b> 1.20 1.11	<b>1.32</b> 1.25 1.27	<b>14.48</b> 14.39 15.41	<b>14.48</b> 14.39 15.41	<b>7.35</b> 6.42 5.92	<b>-0.28</b> -0.24 -0.98	<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>7,097,969,390</b>	<b>84</b>	<b>1.24</b> 1.21	<b>1.21</b> 1.03	<b>1.30</b> 1.22	<b>14.66</b> 14.45	<b>14.66</b> 14.45	<b>6.97</b> 6.13	<b>-1.68</b> -1.64	<b>4/1/1996</b> 4/1/1996

**END NOTES**
**12/31/2017**

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% Commodities</p>

## Section VII.

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### Absolute Returns

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

Absolute Return Portfolio  
Portfolio Performance Summary  
Estimated as of December 31, 2017

Fund	Market Value	Actual %	Dec	QTD	YTD	Returns					Std Dev	Sharpe Ratio	Incep Date
						FYTD	1 Year	3 Year	5 Year	Incep			
Absolute Return Portfolio													
Brevan Howard LP	18,355,458	3.0%	0.02%	-0.84%	-5.22%	-0.21%	-5.22%	-1.46%	-0.54%	0.32%	5.49%	-0.01	Nov-11
Capula Global Relative Value Fund Ltd.	70,509,673	11.6%		0.18%	3.79%	1.45%	3.79%	6.53%	7.07%	5.81%	1.88%	2.70	Dec-11
Davidson Kempner Institutional Partners, L.P.	85,876,540	14.1%	0.59%	0.73%	6.36%	2.19%	6.36%	4.92%	5.74%	5.99%	1.96%	2.70	Nov-11
DE Shaw Composite Fund LLC	105,446,776	17.3%		-0.46%	10.71%	5.49%	10.71%	10.58%	12.34%	12.86%	4.16%	2.80	Nov-11
Elliott Associates, L.P.	104,940,621	17.2%	1.80%	1.80%	9.00%	5.02%	9.00%	8.45%	9.39%	9.49%	3.61%	2.39	Nov-11
Graham Absolute Return Trading Ltd.	57,702,198	9.5%	-0.23%	-1.24%	-7.04%	0.62%	-7.04%	1.26%	2.11%	2.40%	5.08%	0.38	Jan-12
Samlyn Onshore Fund, L.P.	48,382,289	7.9%	1.76%	2.13%	12.17%	5.01%	12.17%	4.01%	8.02%	8.28%	5.91%	1.29	Jan-12
Viking Global Equities, LP	59,051,634	9.7%	-1.10%	1.43%	12.16%	4.74%	12.16%	5.27%	10.24%	10.51%	7.15%	1.36	Dec-11
Winton Fund Limited	38,584,413	6.3%	3.10%	7.69%	7.92%	8.64%	7.92%	1.85%	5.65%	4.22%	8.49%	0.47	Dec-11
Absolute Return Portfolio - Total	588,849,602	96.7%	0.50%	0.96%	6.70%	3.75%	6.70%	3.62%	5.60%	5.57%	3.05%	1.61	Nov-11
HFRI Fund of Funds Composite Index			0.90%	2.03%	7.74%	11.16%	7.74%	2.60%	4.00%	3.76%	3.27%	0.98	Nov-11
MSCI AC World Index Free - Net			1.61%	5.73%	23.97%	32.10%	23.97%	9.30%	10.80%	10.76%	10.51%	0.98	Nov-11
ML 3-month T-Bills			0.11%	0.28%	0.86%	1.04%	0.86%	0.41%	0.27%	0.23%	0.10%	-	Nov-11
Russell 3000 Index (DRI)			1.00%	6.34%	21.13%	31.78%	21.13%	11.12%	15.58%	15.37%	9.72%	1.47	Nov-11
Liquidating Portfolio													
Brigade Leveraged Capital Structures Fund LP - Holdback	3,188,048	0.5%	0.00%	0.00%	3.91%	12.94%	3.91%	4.51%	4.03%	4.26%	5.36%	0.70	Mar-12
Claren Road Credit Fund, Ltd.	793,764	0.1%	0.00%	-8.07%	-4.89%	-10.29%	-4.89%	-0.91%	-	-2.45%	10.96%	-0.23	Apr-13
ESG Cross Border Equity Fund LP - Holdback	1,095,973	0.2%	0.00%	0.00%	-4.43%	-11.13%	-4.43%	-7.56%	-	-8.37%	7.11%	-1.29	Jun-14
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series (liquidating trust)	304,828	0.1%	0.00%	-11.71%	-9.19%	-12.92%	-9.19%	-23.44%	-16.98%	-13.42%	17.68%	-0.74	Jan-12
Luxor Capital Partners, LP - Liquidating SPV	5,123,207	0.8%	-12.63%	-0.17%	44.37%	20.76%	44.37%	-	-	19.10%	20.27%	0.91	Jul-16
OZ Domestic Partners II, L.P. - Holdback	5,537,981	0.9%	0.00%	0.00%	4.47%	11.03%	4.47%	2.59%	5.65%	6.53%	4.35%	1.35	Nov-11
PFM Diversified Fund, L.P. - Holdback	3,925,246	0.6%	0.00%	0.00%	1.67%	4.67%	1.67%	0.69%	5.21%	4.75%	8.22%	0.54	Mar-12
Liquidating/Redeeming - Total	19,969,047	3.3%	-3.58%	-1.25%	6.78%	2.44%	6.78%	-0.07%	-1.77%	-0.38%	7.17%	-0.09	Nov-11
Total Absolute Return Portfolio	608,818,649	100.0%	0.36%	0.89%	6.54%	3.71%	6.54%	3.44%	5.19%	5.24%	3.02%	1.53	Nov-11
HFRI Fund of Funds Composite Index			0.90%	2.03%	7.74%	11.16%	7.74%	2.60%	4.00%	3.76%	3.27%	0.98	Nov-11
Market Indices													
Libor3Month			0.14%	0.38%	1.29%	1.74%	1.29%	0.79%	0.58%	0.55%	0.11%	-	Nov-11
Barclays Aggregate Bond Index			0.46%	0.39%	3.55%	0.93%	3.55%	2.25%	2.10%	2.56%	2.71%	0.74	Nov-11
Barclays High Yield Credit Bond Index			0.30%	0.46%	7.50%	15.47%	7.50%	6.36%	5.78%	7.26%	5.23%	1.27	Nov-11
S&P 500 TR			1.11%	6.64%	21.83%	31.36%	21.83%	11.41%	15.79%	15.51%	9.48%	1.52	Nov-11
MSCI EAFE - Net			1.61%	4.23%	25.03%	32.13%	25.03%	7.80%	7.90%	8.10%	12.59%	0.64	Nov-11
MSCI EMF (Emerging Markets Free) - Net			3.59%	7.44%	37.28%	43.44%	37.28%	9.10%	4.35%	4.97%	15.39%	0.36	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 December 31, 2017

Fund	QTD	YTD	Dec	Nov	Oct	Trailing Returns			Calendar Year Returns					5 Yr Std Dev	Sharpe Ratio			Start Date
						1 Year	3 Year	5 Year	2016	2015	2014	2013	2012		3 yr	5 yr	Incep.	
Absolute Return																		
Brevan Howard LP	-0.79%	-5.31%	0.02%	0.09%	-0.90%	-5.31%	-1.49%	-0.53%	2.99%	-1.98%	-0.78%	2.68%	3.91%	5.76%	-0.36	-0.16	0.80	Sep-05
Capula Global Relative Value Fund Ltd.	0.18%	3.79%				3.79%	6.55%	7.08%	8.37%	7.54%	8.14%	7.60%	0.41%	1.76%	3.08	3.51	1.86	Oct-05
Davidson Kempner Institutional Partners, L.P.	0.76%	6.11%	0.59%	-0.53%	0.70%	6.11%	4.75%	5.63%	6.71%	1.51%	4.45%	9.52%	6.87%	2.07%	2.43	2.39	1.59	Mar-96
DE Shaw Composite Fund LLC	-0.50%	10.41%				10.41%	10.03%	11.41%	6.12%	13.68%	15.57%	11.51%	13.94%	3.96%	2.26	2.61	1.58	Mar-01
Elliott Associates, L.P.	1.80%	8.80%	1.80%	-0.10%	0.10%	8.80%	8.01%	8.93%	12.98%	2.51%	8.24%	12.44%	13.18%	3.39%	1.88	2.38	1.94	Jan-90
Graham Absolute Return Trading Ltd.	-1.24%	-7.01%	-0.23%	-0.49%	-0.52%	-7.01%	1.80%	5.18%	11.78%	1.50%	10.42%	10.50%	9.29%	7.45%	0.17	0.64	0.94	Jan-05
Samlyn Onshore Fund, L.P.	2.09%	12.14%	1.76%	-0.93%	1.27%	12.14%	3.85%	7.79%	1.17%	-1.29%	9.24%	18.93%	10.49%	6.03%	0.54	1.18	1.08	Mar-07
Viking Global Equities, LP	2.07%	13.01%	-1.10%	0.30%	2.90%	13.01%	5.54%	10.35%	-3.92%	8.27%	13.47%	22.65%	12.75%	7.70%	0.61	1.25	1.43	Oct-99
Winton Fund Limited	7.69%	7.89%	3.10%	-0.02%	4.47%	7.89%	1.84%	5.65%	-3.01%	0.95%	13.88%	9.43%	-3.56%	8.79%	0.16	0.60	0.68	Oct-97
Liquidating Portfolio																		
Brigade Leveraged Capital Structures Fund LP	-0.29%	6.31%	0.36%	-0.49%	-0.16%	6.31%	5.30%	4.51%	23.04%	-10.73%	0.61%	6.13%	6.91%	5.78%	0.68	0.70	0.74	Jan-07
Claren Road Credit Fund, Ltd.	-2.45%	1.75%	0.00%	-0.33%	-2.13%	1.75%	-6.50%	-4.98%	-12.72%	-7.96%	-10.10%	5.43%	1.49%	7.57%	-1.02	-0.71	0.33	Jan-06
ESG Cross Border Equity Fund LP	0.00%	-0.05%	0.00%	0.00%	0.00%	-0.05%	-6.21%	-2.74%	-13.04%	-5.06%	-7.16%	13.59%	6.74%	7.29%	-0.88	-0.42	0.55	Jan-04
Indus Asia Pacific Fund, LP	-11.71%	-9.19%	0.00%	0.42%	-12.08%	-9.19%	-23.44%	-16.85%	-26.00%	-33.23%	-15.60%	4.97%	8.21%	19.03%	-1.02	-0.89	-0.02	Dec-00
Luxor Capital Partners, LP	-0.17%	54.01%	-12.63%	5.81%	7.99%	54.01%	10.36%	7.69%	7.80%	-19.05%	-9.83%	19.53%	5.21%	14.39%	0.60	0.55	0.89	Apr-02
OZ Domestic Partners II, L.P.	0.95%	11.06%	0.65%	-1.66%	1.99%	11.06%	4.70%	6.68%	3.79%	-0.44%	5.45%	14.20%	12.01%	4.66%	0.80	1.29	1.12	Jan-04
PFM Diversified Fund, L.P.	3.41%	15.52%	0.00%	-0.68%	4.12%	15.52%	5.07%	7.82%	-7.11%	8.10%	2.84%	22.17%	5.59%	9.04%	0.53	0.82	0.86	Nov-04
Benchmark																		
HFRI Fund of Funds Composite Index	2.03%	7.74%	0.90%	-0.05%	1.16%	7.74%	2.60%	4.00%	0.51%	-0.27%	3.37%	8.96%	4.79%	3.25%				Jan-90
HFRI Fund Weighted Composite Index	2.51%	8.54%	0.90%	0.53%	1.06%	8.54%	4.20%	4.92%	5.44%	-1.12%	2.98%	9.13%	6.36%	3.59%				Jan-90
Market Indices																		
3 Month Libor - BOM	0.38%	1.29%	0.14%	0.12%	0.12%	1.29%	0.79%	0.58%	0.76%	0.33%	0.23%	0.27%	0.42%	0.12%				Jan-87
Barclays Aggregate Bond Index	0.39%	3.55%	0.46%	-0.13%	0.06%	3.55%	2.25%	2.10%	2.66%	0.57%	5.94%	-2.02%	4.23%	2.85%				Jan-76
Barclays High Yield Credit Bond Index	0.46%	7.50%	0.30%	-0.26%	0.42%	7.50%	6.36%	5.78%	17.14%	-4.46%	2.46%	7.46%	15.81%	5.22%				Jul-83
S&P 500 (TR)	6.64%	21.83%	1.11%	3.07%	2.33%	21.83%	11.41%	15.79%	11.96%	1.38%	13.69%	32.39%	16.00%	9.49%				Jun-88
MSCI EAFE - Net - USD	4.23%	25.03%	1.61%	1.05%	1.52%	25.03%	7.80%	7.90%	1.00%	-0.81%	-4.90%	22.78%	17.31%	11.67%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	7.44%	37.28%	3.59%	0.20%	3.51%	37.28%	9.10%	4.35%	11.19%	-14.92%	-2.19%	-2.60%	18.23%	14.39%				Dec-87

Note: The above is manager composite history.

## Section VIII.

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### Private Equity Returns

## Portfolio Summary

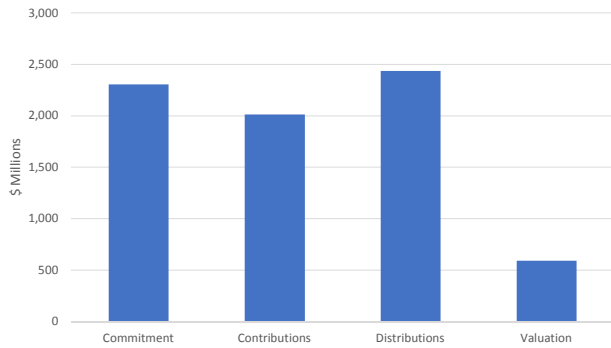
9/30/2017

All Investments

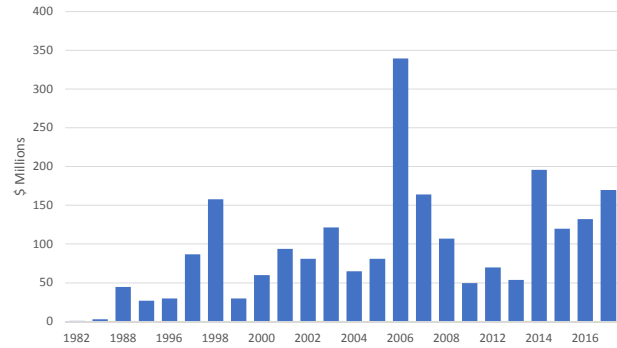
### Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Valuation	Multiple of Cost	IRR	TWR
Private Equity Funds									
	Buyout	81	1,383,642,373	1,233,360,030	1,572,557,540	352,313,985	1.56	13.25%	12.89%
	Direct Lending	3	75,000,000	52,061,378	30,870,747	30,719,789	1.18	9.70%	8.29%
	Distressed Debt	14	263,000,000	220,486,591	237,664,019	70,911,299	1.40	10.31%	10.04%
	Energy	9	198,000,000	147,044,137	190,810,041	29,549,616	1.50	23.81%	7.88%
	Fund of Funds	1	45,000,000	45,000,000	106,748,821	-	2.37	19.94%	-100.00%
	Secondary	4	60,000,000	54,952,240	63,882,193	2,934,029	1.22	5.70%	1.96%
	Venture Capital	22	281,250,000	261,733,530	235,304,354	106,355,901	1.31	5.25%	2.98%
<b>Total: Private Equity Funds</b>		<b>135</b>	<b>2,305,892,373</b>	<b>2,014,637,907</b>	<b>2,437,837,716</b>	<b>592,784,619</b>	<b>1.50</b>	<b>13.48%</b>	<b>11.38%</b>

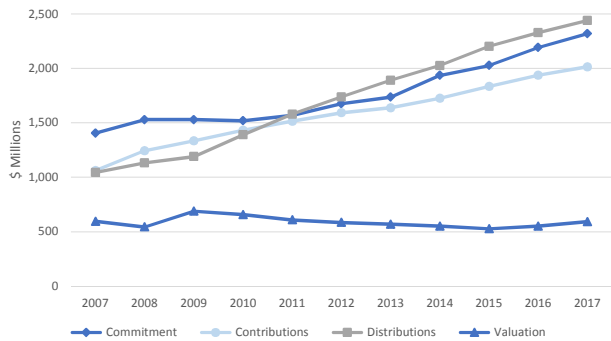
Cash Flow and Valuation Summary



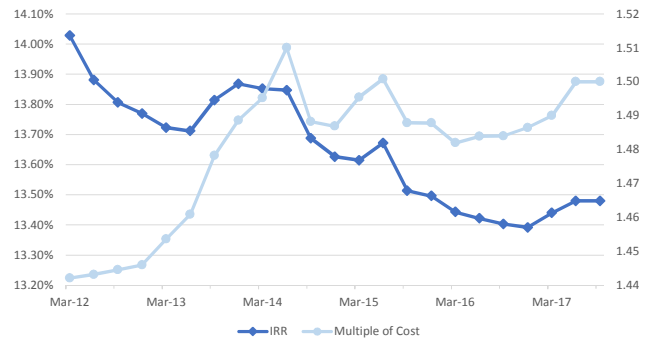
Commitment by Vintage Year



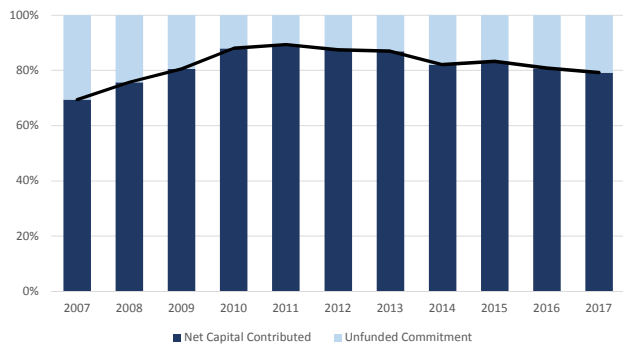
Historical Cash Flows and Valuation



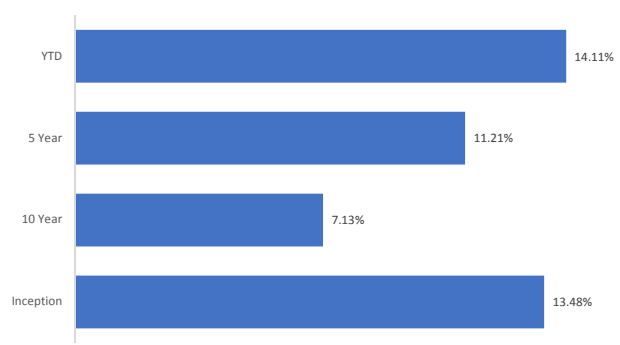
Historical Performance



Historical Percent Funded



Period IRRs



**Employees' Retirement System of Rhode Island Private Equity Performance**  
**9/30/2017**

Current Partnerships	Vintage Year	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
Fenway Partners Capital Fund II	1998	Buyout	15,000,000	18,538,740	20,462,364	206,830	1,600,288	4.7	1.2
Nautic Partners V	2000	Buyout	20,000,000	20,329,437	40,413,948	638,041	1,380,456	17.1	2.1
Providence Equity Partners IV	2000	Buyout	25,000,000	35,976,647	68,572,594	1,990,528	32,010	23.9	1.9
CVC European Equity Partners III	2001	Buyout	20,000,000	23,943,588	59,551,716	114,421	1,358,184	41.0	2.5
Parthenon Investors II	2001	Buyout	23,960,000	23,409,381	37,045,489	1,821,022	876,827	12.3	1.6
Leeds Equity Partners IV	2003	Buyout	10,000,000	10,209,327	11,467,347	1,099,639	2,110,389	4.5	1.3
Nordic Capital Fund V	2003	Buyout	€14,615,550	21,434,529	58,016,017	0	812,842	21.0	2.7
TPG Partners IV	2003	Buyout	15,000,000	16,672,684	31,030,047	64,421	1,490,877	15.6	2.0
Aurora Equity Partners III	2004	Buyout	15,000,000	16,243,392	26,952,245	835,850	504,898	15.1	1.7
Birch Hill Equity Partners III	2005	Buyout	CAD 18,000,000	18,932,021	31,383,048	221,492	3,853,374	12.4	1.9
CVC European Equity Partners IV	2005	Buyout	€16,500,000	21,261,115	40,464,309	2,293,401	551,389	17.0	1.9
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,133	36,171,706	2,200,670	2,068,220	3.8	1.2
Centerbridge Capital Partners	2006	Buyout	15,000,000	23,577,635	38,936,515	1,095,593	3,157,621	19.6	1.8
Charterhouse Capital Partners VIII	2006	Buyout	€15,000,000	18,405,042	17,611,940	-	23,276	-0.7	1.0
Fenway Partners Capital Fund III	2006	Buyout	15,000,000	17,230,534	14,006,244	1,011,799	6,675,739	3.5	1.2
LNK Partners	2006	Buyout	12,500,000	12,127,438	16,864,774	374,814	(76,294)	8.0	1.4
Nordic Capital Fund VI	2006	Buyout	€15,000,000	22,438,197	33,036,011	-	1,414,721	7.0	1.5
TPG Partners V	2006	Buyout	20,000,000	20,697,887	23,460,596	1,774,959	5,359,440	5.2	1.4
Green Equity Investors V	2007	Buyout	20,000,000	20,422,420	29,063,613	1,731,093	12,943,749	18.0	2.1
Nautic Partners VI	2007	Buyout	20,000,000	23,976,560	47,554,599	777,632	6,547,695	17.6	2.3
Providence Equity Partners VI	2007	Buyout	25,000,000	29,333,734	29,154,434	1,320,819	11,215,708	6.5	1.4
Trilantic Capital Partners IV	2007	Buyout	11,098,351	11,562,139	16,412,421	1,196,107	2,549,748	14.6	1.6
Bein Capital Fund X	2008	Buyout	25,000,000	24,300,000	28,768,434	762,500	9,760,279	9.5	1.6
CVC European Equity Partners V	2008	Buyout	€20,000,000	29,450,297	36,988,715	343,813	12,442,756	14.6	1.7
Nordic Capital Fund VII	2008	Buyout	€15,000,000	20,853,034	15,350,378	938,754	13,323,139	5.7	1.4
TPG Partners VI	2008	Buyout	10,000,000	13,817,426	13,662,001	715,414	5,217,794	9.2	1.4
Advent International GPE VII	2012	Buyout	20,000,000	18,000,000	7,600,000	2,000,000	22,895,828	19.8	1.7
Providence Equity Partners VII	2012	Buyout	25,000,000	24,228,017	12,200,090	7,920,672	22,467,642	20.5	1.4
Nordic Capital Fund VIII	2013	Buyout	€15,000,000	11,878,270	368,111	6,330,579	18,231,186	18.5	1.6
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	14,766,147	2,387,263	5,944,577	19,066,599	17.8	1.5
Carlyle Asia Partners IV	2014	Buyout	30,000,000	19,926,235	2,930,747	13,045,404	24,417,416	16.2	1.4
CVC Capital Partners VI	2014	Buyout	€15,000,000	11,190,381	2,625,816	8,376,760	10,582,526	11.6	1.2
Nautic Partners VII	2014	Buyout	20,000,000	15,913,349	8,520,578	5,323,234	18,160,585	44.5	1.7
Riverside Micro-Cap Fund III	2014	Buyout	20,000,000	17,758,317	(4,719)	2,241,683	31,825,791	23.8	1.8
Sorenson Capital Partners III	2014	Buyout	30,000,000	19,983,997	-	17,156,386	20,751,137	2.5	1.0
Baring Asia Private Equity Fund VI	2015	Buyout	15,000,000	9,483,640	1,214,178	6,707,969	9,716,428	13.8	1.2
Centerbridge Capital Partners III	2015	Buyout	25,000,000	11,742,005	1,765,871	14,401,179	12,571,408	18.0	1.2
Paine & Partners Capital Fund IV	2015	Buyout	30,000,000	16,199,556	805,848	14,605,657	15,548,458	0.7	1.0
Advent International GPE VIII	2016	Buyout	20,000,000	9,030,000	-	10,970,000	9,369,099	11.5	1.0
Nautic Partners VIII	2016	Buyout	20,000,000	3,526,579	-	16,473,421	4,135,923	33.9	1.2
Southwest Partners VII	2016	Buyout	37,500,000	2,272,488	577,053	35,227,512	394,336	-7.5	0.4
Tenex Capital Partners II	2016	Buyout	25,000,000	7,944,907	690,537	17,616,961	6,870,286	-6.0	1.0
RLH IV	2017	Buyout	40,000,000	1,374,381	-	38,625,619	1,351,111	-1.7	1.0
Capital Spring Investment Partners	2016	Direct Lending	30,000,000	9,164,684	142,242	20,359,399	9,724,978	6.1	1.1
Avenue Special Situations Fund IV	2006	Distressed Debt	20,000,000	25,179,595	32,810,307	-	89,405	8.3	1.3
MHR Institutional Partners III	2006	Distressed Debt	20,000,000	20,800,000	20,764,995	6,974,396	10,115,860	7.7	1.5
Avenue Special Situations Fund V	2007	Distressed Debt	20,000,000	20,329,267	26,462,123	-	27,528	10.6	1.3
WLR Recovery Fund IV	2007	Distressed Debt	8,000,000	7,277,318	8,983,688	275,492	988,861	7.9	1.4
Oaktree European Principal Fund III	2011	Distressed Debt	20,000,000	17,150,000	4,950,724	5,783,415	20,600,796	11.1	1.5
Centerbridge Special Credit Partners II	2012	Distressed Debt	25,000,000	22,500,000	13,818,489	2,500,000	9,218,812	0.7	1.0
Garrison Opportunity Fund IV	2014	Distressed Debt	30,000,000	23,913,341	(498,315)	6,031,705	26,712,416	5.6	1.1
First Reserve Fund X	2004	Energy	20,000,000	19,999,999	36,485,800	1	84,247	31.0	1.8
Kayne Anderson Energy Fund III	2005	Energy	15,000,000	15,965,344	15,214,110	366,426	135,911	-2.1	1.0
First Reserve Fund XI	2006	Energy	20,000,000	22,125,580	14,833,318	(1)	1,075,481	-8.4	0.7
Kayne Anderson Energy Fund IV	2007	Energy	15,000,000	16,605,519	16,631,275	-	1,255,627	2.6	1.1
EnCap Energy Capital Fund IX	2013	Energy	18,000,000	18,658,902	11,448,048	2,550,577	12,741,217	15.6	1.3
EnCap Energy Capital Fund X	2015	Energy	25,000,000	15,034,351	3,485,075	11,528,128	13,674,320	17.1	1.1
EnCap Energy Capital Fund XI	2017	Energy	50,000,000	845,000	-	49,155,000	582,813	-31.0	0.7
W Capital Partners	2004	Secondaries	15,000,000	14,197,500	10,381,292	802,500	251,793	-9.9	0.7
Collier International Partners V	2006	Secondaries	15,000,000	12,563,354	15,832,410	3,270,000	1,346,823	7.5	1.4
W Capital Partners II	2007	Secondaries	15,000,000	14,896,718	19,701,094	1,596,691	1,307,461	10.7	1.4
Alta BioPharma Partners III	2003	Venture Capital	15,000,000	14,250,000	20,297,956	750,000	493,212	5.8	1.5
Lighthouse Capital Partners V	2003	Venture Capital	11,250,000	10,462,500	12,208,726	787,500	121,221	3.8	1.2
Granite Global Ventures II	2004	Venture Capital	15,000,000	14,333,510	20,268,907	675,000	3,879,793	6.7	1.7
Leapfrog Ventures II	2005	Venture Capital	10,000,000	9,490,000	6,811,564	510,000	3,758,538	1.9	1.1
Alta Partners VIII	2006	Venture Capital	15,000,000	15,000,000	24,903,567	-	8,376,372	16.6	2.2
Castle Ventures III	2006	Venture Capital	5,000,000	5,009,730	1,396,371	-	933,235	-14.6	0.5
Focus Ventures III	2006	Venture Capital	15,000,000	15,000,000	5,556,044	-	2,357,734	-11.4	0.5
Granite Global Ventures III	2006	Venture Capital	15,000,000	14,625,748	26,962,782	375,000	8,505,444	16.3	2.4
Point 406 Ventures I	2006	Venture Capital	10,000,000	10,950,534	8,474,403	370,000	8,099,164	7.5	1.5
Point Judith Venture Fund II	2006	Venture Capital	5,000,000	6,173,309	2,201,897	78,179	4,137,157	0.5	1.0
Lighthouse Capital Partners VI	2007	Venture Capital	15,000,000	14,250,000	19,600,846	750,000	1,132,930	7.2	1.5
Paladin III	2008	Venture Capital	10,000,000	12,690,089	5,964,811	542,009	10,942,040	7.0	1.3
Industry Ventures Partnership Holdings III	2014	Venture Capital	25,000,000	19,562,702	2,442,579	5,500,000	23,103,347	14.0	1.3
Industry Ventures Partnership Holdings III C	2015	Venture Capital	15,000,000	6,800,000	-	8,100,000	9,040,649	33.8	1.3
Industry Ventures Partnership Holdings IV	2016	Venture Capital	10,000,000	3,100,000	-	6,900,000	3,552,676	28.9	1.1
Other funds in aggregate**	various		120,000,000	119,525,041	120,084,026	15,799,468	38,953,168		
<b>Total</b>			<b>\$ 1,575,758,339</b>	<b>\$ 1,350,023,240</b>	<b>\$ 1,392,704,033</b>	<b>\$ 398,826,113</b>	<b>\$ 592,871,913</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, McNeeney & Partners, Thomas McNeeney & Partners II and Wellspring Capital Partners III.



## Section IX.

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### Real Estate Returns

## PORTFOLIO SUMMARY

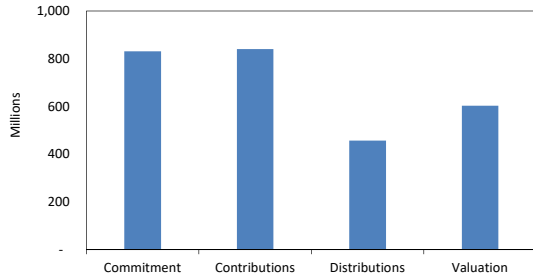
9/30/2017

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

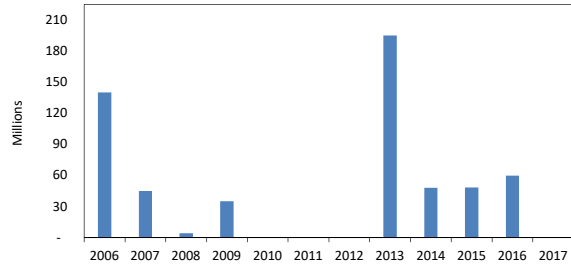
### Performance Summary

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	479,974,910	297,356,303	424,575,207	1.5x	5.4%	5.6%
	Non-Core	21	415,260,817	359,531,413	158,757,807	178,000,079	0.9x	-1.7%	1.9%
<b>Total: Real Estate Funds</b>		<b>29</b>	<b>830,134,474</b>	<b>839,506,323</b>	<b>456,114,110</b>	<b>602,575,286</b>	<b>1.3x</b>	<b>4.0%</b>	<b>4.8%</b>
<b>Total:</b>		<b>29</b>	<b>830,134,474</b>	<b>839,506,323</b>	<b>456,114,110</b>	<b>602,575,286</b>	<b>1.3x</b>	<b>4.0%</b>	<b>4.8%</b>

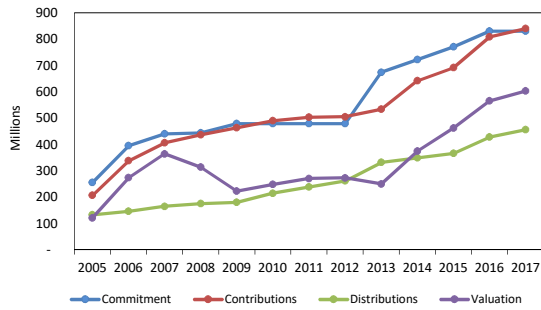
### Cash Flow and Valuation Summary



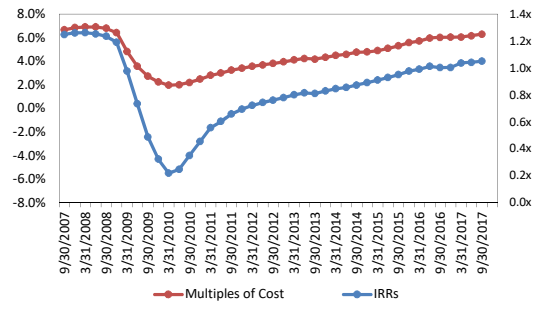
### Commitment by Vintage Year



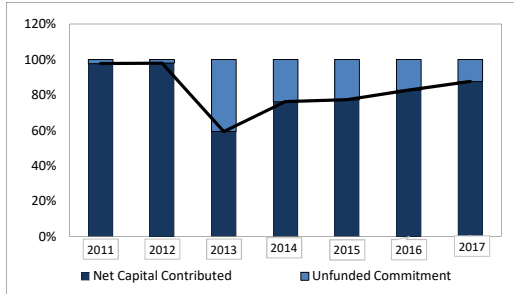
### Historical Cash Flows and Valuation



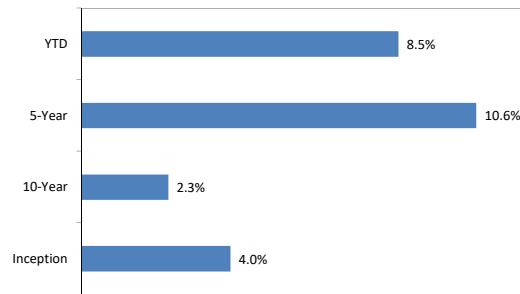
### Historical Performance



### Historical Percent Funded



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



<sup>(1)</sup> Investment information listed as of March 31, 1989 through September 30, 2017 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 September 30, 2017, there are five core funds and eleven non-core funds, which includes a closed, but unfunded commitment to GEM Realty Fund VI (non-core).

<sup>(5)</sup> The YTD IRR presented is an annualized percentage.

**Employees' Retirement System of Rhode Island Real Estate Performance**  
**9/30/2017**

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	15,973,670	-	102,543,569	11.5	1.5
Heitman America Real Estate Trust	2014	Core	60,000,000	60,000,000	8,736,760	-	78,507,059	10.7	1.3
JP Morgan Strategic Property Fund	2006	Core	75,000,000	75,000,000	26,806,943	-	105,649,683	6.3	1.6
Morgan Stanley Prime Property Fund	2005	Core	35,000,000	35,000,000	21,159,528	-	62,450,335	7.3	2.0
Prudential (PRISA)	2005	Core	50,000,000	50,000,000	19,960,380	-	75,424,561	5.3	1.7
Magna Hotel Fund III	2008	Value-Add	4,000,000	3,426,573	5,329,587	573,427	825,051	15.8	1.8
IC Berkeley Partners III	2013	Value-Add	18,000,000	16,038,326	7,961,760	1,961,674	13,466,307	17.0	1.3
Exeter Industrial Value Fund II	2014	Value-Add	30,000,000	29,099,454	5,154,794	900,546	32,494,084	17.6	1.3
Waterton Fund XII	2014	Value-Add	35,000,000	33,161,467	2,813,921	1,838,533	40,870,671	17.6	1.3
Crow Holdings Retail Fund	2015	Value-Add	24,000,000	20,935,313	1,976,163	3,064,687	21,671,551	12.3	1.1
IC Berkeley Partners IV	2016	Value-Add	30,000,000	8,814,545	1,783,071	21,185,455	8,152,881	-12.9	0.9
TriCon Capital Fund VII	2005	Opportunistic	15,000,000	14,571,533	4,099,197	428,467	950,766	-18.2	0.3
JP Morgan Alternative Property Fund	2006	Opportunistic	20,000,000	20,000,000	14,750,429	-	178,065	-4.4	0.7
GEM Realty Fund V	2013	Opportunistic	50,000,000	36,501,311	6,621,000	13,498,689	42,314,528	13.5	1.2
Lone Star Real Estate Fund IV	2015	Opportunistic	24,260,817	17,930,581	4,992,430	6,330,236	17,076,175	21.7	1.2
<b>Total</b>			<b>\$ 540,134,477</b>	<b>\$ 490,352,763</b>	<b>\$ 148,119,633</b>	<b>\$ 49,781,714</b>	<b>\$ 602,575,286</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 X.

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### Infrastructure Returns

## Portfolio Summary

9/30/2017

All Private Infrastructure

\$USD

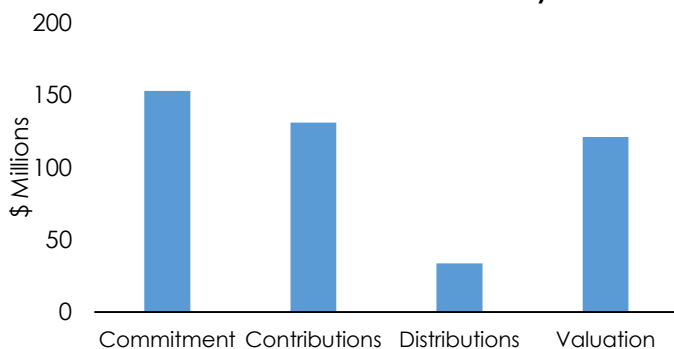
Investment	Commitment	Contributions	Distributions	Reported Valuation	Multiple of Cost*	Since Inception IRR*	1-yr IRR*	QTD IRR*
IFM Global Infrastructure	50,000,000	50,000,000	3,818,800	57,180,313	1.22	8.9	11.4	1.7
ISQ Global Infrastructure Fund	50,000,000	51,287,636	20,602,637 <sup>1</sup>	37,830,265	1.14	15.3	18.9	2.9
Stonepeak Infrastructure Fund II	43,000,000	27,439,077	9,192,523 <sup>2</sup>	23,483,843	1.19	20.2	9.4	4.0
Stonepeak Infrastructure Fund II Master Co-Investment	10,000,000	2,507,050	0	2,495,282	1.00	-0.52	-	-0.43
<b>Total</b>	<b>153,000,000</b>	<b>131,233,763</b>	<b>33,613,960</b>	<b>120,989,703</b>	<b>1.18x</b>	<b>11.7%</b>	<b>13.1%</b>	<b>2.5%</b>

\*Net of Fees and Expenses

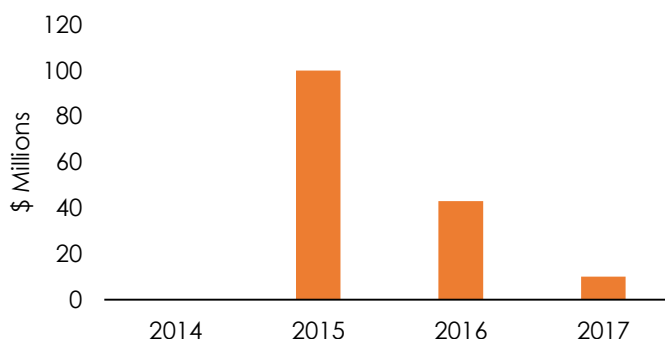
1. Includes \$18,312,336 of recallable distributions

2. Partial distributions subject to recall total \$7,465,089

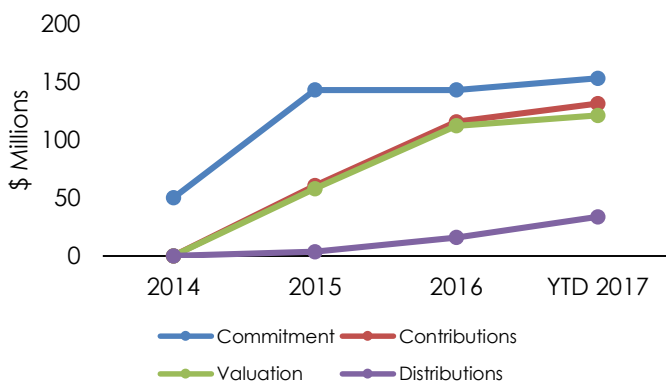
### Cash Flow and Valuation Summary



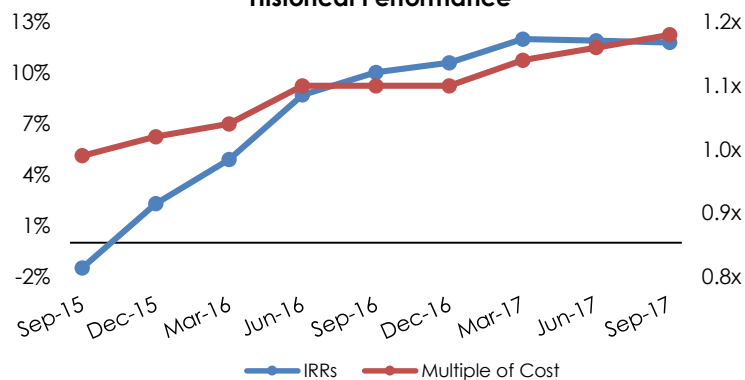
### Commitment by Vintage Year



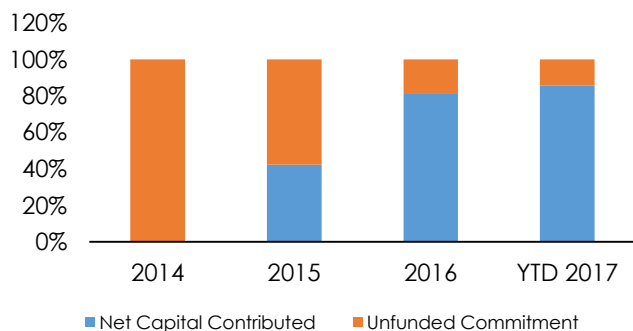
### Historical Cash Flows and Valuation



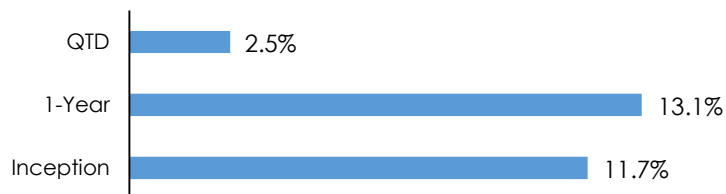
### Historical Performance



### Historical Percent Funded



### Period IRRs



**Employees' Retirement System of Rhode Island Private Infrastructure Performance**  
**9/30/2017**

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	3,818,800	-	57,180,313	8.9	1.2
ISQ Global Infrastructure Fund, L.P.	2015	Value-Add	50,000,000	51,287,636	20,602,637	17,024,700	37,830,265	15.3	1.1
Stonepeak Infrastructure Fund II, L.P.	2016	Opportunistic	43,000,000	27,439,077	9,192,523	23,026,012	23,483,843	20.2	1.2
Stonepeak Infrastructure Fund II-C	2016	Opportunistic	10,000,000	2,507,050	-	7,492,950	2,495,282	-0.5	1.0
<b>Total</b>			<b>\$ 153,000,000</b>	<b>\$ 131,233,763</b>	<b>\$ 33,613,960</b>	<b>\$ 47,543,662</b>	<b>\$ 120,989,703</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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### Cash Flow

# Monthly Valuation Change

Period : 2017-12-01 - 2017-12-31

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
<b>Grand Total</b>		<b>8,420,929,978.21</b>	<b>91,452,077.55</b>	<b>(10,825,596.00)</b>	<b>8,340,303,496.66</b>
<b>Total Global Equity</b>		<b>4,154,741,005.45</b>	<b>60,765,640.82</b>	<b>(145,000,000.00)</b>	<b>4,238,975,364.63</b>
<b>Global Equity</b>		<b>3,843,643,023.31</b>	<b>58,886,792.30</b>	<b>(145,000,000.00)</b>	<b>3,929,756,231.01</b>
	SSGA R3000 INDEX	1,203,152,151.46	13,947,815.96	(227,000,000.00)	1,416,204,335.50
	SSGA MSCI EAFE	937,858,847.07	13,995,584.84	150,000,000.00	773,863,262.23
	SSGA MSCI CANADA	114,225,665.25	4,308,070.18	0.00	109,917,595.07
	SSGA MSCI EM	371,237,074.54	12,954,003.80	0.00	358,283,070.74
	QVM TILT	1,217,169,284.99	13,681,317.52	(68,000,000.00)	1,271,487,967.47
<b>Global Equity Hedge Funds</b>		<b>311,097,982.14</b>	<b>1,878,848.52</b>	<b>0.00</b>	<b>309,219,133.62</b>
	DAVIDSON KEMPNER	85,876,539.76	491,206.28	0.00	85,385,333.48
	ELLIOTT ASSOCIATES	104,940,726.39	1,958,618.66	0.00	102,982,107.73
	INDUS ASIA PACIFIC	304,828.22	0.00	0.00	304,828.22
	PFM DIVERSIFIED	3,925,246.43	0.00	0.00	3,925,246.43
	SAMLYN ON/OFFSHORE	50,766,304.24	836,800.60	0.00	49,929,503.64
	VIKING GLOBAL EQUITI	59,051,633.82	(666,458.19)	0.00	59,718,092.01
	LUXOR CAP PTNS LP	5,123,333.71	(741,318.83)	0.00	5,864,652.54
	ESG CBE FUND LP	1,109,369.57	0.00	0.00	1,109,369.57
<b>Private Equity</b>		<b>493,311,720.26</b>	<b>3,672,927.62</b>	<b>(5,926,132.05)</b>	<b>495,564,924.69</b>
<b>Private Equity</b>		<b>493,311,720.26</b>	<b>3,672,927.62</b>	<b>(5,926,132.05)</b>	<b>495,564,924.69</b>
	PRIVATE EQUITY	493,311,720.26	3,672,927.62	(5,926,132.05)	495,564,924.69
<b>Total Fixed Income</b>		<b>960,234,516.47</b>	<b>4,695,812.47</b>	<b>0.00</b>	<b>955,538,704.00</b>
<b>Fixed Income</b>		<b>960,234,516.47</b>	<b>4,695,812.47</b>	<b>0.00</b>	<b>955,538,704.00</b>
	MACKAY SHIELDS	475,032,112.93	2,488,176.43	0.00	472,543,936.50
	PYRAMIS GLOBAL ADV	485,202,403.54	2,207,636.04	0.00	482,994,767.50
<b>Total Real Return</b>		<b>1,146,374,860.14</b>	<b>9,932,380.13</b>	<b>(23,135,463.83)</b>	<b>1,159,577,943.84</b>
<b>Alternative Absolute Return</b>		<b>225,627,595.56</b>	<b>445,386.84</b>	<b>0.00</b>	<b>225,182,208.72</b>
	BREXAN HOWARD	18,356,227.82	5,448.56	0.00	18,350,779.26
	DE SHAW	105,446,775.71	(577,688.04)	0.00	106,024,463.75
	OZ DOMESTIC PTRS	5,537,981.00	0.00	0.00	5,537,981.00
	WINTON FUTURE FD	38,584,413.36	1,158,444.26	0.00	37,425,969.10
	GRAHAM ABS RETURN	57,702,197.67	(140,817.94)	0.00	57,843,015.61
<b>Alternative Fixed Income</b>		<b>74,491,571.73</b>	<b>(240,929.30)</b>	<b>0.00</b>	<b>74,732,501.03</b>
	BRIGADE LEV CAP	3,188,047.59	0.00	0.00	3,188,047.59
	CAPULA GLOBAL	70,509,672.80	(99,783.08)	0.00	70,609,455.88
	CLAREN ROAD CR. FUND	793,851.34	(141,146.22)	0.00	934,997.56
<b>Credit</b>		<b>363,183,096.67</b>	<b>986,199.53</b>	<b>(22,000,000.00)</b>	<b>384,196,897.14</b>
	PIMCO	189,791,642.10	332,595.46	(11,000,000.00)	200,459,046.64
	WAMCO	173,391,454.57	653,604.07	(11,000,000.00)	183,737,850.50
<b>GILBs</b>		<b>202,806,594.44</b>	<b>1,057,071.95</b>	<b>(6,000,000.00)</b>	<b>207,749,522.49</b>
	BROWN BROTHERS HARR	202,806,594.44	1,057,071.95	(6,000,000.00)	207,749,522.49
<b>Publicly Traded Infrastructure</b>		<b>280,266,001.74</b>	<b>7,684,651.11</b>	<b>4,864,536.17</b>	<b>267,716,814.46</b>
	PRIV INFRASTR AGGR	129,603,026.81	(217,489.67)	4,864,536.17	124,955,980.31
	HARVEST FUND ADVISOR	150,662,974.93	7,902,140.78	0.00	142,760,834.15
<b>Total Cash</b>		<b>29,608,095.73</b>	<b>(119,723.24)</b>	<b>(7,034,399.25)</b>	<b>36,762,218.22</b>
<b>Cash Accounts</b>		<b>29,608,095.73</b>	<b>(119,723.24)</b>	<b>(7,034,399.25)</b>	<b>36,762,218.22</b>
	ERSRI CASH	27,755,776.73	(119,723.24)	(5,108,803.25)	32,984,303.22
	CITIZENS CASH	1,852,319.00	0.00	(1,925,596.00)	3,777,915.00



# Monthly Valuation Change

Period : 2017-12-01 - 2017-12-31

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
<b>Total Other</b>		<b>9,805,545.20</b>	<b>560,678.00</b>	<b>0.00</b>	<b>9,244,867.20</b>
<b>Other</b>		<b>9,805,545.20</b>	<b>560,678.00</b>	<b>0.00</b>	<b>9,244,867.20</b>
	RUSSELL OVERLAY FD	9,805,545.20	560,678.00	0.00	9,244,867.20
<b>Total Miscellaneous</b>		<b>1,875,798.69</b>	<b>72,449.01</b>	<b>996,691.29</b>	<b>806,658.39</b>
<b>Miscellaneous Accounts</b>		<b>1,875,798.69</b>	<b>72,449.01</b>	<b>996,691.29</b>	<b>806,658.39</b>
	RI TRANS ACCT	5,456.73	148.00	0.00	5,308.73
	SHOTT CAPITAL	1,809,658.36	67,840.87	996,691.29	745,126.20
	NON-US EQUITY TRANS	54,668.46	(60.81)	0.00	54,729.27
	FIXED INC TRANS	6,015.14	4,520.95	0.00	1,494.19
<b>*unclassified</b>		<b>1,624,978,436.27</b>	<b>11,871,912.74</b>	<b>169,273,707.84</b>	<b>1,443,832,815.69</b>
<b>*Unclassified</b>		<b>1,624,978,436.27</b>	<b>11,871,912.74</b>	<b>169,273,707.84</b>	<b>1,443,832,815.69</b>
	ERSRI SMA CASH	252,199,969.81	319,154.74	(8,600,000.00)	260,480,815.07
	MACKAY LONG DURATION	166,199,831.18	2,368,946.83	46,000,000.00	117,830,884.35
	WAMCO LONG DURATION	165,789,505.07	2,247,551.53	46,000,000.00	117,541,953.54
	CPC CB LLC	114,759,828.30	3,738,116.97	34,000,000.00	77,021,711.33
	CPC QIS LLC	115,111,099.03	3,051,674.24	1,000,000.00	111,059,424.79
	CPC AP LLC	110,872,361.89	(913,104.77)	54,000,000.00	57,785,466.66
	PRIVATE CREDIT	77,869,227.47	0.00	1,336,619.36	76,532,608.11
	OPPORTUNISTIC PRV CR	28,711,446.00	651.00	(1,468,641.00)	30,179,436.00
	CORE REAL ESTATE	423,137,637.61	1,058,922.20	(1,490,349.36)	423,569,064.77
	NON CORE REAL ESTATE	170,327,529.91	0.00	(1,503,921.16)	171,831,451.07

CASH FLOW ANALYSIS - INCOME & EXPENSES

Employees Retirement System

FISCAL YEAR 2018	FY 2017-18												
	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2018	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2017
MEMBER BENEFITS	823,366,068	68,500,000	68,500,000	68,500,000	68,500,000	68,500,000	68,500,000	68,844,811	68,905,777	68,912,763	68,797,894	68,654,488	68,250,336
ADMINISTRATIVE EXPENSES	9,323,198	1,169,348.10	1,005,428	738,845	892,566	768,264	484,162	855,600	497,568	844,408	1,200,489	473,241	393,280
INVESTMENT EXPENSES	6,875,201	145,711	1,035,970	874,882	1,134,860	528,297	329,085	(955)	574,291	875,124	77,109	1,034,676	266,153
TOTAL OUTFLOW	839,564,467	69,815,059	70,541,398	70,113,726	70,527,426	69,796,561	69,313,247	69,699,456	69,977,635	70,632,295	70,075,492	70,162,404	68,909,768
CONTRIBUTIONS	516,500,028	55,658,886	43,884,816	38,943,512	46,923,170	40,327,455	53,349,987	47,242,656	41,926,087	45,184,050	24,149,562	22,954,146	55,955,701
OTHER INCOME*	74,764,440	3,453,123	8,323,084	12,121,233	8,192,692	7,278,049	6,918,798	(461,275)	8,186,393	9,405,337	3,322,153	3,119,643	4,905,210
TOTAL INCOME	591,264,468	59,112,009	52,207,900	51,064,745	55,115,862	47,605,504	60,268,785	46,781,381	50,112,480	54,589,387	27,471,715	26,073,789	60,860,911
DIFFERENCE	(248,299,999)	(10,703,050)	(18,333,499)	(19,048,981)	(15,411,564)	(22,191,057)	(9,044,462)	(22,918,075)	(19,865,155)	(16,042,908)	(42,603,777)	(44,088,614)	(8,048,857)

Municipal Employees Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2018	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2017
MEMBER BENEFITS	95,004,763	7,900,000	7,900,000	7,900,000	7,900,000	7,900,000	7,900,000	7,987,514	7,994,201	7,964,379	7,919,871	7,882,040	7,856,758
ADMINISTRATIVE EXPENSES	2,157,828	270,038	232,184	169,799	205,127	176,177	109,317	201,000	116,695	197,622	278,994	109,981	90,893
INVESTMENT EXPENSES	1,589,377	33,649	239,237	201,063	260,810	121,148	74,303	(224)	134,689	204,810	17,920	240,459	61,512
TOTAL OUTFLOW	98,751,968	8,203,687	8,371,421	8,270,862	8,365,937	8,197,326	8,083,620	8,188,289	8,245,585	8,366,811	8,216,785	8,232,481	8,009,164
CONTRIBUTIONS	65,345,907	6,717,800	5,334,349	4,706,224	6,148,074	4,495,807	6,943,950	5,485,021	4,955,181	5,693,573	4,943,375	5,317,956	4,604,597
OTHER INCOME*	17,262,672	797,431	1,922,052	2,785,667	1,882,821	1,668,993	1,562,174	(108,364)	1,919,961	2,201,187	772,070	725,007	1,133,676
TOTAL INCOME	82,608,579	7,515,231	7,256,401	7,491,891	8,030,895	6,164,800	8,506,124	5,376,657	6,875,142	7,894,760	5,715,445	6,042,963	5,738,273
DIFFERENCE	(16,143,388)	(688,456)	(1,115,020)	(778,971)	(335,043)	(2,032,525)	422,503	(2,811,632)	(1,370,443)	(472,051)	(2,501,340)	(2,189,518)	(2,270,891)

CASH FLOW ANALYSIS - INCOME & EXPENSES

<b>State Police</b> Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2018	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2017
MEMBER BENEFITS	5,954,019	500,000	500,000	500,000	500,000	500,000	500,000	492,379	492,379	492,341	500,000	492,341	484,579
ADMINISTRATIVE EXPENSES	192,264	23,674	20,356	14,842	17,930	15,383	9,455	17,789	10,305	17,434	12,525	24,574	7,998
INVESTMENT EXPENSES	142,818	2,950	20,974	17,575	22,798	10,578	6,427	(20)	11,894	18,068	24,584	1,578	5,412
TOTAL OUTFLOW	6,289,101	526,624	541,329	532,417	540,728	525,960	515,882	510,149	514,578	527,842	537,109	518,493	497,989
CONTRIBUTIONS	7,094,068	564,377	505,403	628,202	577,192	621,162	669,574	549,262	631,211	792,032	640,662	490,527	424,464
OTHER INCOME*	1,533,845	69,911	168,506	243,498	164,579	145,725	135,118	(9,591)	169,546	194,181	84,619	68,003	99,750
TOTAL INCOME	8,627,914	634,288	673,909	871,700	741,771	766,887	804,692	539,672	800,757	986,213	725,281	558,530	524,215
DIFFERENCE	2,338,812	107,664	132,580	339,283	201,043	240,926	288,810	29,523	286,179	458,371	188,172	40,038	26,225

<b>Judicial</b> Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2018	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2017
MEMBER BENEFITS	2,735,284	227,956	227,937	227,918	227,918	227,879	227,841	227,995	227,976	227,976	227,976	227,956	227,956
ADMINISTRATIVE EXPENSES	99,136	12,367	10,633	7,745	9,356	8,023	4,915	9,360	5,424	9,164	12,882	5,078	4,188
INVESTMENT EXPENSES	72,934	1,541	10,956	9,171	11,896	5,517	3,341	(10)	6,261	9,498	827	11,103	2,834
TOTAL OUTFLOW	2,907,354	241,865	249,527	244,833	249,170	241,419	236,096	237,345	239,660	246,638	241,685	244,137	234,978
CONTRIBUTIONS	6,482,861	775,599	645,108	632,110	625,931	612,878	602,903	239,051	617,731	457,399	245,762	247,048	781,341
OTHER INCOME*	791,349	36,520	88,025	127,059	85,878	76,001	70,235	(5,046)	89,242	102,077	35,649	33,476	52,233
TOTAL INCOME	7,274,210	812,120	733,133	759,168	711,809	688,879	673,138	234,005	706,973	559,475	281,410	280,524	833,575
DIFFERENCE	4,366,856	570,255	483,606	514,335	462,639	447,461	437,042	(3,340)	467,313	312,837	39,725	36,387	598,596

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

FISCAL YEAR 2018		DIRECT BILLED INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES											
ERSRI & MERSRI		ACCRUAL BASIS											
	Projected Jul 17	Projected Aug	Projected Sept	Projected Oct	Projected Nov	Projected Dec	Projected Jan 18	Projected Feb	Projected Mar	Projected Apr	Projected May	Projected June	Projected TOTAL
<b>EQUITIES US</b>													
SSGA Russell 3000			41,941			42,000			42,000			42,000	167,941
Shott Capital/Hamilton Lane			10,797			1,000			1,000			1,000	13,797
SSGA QVM Tilt			<u>121,825</u>			<u>115,000</u>			<u>115,000</u>			<u>115,000</u>	<u>466,825</u>
			174,563			158,000			158,000			164,800	188,538
<b>FIXED INCOME</b>													
Pyramis			170,000			170,000			170,000			170,000	680,000
Mackay Shields			161,197			170,000			170,000			170,000	671,197
Brown Bros.TIPS/GILB			<u>74,186</u>			<u>77,000</u>			<u>77,000</u>			<u>77,000</u>	<u>305,186</u>
			405,383			417,000			417,000			417,000	1,656,383
<b>INT'L EQUITIES</b>													
SSGA MSCI EAFE			58,822			55,000			55,000			55,000	223,822
SSGA MSCI CAD			8,000			8,000			8,000			8,000	32,000
SSGA MSCI Emerg Mkts			<u>93,947</u>			<u>82,000</u>			<u>82,000</u>			<u>82,000</u>	<u>339,947</u>
			160,769			145,000			145,000			145,000	595,769
<b>CREDIT</b>													
WAMCO			115,575			130,000			130,000			130,000	505,575
PIMCO			<u>125,861</u>			<u>130,000</u>			<u>130,000</u>			<u>130,000</u>	<u>515,861</u>
			241,436			260,000			260,000			260,000	1,021,436
<b>Infrastructure</b>													
Harvest Partners			300,000			300,000			300,000			300,000	1,200,000
<b>Long Duration</b>													
WAMCO			9,119										9,119
Mackay Shields			<u>12,388</u>										<u>12,388</u>
			21,507										21,507
<b>REAL ESTATE</b>													
Direct Billed Real Estate	193,678	0	0	961,509	75,189	0	411,042	0	94,343	322,544	107,294	0	2,165,599
<b>ALTERNATIVE INVESTMENTS</b>													
Direct Billed Private Equity	142,868	1,309,667	97,602	147,522	652,829	(1,214)	3,044	667,372	1,339,709	782,990	1,202,765	184,262	6,529,416
<b>SUB TOTAL-INV MGMT FEES</b>	336,546	1,309,667	1,401,261	1,109,032	728,018	1,278,786	414,085	667,372	2,714,052	1,105,534	1,310,059	1,471,062	13,378,649
<b>PROFESSIONAL FEES</b>													
Legal	8,475	11,258	10,736	50,339	5,788	8,750	8,750	8,750	8,750	8,750	8,750	8,750	147,845
BNY Mellon - Custodial	60,277	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	489,277
Cliffwater	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	450,000
PCA/Russell/Aberdeen	21,283	21,458	23,660	26,487	91,768	72,831	14,583	14,583	78,809	14,583	14,583	107,852	502,481
Payden & Rygel	23,293	24,373	22,973	23,139	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	285,778
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>
	161,245	144,005	144,286	186,882	208,473	192,498	134,250	134,250	198,476	134,250	134,250	227,519	2,000,385
<b>OPERATING EXPENSE</b>													
Retirement Transfers	359,498	488,767	677,553	721,761	837,137	870,703	706,200	529,069	1,384,884	537,192	1,162,726	1,361,470	9,636,960
Other Expense	<u>6,270</u>	<u>0</u>	<u>0</u>	<u>14,463</u>	<u>21,750</u>	<u>23,820</u>	<u>750</u>	<u>9,523</u>	<u>39,903</u>	<u>1,795</u>	<u>23,073</u>	<u>45,001</u>	<u>186,348</u>
	365,768	488,767	677,553	736,224	858,887	894,523	706,950	538,592	1,424,787	538,987	1,185,799	1,406,471	9,823,308
<b>TOTAL:</b>	863,559	1,942,439	2,223,099	2,032,138	1,795,378	2,365,808	1,255,286	1,340,214	4,337,315	1,778,771	2,630,108	3,105,052	25,202,341

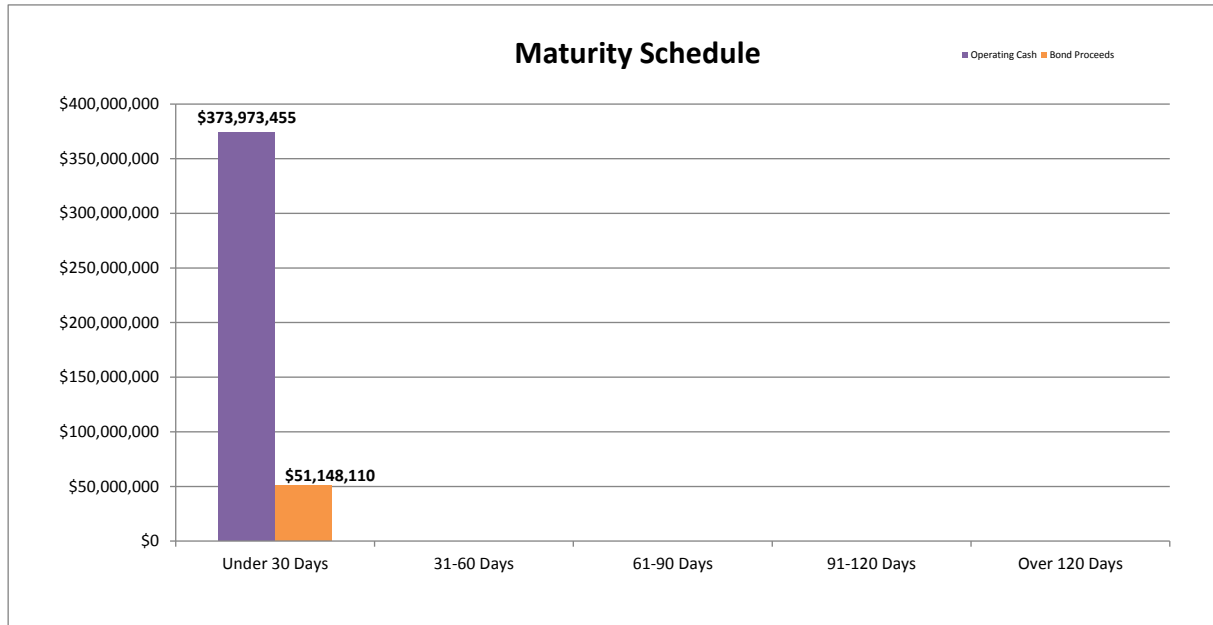
Note: Numbers in bold are actual.

## Section XII.

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### Short-Term Investments

### Short-Term Investment Maturity Schedule & SIC Compliance Report at December 31, 2017



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	119,527,822	119,527,822
	0%	0%	0%	0%	32%	32.0%
Bank RI	15,385,032	0	16,173,395	0	0	31,558,426
	4%	0%	4%	0%	0%	8.4%
Santander Bank	0	0	0	31,759,659	0	31,759,659
	0%	0%	0%	8%	0%	8.5%
People's Credit Union	0	0	0	1,842,103	0	1,842,103
	0%	0%	0%	0%	0%	0.49%
Navigant Credit Union	0	0	0	4,967,726	0	4,967,726
	0%	0%	0%	1%	0%	1.33%
Fidelity	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0.00%
Bristol County Savings Bk	0	4,366,726	0	0	0	4,366,726
	0%	1%	0%	0%	0%	1.17%
Centreville Bank	0	8,025,272	0	0	0	8,025,272
	0%	2%	0%	0%	0%	2.15%
Citizens Bank	0	0	0	35,911,536	0	35,911,536
	0%	0%	0%	10%	0%	9.6%
Webster Bank	0	0	0	22,048,793	0	22,048,793
	0%	0%	0%	6%	0%	5.9%
Customers Bank	0	0	0	41,572,627	0	41,572,627
	0%	0%	0%	11%	0%	11.1%
Washington Trust	0	56,076,822	0	3,661,742	0	59,738,563
	0%	15%	0%	1%	0%	16.0%
TD Bank	0	0	0	12,654,202	0	12,654,202
	0%	0%	0%	3%	0%	3.4%
<b>TOTALS</b>	<b>15,385,032</b>	<b>68,468,820</b>	<b>16,173,395</b>	<b>154,418,388</b>	<b>119,527,822</b>	<b>373,973,456</b>

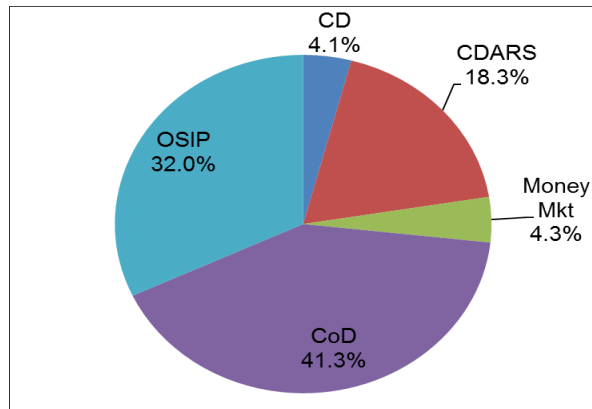
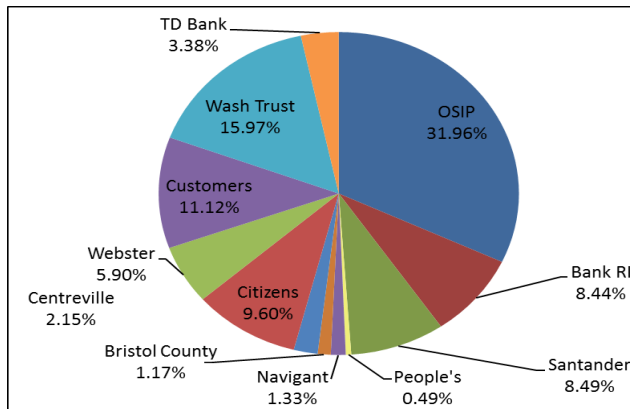
**State of Rhode Island**  
**Short Term Cash Monthly Performance**  
**Performance for**  
**December 01, 2017 to December 31, 2017**

<b>Fund Name</b>	<b>Beginning Balance</b>	<b>Ending Balance</b>	<b>Average Daily Balance</b>	<b>Earnings</b>	<b>Yield(Annual)</b>
GENERAL FUND	\$ 173,560,611.37	\$ 92,128,021.43	\$ 142,408,404.83	\$ 108,114.67	0.8939%
H.A.V.A	\$ 299.29	\$ 299.49	\$ 299.48	\$ 0.20	0.7863%
GENERAL FUND (HIST PRES)	\$ 546,619.26	\$ 547,156.87	\$ 547,136.37	\$ 635.48	1.3675%
HISTORIC TAX CREDITS	\$ 6,966,097.55	\$ 6,972,783.53	\$ 6,972,530.18	\$ 7,853.69	1.3262%
HIGHWAY FUND	\$ 62,421,627.36	\$ 56,076,081.05	\$ 54,212,911.98	\$ 58,241.27	1.2649%
T.D.I. RESERVE (DET)	\$ 119,064,748.43	\$ 103,798,246.58	\$ 112,018,345.02	\$ 82,716.53	0.8694%
RICAP GL FUND 21	\$ 24,494,991.11	\$ 19,168,011.93	\$ 22,070,541.23	\$ 21,591.96	1.1519%
BOND CAPITAL FUND	\$ 3,240,777.77	\$ 43,824.85	\$ 343,817.29	\$ 234.27	0.8023%
R.I. CLEAN WATER ACT	\$ 3,231,964.98	\$ 3,234,854.35	\$ 3,234,746.96	\$ 3,328.95	1.2117%
STATE LOTTERY FUND	\$ 45,277,111.57	\$ 43,610,684.31	\$ 38,722,335.84	\$ 38,802.21	1.1798%
ASSESSED FRINGE BEN ADM	\$ 5,725,526.99	\$ 3,728,943.39	\$ 5,196,561.90	\$ 3,826.32	0.8670%
AUTO EQUIPMENT SERVICE	\$ 1,262.23	\$ 1,263.06	\$ 1,263.03	\$ 0.86	0.8017%
HEALTH INSURANCE FUND	\$ 18,752,061.70	\$ 26,269,892.44	\$ 24,236,886.55	\$ 23,182.39	1.1262%
FLEET REVOLVING LOAN FUND	\$ 2,278,749.35	\$ 2,281,294.42	\$ 2,281,238.92	\$ 1,720.48	0.8880%
EMPLOYEES RETIREMENT	\$ 712,122.40	\$ 269,174.83	\$ 33,803,056.92	\$ 23,104.87	0.8048%
MUNICIPAL EMPLOYEES RET.	\$ 953,946.36	\$ 55,582.65	\$ 3,516,795.87	\$ 2,390.04	0.8002%
RETIREE HEALTH FUND	\$ 2,012,178.17	\$ 3,413,786.22	\$ 3,633,058.84	\$ 2,549.00	0.8261%
BOG RETIREE FUND	\$ 200,959.35	\$ 201,102.69	\$ 201,098.27	\$ 136.99	0.8021%
RIPTA HEALTH FUND	\$ 2,042,531.02	\$ 2,043,885.90	\$ 2,043,840.54	\$ 1,406.24	0.8101%
PERMANENT SCHOOL FUND	\$ 1,967,054.10	\$ 1,968,988.53	\$ 1,968,914.77	\$ 2,286.51	1.3673%
TEACHER RETIREE HEALTH FUND	\$ 3,285,550.92	\$ 3,287,756.95	\$ 3,287,682.71	\$ 2,301.46	0.8242%
RI ST POL RETIREE HEALTH	\$ 524,972.44	\$ 525,366.86	\$ 525,355.29	\$ 358.47	0.8034%
RI LEG RETIREE HEALTH	\$ 834.32	\$ 834.87	\$ 834.85	\$ 0.57	0.8039%
RI JUDICIAL RETIREE HEALTH	\$ 40,752.74	\$ 40,779.54	\$ 40,778.65	\$ 27.71	0.8001%
UNIVERSITY COLLEGE	\$ 13,458,991.25	\$ 3,472,315.92	\$ 4,717,305.97	\$ 5,308.31	1.3249%
INDUS. BLDG. & MTG. INS.	\$ 831,534.69	\$ 832,522.32	\$ 832,491.13	\$ 966.90	1.3675%
<b>Operating Funds Totals</b>	<b>\$ 491,593,876.72</b>	<b>\$ 373,973,454.98</b>	<b>\$ 466,818,233.39</b>	<b>\$ 391,086.35</b>	<b>0.986%</b>
CCDL 2004 SERIES A	\$ -	\$ -	\$ -	\$ -	
BOND CCDL 2006 SERIES C	\$ 741,570.63	\$ 519,631.79	\$ 593,612.73	\$ 684.00	1.3567%
GO BND-NTAX 2007 SERIES A	\$ 366,001.70	\$ 366,001.70	\$ 365,987.99	\$ 425.09	1.3676%
CCDL10B BOND CAPITAL COMPONENT	\$ 950,000.00	\$ 950,000.00	\$ 949,964.41	\$ 1,103.36	1.3675%
CCDL10C	\$ 161,787.26	\$ 161,946.38	\$ 161,940.31	\$ 188.09	1.3675%
CCDL2011A	\$ 5,329,102.23	\$ 5,319,763.47	\$ 5,323,409.06	\$ 6,182.74	1.3675%
CCDL2012B	\$ 6,162,188.54	\$ 6,092,902.03	\$ 6,101,613.64	\$ 7,085.98	1.3674%
GO CCDL 2013A	\$ 2,700,000.00	\$ 2,700,000.00	\$ 2,699,898.84	\$ 3,135.87	1.3675%
GO CCDL 2013B	\$ 3,125,000.00	\$ -	\$ -	\$ -	0.0000%
GO CCDL 2014A	\$ 94,193.10	\$ 94,193.10	\$ 94,189.57	\$ 109.40	1.3676%
GO CCDL 2014B	\$ 40,664.27	\$ 40,664.27	\$ 40,662.75	\$ 47.23	1.3676%
GO CCDL 2016A	\$ 24,644,973.46	\$ 14,872,874.79	\$ 18,500,748.94	\$ 21,226.02	1.3509%
GO CCDL 2016B	\$ 4,206,572.06	\$ 4,015,100.71	\$ 4,108,865.31	\$ 4,765.90	1.3657%
GO CCDL 2017	\$ 18,001,227.35	\$ 14,366,690.29	\$ 15,787,065.28	\$ 18,234.69	1.3600%
CLEAN WATER 2004 SERIES A	\$ -	\$ -	\$ -	\$ -	
CCDL99A 1999A	\$ 206,569.39	\$ 206,569.39	\$ 206,561.65	\$ 239.92	1.3676%
CLEAN WATER 2007 SERIES A	\$ 205,772.44	\$ 205,772.44	\$ 205,764.73	\$ 238.99	1.3675%
CCDL2011A CLEAN WATER COMPONENT	\$ 1,236,000.00	\$ 1,236,000.00	\$ 1,235,953.69	\$ 1,435.53	1.3675%
<b>Bond Proceeds Fund Totals</b>	<b>\$ 68,171,622.43</b>	<b>\$ 51,148,110.36</b>	<b>\$ 56,376,238.90</b>	<b>\$ 65,102.81</b>	<b>1.360%</b>
<b>Grand Totals</b>	<b>\$ 559,765,499.15</b>	<b>\$ 425,121,565.34</b>	<b>\$ 523,194,472.29</b>	<b>\$ 456,189.16</b>	<b>1.023%</b>

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

**Issuer Credit Rating  
December 31, 2017**

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	Moody's	S&P	S&P		Veribanc
Bank of America	-	0.0%	Baa1	P-2	A-2	Baa1	A-			Stable		GREEN/*
Bank RI	3,4	8.4%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Citizens Bank	4	9.6%	Baa1	P-2	A-2	A1	BBB+			Stable		GREEN/*
Customers Bank	4	11.1%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/*
Webster Bank	4	5.9%	Baa1	P-1	A-2	A1	BBB+			Stable		GREEN/**
Washington Trust	4,7	16.0%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Santander Bank	4	8.5%	A3	P-2	A-2	A3	A-			Stable		GREEN/*
TD Bank	4	3.4%	Aa2	P-1	A-1+	Aa2	AA-			Stable		GREEN/**
Ocean State Inv. Pool	6	32.0%	N/R	N/R	N/R	N/R	N/R			N/R		N/R
People's Credit Union	4	0.5%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Navigant Credit Union	4	1.3%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Home Loan Inv. Bank	-		N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Bristol County Sav. Bank	4	1.2%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**
Centreville Bank	4	2.2%	N/R	N/R	N/R	N/R	N/R			N/R		GREEN/**/BB



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

**Veribanc 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



State of Rhode Island

OSIP Performance FY17 Q2

October 1, 2017 through December 31, 2017

Fund Name	Beginning Balance	Ending Balance	Average Daily Balance	Earnings	Yield
GENERAL FUND	\$ 74,318,341	\$ 2,451,316	\$ -	\$ 135,822	1.19%
GENERAL FUND (HIST PRES)	\$ 546,066	\$ 547,150	\$ 546,048	\$ 1,720	1.25%
HISTORIC TAX CREDITS	\$ 6,452,217	\$ 6,465,026	\$ 6,452,067	\$ 20,318	1.25%
HIGHWAY FUND	\$ 46,827,768	\$ 44,120,731	\$ 46,004,458	\$ 144,590	1.25%
T.D.I. RESERVE (DET)	\$ 16,219,258	\$ 6,359,066	\$ 18,807,882	\$ 58,458	1.23%
RICAP GL FUND 21	\$ 16,538,082	\$ 8,466,300	\$ 13,183,288	\$ 41,060	1.24%
R.I. CLEAN WATER ACT	\$ 2,341,967	\$ 2,346,617	\$ 2,341,887	\$ 7,375	1.25%
STATE LOTTERY FUND	\$ 26,143,579	\$ 23,193,021	\$ 24,316,662	\$ 76,379	1.25%
ASSESSED FRINGE BEN ADM	\$ 611,722	\$ 612,936	\$ 611,701	\$ 1,926	1.25%
HEALTH INSURANCE FUND	\$ 13,390,466	\$ 17,417,049	\$ 13,520,583	\$ 42,676	1.25%
RETIREE HEALTH FUND	\$ 146	\$ 1,300,146	\$ 42,535	\$ 166	1.55%
BOG RETIREE FUND	\$ 729	\$ 731	\$ 729	\$ 2	1.25%
RIPTA HEALTH FUND	\$ 36,277	\$ 36,349	\$ 36,276	\$ 114	1.25%
PERMANENT SCHOOL FUND	\$ 1,964,384	\$ 1,968,284	\$ 1,964,317	\$ 6,186	1.25%
TEACHER RETIREE HEALTH FUND	\$ 139,947	\$ 140,225	\$ 139,944	\$ 441	1.25%
RI ST POL RETIREE HEALTH	\$ 3,117	\$ 3,123	\$ 3,117	\$ 10	1.25%
UNIVERSITY COLLEGE	\$ 9,541,936	\$ 3,267,274	\$ 9,944,866	\$ 30,458	1.22%
INDUS. BLDG. & MTG. INS.	\$ 1,230,258	\$ 832,477	\$ 1,021,528	\$ 3,186	1.24%

<b>Operating Funds Totals</b>	<b>\$ 216,306,263</b>	<b>\$ 119,527,822</b>	<b>\$ 138,937,886</b>	<b>\$ 570,885</b>	<b>1.26%</b>
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BOND CCDL 2006 SERIES C	\$ 742,274	\$ 519,632	\$ 691,130	\$ 2,155	1.24%
GO BND-NTAX 2007 SERIES A	\$ 366,353	\$ 366,002	\$ 365,709	\$ 1,151	1.25%
CCDL10B BOND CAPITAL COMPONENT	\$ 950,902	\$ 950,000	\$ 949,238	\$ 2,988	1.25%
CCDL10C	\$ 161,626	\$ 161,946	\$ 161,620	\$ 509	1.25%
CCDL2011A	\$ 5,336,130	\$ 5,319,763	\$ 5,323,532	\$ 16,759	1.25%
CCDL2012B	\$ 6,168,037	\$ 6,092,902	\$ 6,136,912	\$ 19,313	1.25%
GO CCDL 2013A	\$ 2,702,563	\$ 2,700,000	\$ 2,697,834	\$ 8,493	1.25%
GO CCDL 2013B	\$ 3,127,966	\$ -	\$ 2,646,989	\$ 6,201	0.93%
GO CCDL 2014A	\$ 1,633,430	\$ 94,193	\$ 528,163	\$ 1,582	1.19%
GO CCDL 2014B	\$ 40,703	\$ 40,664	\$ 40,632	\$ 128	1.25%
GO CCDL 2016A	\$ 30,475,139	\$ 14,872,875	\$ 24,192,703	\$ 74,977	1.23%
GO CCDL 2016B	\$ 4,222,353	\$ 4,015,101	\$ 4,173,652	\$ 13,123	1.25%
GO CCDL 2017	\$ 21,696,088	\$ 14,366,690	\$ 18,277,999	\$ 57,024	1.24%
CCDL99A 1999A	\$ 206,765	\$ 206,569	\$ 206,404	\$ 650	1.25%
CLEAN WATER 2007 SERIES A	\$ 205,968	\$ 205,772	\$ 205,607	\$ 647	1.25%
CCDL2011A CLEAN WATER COMPONENT	\$ 1,237,173	\$ 1,236,000	\$ 1,235,009	\$ 3,888	1.25%

<b>Bond Proceeds Fund Totals</b>	<b>\$ 79,273,469</b>	<b>\$ 51,148,110</b>	<b>\$ 67,833,132</b>	<b>\$ 209,589</b>	<b>1.22%</b>
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<b>Grand Totals</b>	<b>\$ 295,579,733</b>	<b>\$ 170,675,932</b>	<b>\$ 206,771,018</b>	<b>\$ 780,474</b>	<b>1.24%</b>
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## Section XIII.

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### Defined Contribution Plan



# 2017 YTD 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 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns			Annualized Total Returns as of 12/31/2017							Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	0 Year	%ile		
TIAA Stable Value			Current crediting rate = 2.00					0.50	2.00	2.00		1.92		1.89				1.89	
FIXED INCOME																			
Intermediate-Term Bond																			
Vanguard Total Bond Market Index Adm	VBTLX	4.92	195,871.82	0.05	0.05	2	-	0.41	3.57	3.57	55	2.18	53	2.02	51	3.95	61	4.20	11/12/01
BBgBarc US Agg Float Adj TR USD								0.41	3.63	3.63		2.27		2.10					
Intermediate-Term Bond Median				0.83	0.69			0.31	3.78	3.78		2.21		2.06		4.17			
Intermediate-Term Bond Number of Funds				1019	1019					1005		944		917		807			
Inflation-Protected Bond																			
PIMCO Real Return Instl	PRRIX	10.08	11,586.18	0.64	0.45	29	-	1.33	3.92	3.92	11	2.01	19	(0.03)	38	3.86	5	5.91	01/29/97
BBgBarc US Treasury US TIPS TR USD								1.26	3.01	3.01		2.05		0.13		3.53			
Inflation-Protected Bond Median				0.82	0.60			1.11	2.60	2.60		1.55		(0.27)		2.95			
Inflation-Protected Bond Number of Funds				240	240					239		231		217		156			
EQUITY																			
Large Cap Blend - Index																			
Vanguard Institutional Index I	VINIX	17.08	232,158.10	0.04	0.04	2	-	6.63	21.79	21.79	29	11.38	14	15.76	13	8.50	21	9.93	07/31/90
S&P 500 TR USD								6.64	21.83	21.83		11.41		15.79		8.50			
TIAA-CREF Social Choice Eq Instl	TISCX	12.08	3,059.07	0.19	0.19	7	-	6.19	20.93	20.93	51	10.24	48	14.89	46	8.38	26	5.84	07/01/99
Russell 3000 TR USD								6.34	21.13	21.13		11.12		15.58		8.60			
Large Blend Median				1.04	0.92			6.46	20.93	20.93		10.04		14.66		7.71			
Large Blend Number of Funds				1394	1394					1340		1276		1201		1065			
Mid-Cap Blend																			
Vanguard Mid Cap Index Institutional	VMCIX	19.67	94,732.67	0.05	0.05	2	-	5.67	19.29	19.29	17	9.40	43	15.02	17	8.94	38	10.14	05/21/98
Spliced Mid Cap Index *								5.65	19.30	19.30		9.42		15.06		8.96			
CRSP US Mid Cap TR USD								5.65	19.30	19.30		9.42		15.07		8.79			
Mid-Cap Blend Median				1.15	1.02			5.56	15.67	15.67		8.43		13.61		8.33			
Mid-Cap Blend Number of Funds				438	438					432		386		368		304			
Small Blend																			
Vanguard Small Cap Index I	VSCIX	1.75	84,634.84	0.05	0.05	2	-	5.10	16.25	16.25	13	9.85	37	14.45	26	9.71	17	9.17	07/07/97
Spliced Small Cap Index **								5.10	16.24	16.24		9.81		14.43		9.61			
CRSP US Small Cap TR USD								5.10	16.24	16.24		9.81		14.54		10.03			
Small Blend Median				1.30	1.15			3.40	12.70	12.70		9.02		13.38		8.16			
Small Blend Number of Funds				809	809					803		734		668		572			



# 2017 YTD 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 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns		Annualized Total Returns as of 12/31/2017								Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	10 Year	%ile		
<b>Foreign Large Blend</b>																			
TIAA-CREF International Eq Idx Instl	TCIEX	12.42	11,949.38	0.06	0.06	2	-	3.76	25.32	25.32	49	8.07	41	7.78	34	2.08	37	8.42	10/01/02
MSCI EAFE NR USD								4.23	25.03	25.03		7.80		7.90		1.94			
Foreign Large Blend Median				1.21	1.01			3.81	25.33	25.33		7.63		7.28		1.71			
Foreign Large Blend Number of Funds				763	763					744		654		627		485			
<b>Diversified Emerging Mkts</b>																			
Vanguard Emerging Mkts Stock Idx Adm	VEMAX	9.42	91,722.14	0.14	0.14	1	-	6.29	31.38	31.38	66	7.51	63	3.49	65	1.29	57	6.45	06/23/06
Spliced Emerging Markets Index ***								6.70	31.06	31.06		7.42		3.73		1.38			
FTSE EMs AC China A Inclusion NR USD								6.69	31.02	31.02		7.69		4.43		1.76			
FTSE Emerging NR USD								6.96	32.08	32.08		8.08		4.22		1.81			
MSCI EM NR USD								7.44	37.28	37.28		9.10		4.35		1.68			
Diversified Emerging Mkts Median				1.67	1.35			6.35	36.00	36.00		8.62		4.32		1.82			
Diversified Emerging Mkts Number of Funds				798	798	798				784	779	685	680	551	546	284	278		
<b>Miscellaneous Sector</b>																			
TIAA Real Estate Account	QREARX	1.67	24,943.71	0.85	0.85		0.24	1.29	4.37	4.37		5.90		7.88		2.49		6.35	10/02/95
<b>Lifecycle</b>																			
Vanguard Target Retire Inc Trust I				0.07	0.07			2.05	8.60	8.60		4.53		5.03		4.99		5.22	6/22/2007
Vanguard Target Retirement Income Composite								2.14	8.68	8.68		4.66		5.15		4.99			
Target-Date Retirement Median				0.72				2.09	8.85	8.85		4.14		4.39		4.13			
Target-Date Retirement Number of Funds				187						180	180	166	166	148	148	105	105		
Vanguard Target Retire 2015 Trust I				0.07	0.07			2.74	11.56	11.56		5.70		7.33		5.35		5.25	6/28/2007
Vanguard Target Retirement 2015 Composite								2.84	11.61	11.61		5.82		7.46		5.29			
Target-Date 2015 Median				0.65				2.61	11.42	11.42		5.54		6.79		4.60			
Target-Date 2015 Number of Funds				136						128	128	109	109	87	87	52	52		
Vanguard Target Retire 2020 Trust I				0.07	0.07			3.41	14.18	14.18		6.72		8.61		5.72		5.56	6/22/2007
Vanguard Target Retirement 2020 Composite								3.52	14.22	14.22		6.83		8.75		5.76			
Target-Date 2020 Median				0.73				3.01	12.66	12.66		5.84		7.19		4.55			
Target-Date 2020 Number of Funds				253						241	241	215	215	185	185	128	128		
Vanguard Target Retire 2025 Trust I				0.07	0.07			3.87	16.02	16.02		7.41		9.46		5.89		5.63	6/28/2007
Vanguard Target Retirement 2025 Composite								4.01	16.08	16.08		7.51		9.61		5.95			
Target-Date 2025 Median				0.73				3.51	15.08	15.08		6.68		8.21		5.05			
Target-Date 2025 Number of Funds				225						216	216	191	191	166	166	87	87		



# 2017 YTD 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 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns			Annualized Total Returns as of 12/31/2017							Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	0 Year	%ile		
Vanguard Target Retire 2030 Trust I				0.07	0.07			4.25	17.61	17.61		7.94		10.22		6.01		5.71	6/28/2007
Vanguard Target Retirement 2030 Composite								4.41	17.66	17.66		8.06		10.40		6.08			
Target-Date 2030 Median					0.78			4.05	17.01	17.01		7.32		9.02		5.04			
Target-Date 2030 Number of Funds					252					241	241	215	215	185	185	128	128		
Vanguard Target Retire 2035 Trust I				0.07	0.07			4.65	19.22	19.22		8.51		11.00		6.29		5.92	6/28/2007
Vanguard Target Retirement 2035 Composite								4.81	19.25	19.25		8.61		11.18		6.33			
Target-Date 2035 Median					0.75			4.45	18.73	18.73		8.04		9.93		5.55			
Target-Date 2035 Number of Funds					225					216	216	191	191	166	166	87	87		
Vanguard Target Retire 2040 Trust I				0.07	0.07			5.04	20.82	20.82		9.01		11.59		6.60		6.23	6/28/2007
Vanguard Target Retirement 2040 Composite								5.22	20.86	20.86		9.16		11.80		6.64			
Target-Date 2040 Median					0.80			4.76	19.86	19.86		8.25		10.29		5.35			
Target-Date 2040 Number of Funds					252					241	241	215	215	185	185	128	128		
Vanguard Target Retire 2045 Trust I				0.07	0.07			5.24	21.52	21.52		9.26		11.73		6.65		6.27	6/28/2007
Vanguard Target Retirement 2045 Composite								5.42	21.55	21.55		9.41		11.96		6.72			
Target-Date 2045 Median					0.75			4.89	20.69	20.69		8.68		10.68		5.82			
Target-Date 2045 Number of Funds					225					216	216	191	191	165	165	87	87		
Vanguard Target Retire 2050 Trust I				0.07	0.07			5.23	21.48	21.48		9.24		11.73		6.70		6.33	6/28/2007
Vanguard Target Retirement 2050 Composite								5.42	21.55	21.55		9.41		11.96		6.72			
Target-Date 2050 Median					0.80			5.02	20.86	20.86		8.60		10.79		5.66			
Target-Date 2050 Number of Funds					248					237	237	211	211	180	180	90	90		
Vanguard Target Retire 2055 Trust I				0.07	0.07			5.22	21.48	21.48		9.21		11.69				10.96	10/5/2010
Vanguard Target Retirement 2055 Composite								5.42	21.55	21.55		9.41		11.96					
Target-Date 2055 Median					0.75			4.99	21.18	21.18		8.81		10.91		6.81			
Target-Date 2055 Number of Funds					225					214	214	184	184	129	129	3	3		
Vanguard Target Retirement 2060 Trust I				0.07	0.07			5.23	21.51	21.51		9.22		11.69				10.92	3/1/2012
Vanguard Target Retirement 2060 Composite								5.42	21.55	21.55		9.41		11.96					
Target-Date 2060+ Median					0.75			5.13	21.30	21.30		9.17		11.59					
Target-Date 2060+ Number of Funds					205					167	167	44	44	1	1	0	0		
Vanguard Target Retirement 2065 Trust I				0.07	0.07			5.19										12.23	7/7/2017
Vanguard Target Retirement 2060 Composite								5.42											
Target-Date 2060+ Median					0.75			5.13	21.30	21.30		9.17		11.59					
Target-Date 2060+ Number of Funds					205					167	167	44	44	1	1	0	0		



# 2017 YTD 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 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 12/31/2017								Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		

Source: Morningstar & TIAA-CREF

Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 12/31/2017. All other data as of 12/31/2017.

**VA = Variable Annuity**

Since Incep. = Since Inception Date; 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.

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

\*\*\*\*\*The returns from the equal-weighted NFI-ODCE are calculated by the National Council of Real Estate Investment Fiduciaries, net of fees.

\*\*\*\*\*The unlevered property level returns for the Account and the NPI are both calculated by the National Council of Real Estate Investment Fiduciaries. Only NPI properties held by open end funds are included in the comparison index.

. %-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.

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

**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.

# 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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**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.**

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

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## Section XIV.

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### 457 Plans

### State of Rhode Island Total Assets 457 Plans

Plan Provider	3/31/2017	6/30/2017	9/30/2017	12/31/2017
Valic	\$ 60,141,182.50	\$ 60,165,038.87	\$ 45,902,986.78	\$ 9,649,545.00
Fidelity	\$ 127,861,233.12	\$ 133,009,424.77	\$ 141,370,554.17	\$ 147,786,502.78
ING/Voya	\$ 155,790,910.79	\$ 160,154,444.65	\$ 169,881,445.82	\$ 181,622,770.56
TIAA			\$ 351,144.57	\$ 24,342,894.00
<b>Total</b>	\$ 343,793,326.41	\$ 353,328,908.29	\$ 357,506,131.34	\$ 363,401,712.34



# 2017 YTD 457b Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns			Annualized Total Returns as of 12/31/2017							Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	10 Year	%ile		
TIAA Traditional RCP			Current crediting rate = 3.50					0.81	3.31	3.31		3.48		3.53		3.62		3.74	
FIXED INCOME																			
Intermediate-Term Bond																			
PIMCO Total Return Instl	PTTRX	3.33	73,815.90	0.51	0.46	22	-	0.11	5.13	5.13	10	2.80	21	2.21	39	5.23	8	7.32	05/11/87
BBgBarc US Agg Bond TR USD								0.39	3.54	3.54		2.24		2.10		4.01			
Vanguard Total Bond Market Index Adm	VBTLX	4.92	195,871.82	0.05	0.05	2	-	0.41	3.57	3.57	55	2.18	53	2.02	51	3.95	61	4.20	11/12/01
BBgBarc US Agg Float Adj TR USD								0.41	3.63	3.63		2.27		2.10					
Intermediate-Term Bond Median				0.83	0.69			0.31	3.78	3.78		2.21		2.06		4.17			
Intermediate-Term Bond Number of Funds				1019	1019					1005		944		917		807			
Inflation-Protected Bond																			
American Century Inflation Adjs Bond R5	AIANX	16.17	3,115.90	0.27	0.27	12	0.05	1.23	3.29	3.29	22	2.02	19	(0.10)	50	3.41	23	4.21	10/01/02
BBgBarc US Treasury US TIPS TR USD								1.26	3.01	3.01		2.05		0.13		3.53			
Inflation-Protected Bond Median				0.82	0.60			1.11	2.60	2.60		1.55		(0.27)		2.95			
Inflation-Protected Bond Number of Funds				240	240					239		231		217		156			
EQUITY																			
Large Cap Blend - Index																			
Vanguard Institutional Index I	VINIX	17.08	232,158.10	0.04	0.04	2	-	6.63	21.79	21.79	29	11.38	14	15.76	13	8.50	21	9.93	07/31/90
S&P 500 TR USD								6.64	21.83	21.83		11.41		15.79		8.50			
TIAA-CREF Social Choice Eq Instl	TISCX	12.08	3,059.07	0.19	0.19	7	-	6.19	20.93	20.93	51	10.24	48	14.89	46	8.38	26	5.84	07/01/99
Russell 3000 TR USD								6.34	21.13	21.13		11.12		15.58		8.60			
Large Blend Median				1.04	0.92			6.46	20.93	20.93		10.04		14.66		7.71			
Large Blend Number of Funds				1394	1394					1340		1276		1201		1065			
Mid-Cap Blend																			
Vanguard Mid Cap Index Institutional	VMCIX	19.67	94,732.67	0.05	0.05	2	-	5.67	19.29	19.29	17	9.40	43	15.02	17	8.94	38	10.14	05/21/98
Spliced Mid Cap Index *								5.65	19.30	19.30		9.42		15.06		8.96			
CRSP US Mid Cap TR USD								5.65	19.30	19.30		9.42		15.07		8.79			
Mid-Cap Blend Median				1.15	1.02			5.56	15.67	15.67		8.43		13.61		8.33			
Mid-Cap Blend Number of Funds				438	438					432		386		368		304			
Small Blend																			
Vanguard Small Cap Index I	VSCIX	1.75	84,634.84	0.05	0.05	2	-	5.10	16.25	16.25	13	9.85	37	14.45	26	9.71	17	9.17	07/07/97
Spliced Small Cap Index **								5.10	16.24	16.24		9.81		14.43		9.61			
CRSP US Small Cap TR USD								5.10	16.24	16.24		9.81		14.54		10.03			
Small Blend Median				1.30	1.15			3.40	12.70	12.70		9.02		13.38		8.16			
Small Blend Number of Funds				809	809					803		734		668		572			



# 2017 YTD 457b Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns		Annualized Total Returns as of 12/31/2017								Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	10 Year	%ile		
Foreign Large Blend																			
TIAA-CREF International Eq Idx Instl	TCIEX	12.42	11,949.38	0.06	0.06	2	-	3.76	25.32	25.32	49	8.07	41	7.78	34	2.08	37	8.42	10/01/02
MSCI EAFE NR USD								4.23	25.03	25.03		7.80		7.90		1.94			
Foreign Large Blend Median				1.21	1.01			3.81	25.33	25.33		7.63		7.28		1.71			
Foreign Large Blend Number of Funds				763	763					744		654		627		485			
Foreign Large Growth																			
American Funds Europacific Growth R6	RERGX	26.08	162,483.52	0.50	0.50	3	-	4.23	31.17	31.17	44	9.66	32	9.21	27	3.90	24	10.69	05/01/09
MSCI ACWI Ex USA NR USD								5.00	27.19	27.19		7.83		6.80		1.84			
Foreign Large Growth Median				1.28	1.14			4.34	31.24	31.24		9.11		8.13		2.79			
Foreign Large Growth Number of Funds				415	415	415				410	406	367	363	353	348	289	279		
Lifecycle																			
Vanguard Target Retire Inc Trust I				0.07	0.07			2.05	8.60	8.60		4.53		5.03		4.99		5.22	6/22/2007
Vanguard Target Retirement Income Composite								2.14	8.68	8.68		4.66		5.15		4.99			
Target-Date Retirement Median					0.72			2.09	8.85	8.85		4.14		4.39		4.13			
Target-Date Retirement Number of Funds					187					180	180	166	166	148	148	105	105		
Vanguard Target Retire 2015 Trust I				0.07	0.07			2.74	11.56	11.56		5.70		7.33		5.35		5.25	6/28/2007
Vanguard Target Retirement 2015 Composite								2.84	11.61	11.61		5.82		7.46		5.29			
Target-Date 2015 Median					0.65			2.61	11.42	11.42		5.54		6.79		4.60			
Target-Date 2015 Number of Funds					136					128	128	109	109	87	87	52	52		
Vanguard Target Retire 2020 Trust I				0.07	0.07			3.41	14.18	14.18		6.72		8.61		5.72		5.56	6/22/2007
Vanguard Target Retirement 2020 Composite								3.52	14.22	14.22		6.83		8.75		5.76			
Target-Date 2020 Median					0.73			3.01	12.66	12.66		5.84		7.19		4.55			
Target-Date 2020 Number of Funds					253					241	241	215	215	185	185	128	128		
Vanguard Target Retire 2025 Trust I				0.07	0.07			3.87	16.02	16.02		7.41		9.46		5.89		5.63	6/28/2007
Vanguard Target Retirement 2025 Composite								4.01	16.08	16.08		7.51		9.61		5.95			
Target-Date 2025 Median					0.73			3.51	15.08	15.08		6.68		8.21		5.05			
Target-Date 2025 Number of Funds					225					216	216	191	191	166	166	87	87		
Vanguard Target Retire 2030 Trust I				0.07	0.07			4.25	17.61	17.61		7.94		10.22		6.01		5.71	6/28/2007
Vanguard Target Retirement 2030 Composite								4.41	17.66	17.66		8.06		10.40		6.08			
Target-Date 2030 Median					0.78			4.05	17.01	17.01		7.32		9.02		5.04			
Target-Date 2030 Number of Funds					252					241	241	215	215	185	185	128	128		
Vanguard Target Retire 2035 Trust I				0.07	0.07			4.65	19.22	19.22		8.51		11.00		6.29		5.92	6/28/2007
Vanguard Target Retirement 2035 Composite								4.81	19.25	19.25		8.61		11.18		6.33			
Target-Date 2035 Median					0.75			4.45	18.73	18.73		8.04		9.93		5.55			
Target-Date 2035 Number of Funds					225					216	216	191	191	166	166	87	87		



# 2017 YTD 457b Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %ile	Rev Share	Recent Returns			Annualized Total Returns as of 12/31/2017							Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%ile	3 Year	%ile	5 Year	%ile	10 Year	%ile		
Vanguard Target Retire 2040 Trust I				0.07	0.07			5.04	20.82	20.82		9.01		11.59		6.60		6.23	6/28/2007
Vanguard Target Retirement 2040 Composite								5.22	20.86	20.86		9.16		11.80		6.64			
Target-Date 2040 Median					0.80			4.76	19.86	19.86		8.25		10.29		5.35			
Target-Date 2040 Number of Funds					252					241	241	215	215	185	185	128	128		
Vanguard Target Retire 2045 Trust I				0.07	0.07			5.24	21.52	21.52		9.26		11.73		6.65		6.27	6/28/2007
Vanguard Target Retirement 2045 Composite								5.42	21.55	21.55		9.41		11.96		6.72			
Target-Date 2045 Median					0.75			4.89	20.69	20.69		8.68		10.68		5.82			
Target-Date 2045 Number of Funds					225					216	216	191	191	165	165	87	87		
Vanguard Target Retire 2050 Trust I				0.07	0.07			5.23	21.48	21.48		9.24		11.73		6.70		6.33	6/28/2007
Vanguard Target Retirement 2050 Composite								5.42	21.55	21.55		9.41		11.96		6.72			
Target-Date 2050 Median					0.80			5.02	20.86	20.86		8.60		10.79		5.66			
Target-Date 2050 Number of Funds					248					237	237	211	211	180	180	90	90		
Vanguard Target Retire 2055 Trust I				0.07	0.07			5.22	21.48	21.48		9.21		11.69				10.96	10/5/2010
Vanguard Target Retirement 2055 Composite								5.42	21.55	21.55		9.41		11.96					
Target-Date 2055 Median					0.75			4.99	21.18	21.18		8.81		10.91		6.81			
Target-Date 2055 Number of Funds					225					214	214	184	184	129	129	3	3		
Vanguard Target Retirement 2060 Trust I				0.07	0.07			5.23	21.51	21.51		9.22		11.69				10.92	3/1/2012
Vanguard Target Retirement 2060 Composite								5.42	21.55	21.55		9.41		11.96					
Target-Date 2060+ Median					0.75			5.13	21.30	21.30		9.17		11.59					
Target-Date 2060+ Number of Funds					205					167	167	44	44	1	1	0	0		
Vanguard Target Retirement 2065 Trust I				0.07	0.07			5.19										12.23	7/7/2017
Vanguard Target Retirement 2060 Composite								5.42											
Target-Date 2060+ Median					0.75			5.13	21.30	21.30		9.17		11.59					
Target-Date 2060+ Number of Funds					205					167	167	44	44	1	1	0	0		

Source: Morningstar & TIAA-CREF

Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 12/31/2017. All other data as of 12/31/2017.

VA = Variable Annuity

Since Incep. = Since Inception Date; 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.



# 2017 YTD 457b Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
As of 12/31/2017	Ticker	Mgr. Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 12/31/2017								Since Incep.	Incep. Date
								3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		

\*\*\*\*\* = 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.**

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

\*\*\*\*\*The returns from the equal-weighted NFI-ODCE are calculated by the National Council of Real Estate Investment Fiduciaries, net of fees.

\*\*\*\*\*The unlevered property level returns for the Account and the NPI are both calculated by the National Council of Real Estate Investment Fiduciaries. Only NPI properties held by open end funds are included in the comparison index.



. %-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.

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**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.

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# STATE OF RHODE ISLAND

## Investment Performance Report

Compiled as of: January 16, 2018

**Understanding investment performance:** As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.Netbenefits.com](http://www.Netbenefits.com) (log in, choose plan, select Investment Choices & Research, and then pick investment option.).

Quarterly Data As Of: 12/31/2017

Product Name	Fund Code	Ticker	Quarterly Average Annual Returns 1 Year	Quarterly Average Annual Returns 5 Year	Quarterly Average Annual Returns 10 Year	Quarterly Average Annual Returns LOF	Inception Date	Short-term Trading fee (%/days)	Gross Expense Ratio	Gross Expense Ratio Date
Asset Class: Bond										
Morningstar Category: Intermediate-Term Bond			3.71%	2.05%	4.06%				1.26%	12/31/2017
Fidelity® U.S. Bond Index Fund - Premium Class	2324	FSITX	3.47%	2.01%	3.82%	6.02%	03/08/1990	None	0.045%	10/30/2017
<i>BBgBarc U.S. Agg Bond</i>			3.54%	2.10%	4.01%	6.10%				
PIMCO Total Return Fund Institutional Class	OF1P	PTTRX	5.13%	2.21%	5.23%	7.32%	05/11/1987	None	0.51%	10/24/2017
<i>BBgBarc U.S. Agg Bond</i>			3.54%	2.10%	4.01%	6.39%				
Asset Class: Domestic Equities										
Morningstar Category: Large Blend			20.44%	14.24%	7.61%				1.24%	12/31/2017
Fidelity® 500 Index Fund - Institutional Class	2327	FXSIX	21.79%	15.76%	8.47%	10.39%	02/17/1988	None	0.03%	07/31/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	10.54%				
Fidelity® Large Cap Stock Fund	0338	FLCSX	18.15%	15.41%	8.55%	8.81%	06/22/1995	None	0.62%	06/29/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	9.32%				
Vanguard FTSE Social Index Fund Investor Shares	OQPN	VFTSX	24.11%	17.00%	8.61%	4.58%	05/31/2000	None	0.2%	12/21/2017
<i>DJ US Total Stk Mkt</i>			21.16%	15.52%	8.66%	6.29%				
<i>FTSE USA Permissible</i>			24.33%	N/A	N/A	N/A				
Morningstar Category: Large Growth			27.67%	15.29%	8.31%				1.66%	12/31/2017
Fidelity® Contrafund® - Class K	2080	FCNKX	32.39%	16.54%	9.08%	12.59%	05/17/1967	None	0.58%	03/01/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	N/A				
Morningstar Category: Large Value			15.94%	13.33%	6.92%				1.33%	12/31/2017
Invesco Diversified Dividend Fund Class R6	OK26	LCEFX	8.64%	13.14%	8.48%	8.13%	12/31/2001	None	0.44%	02/28/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	7.58%				
<i>Russell 1000 Value</i>			13.66%	14.04%	7.10%	7.79%				
Morningstar Category: Mid-Cap Blend			15.93%	13.28%	7.86%				2.3%	12/31/2017
Fidelity® Mid Cap Index Fund - Premium Class	2350	FSCCKX	18.44%	14.90%	N/A	15.24%	09/08/2011	None	0.05%	07/31/2017

<i>Russell MidCap</i>			18.52%	14.96%	9.11%	15.32%				
Morningstar Category: Mid-Cap Value			13.22%	13.25%	8.06%				1.84%	12/31/2017
Fidelity® Low-Priced Stock Fund - Class K	2095	FLPKX	20.79%	13.66%	9.25%	13.94%	12/27/1989	None	0.58%	08/29/2017
<i>Russell 2000</i>			14.65%	14.12%	8.71%	9.81%				
Morningstar Category: Small Blend			12.28%	12.99%	8.13%				2.32%	12/31/2017
Fidelity® Small Cap Index Fund - Premium Class	2359	FSSVX	14.83%	14.32%	N/A	15.10%	09/08/2011	None	0.05%	07/31/2017
<i>Russell 2000</i>			14.65%	14.12%	8.71%	14.97%				
Asset Class: International/Global										
Morningstar Category: Foreign Large Blend			25.12%	7.27%	1.79%				1.78%	12/31/2017
Fidelity® International Index Fund - Premium Class	1522	FSIVX	25.35%	7.74%	2.09%	5.28%	11/05/1997	None	0.06%	07/31/2017
<i>MSCI EAFE (Net MA)</i>			25.29%	8.07%	2.10%	5.45%				
Harbor International Fund Institutional Class	OFHL	HAIX	22.90%	5.23%	2.12%	10.81%	12/29/1987	None	0.81%	12/18/2017
<i>MSCI EAFE (N)</i>			25.03%	7.90%	1.94%	5.63%				
Asset Class: Stable Value										
Morningstar Category: Stable Value										
T. Rowe Price Stable Value Common Trust Fund A	OGMU		1.53%	1.87%	2.75%	4.88%	09/12/1988	None	0.30%	12/31/2015
<i>CG 3-Month Treasury Bill</i>			0.84%	0.24%	0.34%	3.09%				
Asset Class: Target Date										
Morningstar Category: Target-Date 2000-2010			10.15%	5.78%	4.19%				7%	12/31/2017
Fidelity Freedom® 2005 Fund - Class K	3020	FSNJX	10.45%	5.64%	3.99%	5.08%	11/06/2003	None	0.44%	07/20/2017
<i>BBgBarc U.S. Agg Bond</i>			3.54%	2.10%	4.01%	4.23%				
<i>FID FF 2005 Comp Idx</i>			9.25%	5.69%	4.18%	5.32%				
Fidelity Freedom® 2010 Fund - Class K	3021	FSNKX	12.52%	6.82%	4.77%	6.63%	10/17/1996	None	0.47%	07/20/2017
<i>BBgBarc U.S. Agg Bond</i>			3.54%	2.10%	4.01%	5.23%				
<i>FID FF 2010 Comp Idx</i>			11.09%	6.98%	5.12%	6.74%				
Morningstar Category: Target-Date 2015			11.29%	6.47%	4.44%				7.97%	12/31/2017
Fidelity Freedom® 2015 Fund - Class K	3022	FSNLX	14.30%	7.48%	4.93%	6.12%	11/06/2003	None	0.5%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.99%				
<i>FID FF 2015 Comp Idx</i>			12.99%	7.73%	5.35%	6.52%				
Morningstar Category: Target-Date 2020			12.46%	6.76%	4.54%				4.6%	12/31/2017
Fidelity Freedom® 2020 Fund - Class K	3023	FSNOX	15.71%	8.11%	4.86%	6.96%	10/17/1996	None	0.54%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.49%				
<i>FID FF 2020 Comp Idx</i>			14.32%	8.40%	5.43%	7.10%				
Morningstar Category: Target-Date 2025			14.67%	7.93%	4.94%				3.34%	12/31/2017
Fidelity Freedom® 2025 Fund - Class K	3024	FSNPX	16.87%	9.07%	5.26%	6.74%	11/06/2003	None	0.57%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.99%				

<i>FID FF 2025 Comp Idx</i>			15.57%	9.54%	6.07%	7.41%				
Morningstar Category: Target-Date 2030			16.57%	8.74%	5.12%				4.28%	12/31/2017
Fidelity Freedom® 2030 Fund - Class K	3025	FSNQX	19.86%	10.06%	5.24%	7.15%	10/17/1996	None	0.61%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.49%				
<i>FID FF 2030 Comp Idx</i>			18.43%	10.59%	6.15%	7.38%				
Morningstar Category: Target-Date 2035			18.43%	9.66%	5.40%				4.25%	12/31/2017
Fidelity Freedom® 2035 Fund - Class K	3026	FSNUX	22.01%	11.04%	5.59%	7.25%	11/06/2003	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.99%				
<i>FID FF 2035 Comp Idx</i>			20.73%	11.75%	6.74%	8.12%				
Morningstar Category: Target-Date 2040			19.52%	10.03%	5.49%				4.64%	12/31/2017
Fidelity Freedom® 2040 Fund - Class K	3027	FSNVX	22.38%	11.17%	5.53%	4.29%	09/06/2000	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	5.48%				
<i>FID FF 2040 Comp Idx</i>			20.95%	11.88%	6.70%	5.53%				
Morningstar Category: Target-Date 2045			20.51%	10.45%	5.66%				4.27%	12/31/2017
Fidelity Freedom® 2045 Fund - Class K	3028	FSNZX	22.36%	11.28%	5.54%	6.37%	06/01/2006	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.80%				
<i>FID FF 2045 Comp Idx</i>			20.95%	12.00%	6.73%	7.33%				
Morningstar Category: Target-Date 2050			20.67%	10.48%	5.68%				4.18%	12/31/2017
Fidelity Freedom® 2050 Fund - Class K	3029	FNSBX	22.33%	11.31%	5.31%	6.20%	06/01/2006	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	8.80%				
<i>FID FF 2050 Comp Idx</i>			20.95%	12.05%	6.60%	7.22%				
Morningstar Category: Target-Date 2055			21.08%	10.87%	6.82%				4.72%	12/31/2017
Fidelity Freedom® 2055 Fund - Class K	3030	FNSDX	22.37%	11.46%	N/A	9.17%	06/01/2011	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	13.77%				
<i>FID FF 2055 Comp Idx</i>			20.95%	12.27%	N/A	10.43%				
Morningstar Category: Target-Date 2060+			21.27%	11.59%					14.07%	12/31/2017
Fidelity Freedom® 2060 Fund - Class K	3031	FNSFX	22.21%	N/A	N/A	9.53%	08/05/2014	None	0.64%	07/20/2017
<i>S&amp;P 500</i>			21.83%	15.79%	8.50%	12.55%				
<i>FID FF 2060 Comp Idx</i>			20.95%	N/A	N/A	9.23%				
Morningstar Category: Target-Date Retirement			8.81%	4.48%	4.07%				5.68%	12/31/2017
Fidelity Freedom® Income Fund - Class K	3019	FNSHX	8.14%	4.23%	3.90%	4.90%	10/17/1996	None	0.42%	07/20/2017
<i>BBgBarc U.S. Agg Bond</i>			3.54%	2.10%	4.01%	5.23%				
<i>FID FF Income Comp Idx</i>			7.10%	4.09%	3.64%	4.90%				

#### Footnotes

Fund line-up as of 01/16/2018

Last categorization update date 12/31/2017

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. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

Indices are unmanaged and you cannot invest directly in an index.

Morningstar, Inc., provided data on the non-Fidelity mutual funds. Although the data is gathered from reliable sources, accuracy and completeness cannot be guaranteed by Morningstar.

The Morningstar Category Average is the average return for the peer group based on the returns of each individual fund within the group, for the period shown. This average assumes reinvestment of dividends and capital gains, if any, and excludes sales charges.

Fidelity Freedom® 2005 Fund - Class K, Fidelity Freedom® 2035 Fund - Class K, Fidelity Freedom® Income Fund - Class K: On July 20, 2017, an initial offering of the Fidelity Freedom K class took place. Returns and expenses prior to that date are those of the Freedom (retail) class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

Fidelity Freedom® 2010 Fund - Class K, Fidelity Freedom® 2015 Fund - Class K, Fidelity Freedom® 2020 Fund - Class K, Fidelity Freedom® 2025 Fund - Class K, Fidelity Freedom® 2030 Fund - Class K, Fidelity Freedom® 2040 Fund - Class K, Fidelity Freedom® 2045 Fund - Class K, Fidelity Freedom® 2050 Fund - Class K, Fidelity Freedom® 2055 Fund - Class K, Fidelity Freedom® 2060 Fund - Class K: On July 20, 2017, an initial offering of the Fidelity Freedom K class took place. Returns and expenses prior to that date are those of the Freedom (retail) class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

T. Rowe Price Stable Value Common Trust Fund A: This investment option is not a mutual fund.

Invesco Diversified Dividend Fund Class R6: The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 09/24/2012. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 12/31/2001, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

Fidelity® U.S. Bond Index Fund - Premium Class: Returns prior to May 4, 2011 are those of the Investor Class and reflect the Investor Class' expense ratio. Had the Premium Class' expense ratio been reflected, total returns would have been higher.

Fidelity® 500 Index Fund - Institutional Class: Returns prior to May 4, 2011 are those of the Premium Class and reflect the Premium Class' expense ratio. Had the Institutional Class' expense ratio been reflected, total returns would have been higher.

Fidelity® International Index Fund - Premium Class: Returns prior to October 14, 2005 are those of the Investor Class and reflect the Investor Class' expense ratio. Had the Premium Class' expense ratio been reflected, total returns would have been higher.

Fidelity® Contrafund® - Class K: On May 9, 2008, an initial offering of the retirement (K) class took place. Returns and expenses prior to that date are those of the non-K, non-advisor class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

Fidelity® Low-Priced Stock Fund - Class K: On May 9, 2008, an initial offering of the retirement (K) class took place. Returns and expenses prior to that date are those of the non-K, non-advisor class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

#### **Expense Ratio Footnotes**

For a mutual fund, the expense ratio is the total annual fund or class operating expenses (before waivers or reimbursements) paid by the fund and stated as a percent of the fund's total net assets. Where the investment option is not a mutual fund, the figure displayed in the expense ratio field is intended to reflect similar information. However, it may have been calculated using methodologies that differ from those used for mutual funds. Mutual fund data has been drawn from the most recent prospectus. For non-mutual fund investment options, the information has been provided by the trustee or plan sponsor. When no ratio is shown for these options it is due to the fact that none was available. Nevertheless, there may be fees and expenses associated with the investment option.

Morningstar Category Gross Expense Ratio: This figure represents average gross expense ratio paid by the funds in the Morningstar category. The information is based on the gross expense ratio as reported in each fund's most current prospectus and is provided by Morningstar.



## Investment Risk

Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market or economic developments.

Foreign investments, especially those in emerging markets, involve greater risk and may offer greater potential returns than U.S. investments. This risk includes political and economic uncertainties of foreign countries, as well as the risk of currency fluctuation.

In general the bond market is volatile and bonds entail interest rate risk (as interest rates rise bond prices usually fall and vice versa). This effect is usually pronounced for longer-term securities. Bonds also entail the risk of issuer default, issuer credit risk and inflation risk.

Fidelity Freedom Funds are designed for investors expecting to retire around the year indicated in each fund's name. Except for the Freedom Income Fund, the funds' asset allocation strategy becomes increasingly conservative as it approaches the target date and beyond. Ultimately, they are expected to merge with the Freedom Income Fund. The investment risks of each Fidelity Freedom Fund change over time as its asset allocation changes. They are subject to the volatility of the financial markets, including equity and fixed income investments in the U.S. and abroad and may be subject to risks associated with investing in high yield, small cap and, commodity-related, foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates.

Investments in mid-sized companies may involve greater risk than those of larger, more well known companies, but may be less volatile than investments in smaller companies.

Investments in smaller companies may involve greater risk than those in larger, more well known companies.

## Index Definitions

FID FF 2040 Comp Idx: Fidelity Freedom 2040 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

FID FF 2045 Comp Idx: Fidelity Freedom 2045 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

FID FF 2050 Comp Idx: Fidelity Freedom 2050 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

BBgBarc U.S. Agg Bond: The Bloomberg Barclays U.S. Aggregate Bond Index is an unmanaged market value-weighted index for U.S. dollar denominated investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities with maturities of at least one year.

MSCI EAFE (Net MA): The MSCI Europe, Australasia and Far East Index (net MA tax) is an unmanaged market capitalization-weighted index of equity securities of companies domiciled in various countries. The index is designed to represent performance of developed stock markets outside the United States and Canada and excludes certain market segments unavailable to U.S. based investors. The index returns for periods after 1/1/1997 are adjusted for tax withholding rates applicable to U.S.-based mutual funds organized as Massachusetts business trusts.

Russell 1000 Value: The Russell 1000® Value Index is an unmanaged market capitalization-weighted index of value-oriented stocks of the largest U.S. domiciled companies that are included in the Russell 1000 Index. Value-oriented stocks tend to have lower price-to-book ratios and lower forecasted growth values.

Russell 2000: The Russell 2000® Index is an unmanaged market capitalization-weighted index of 2,000 small company stocks of U.S. domiciled companies.

Russell MidCap: The Russell Midcap® Index is an unmanaged market capitalization-weighted index of 800 medium-capitalization stocks. The stocks are also members of the Russell 1000® index.

CG 3-Month Treasury Bill: The Citigroup 3-Month Treasury Bill Index is an unmanaged index designed to represent the average of T-bill rates for each of the prior three months, adjusted to a bond-equivalent basis.

equivalent basis.

**S&P 500:** S&P 500 Index is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance.

**FID FF Income Comp Idx:** Fidelity Freedom Income Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2010 Comp Idx:** Fidelity Freedom 2010 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2020 Comp Idx:** Fidelity Freedom 2020 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2030 Comp Idx:** Fidelity Freedom 2030 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2055 Comp Idx:** Fidelity Freedom 2055 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**DJ US Total Stk Mkt:** Dow Jones U.S. Total Stock Market Index is a float-adjusted market capitalization-weighted index of all equity securities of U.S. headquartered companies with readily available price data.

**FID FF 2060 Comp Idx:** Fidelity Freedom 2060 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations.

**FTSE USA Permissible:** The FTSE USA Permissible Index includes stocks selected from approximately 700 of the largest public companies in the United States by evaluating each company's performance in the following categories: environmental sustainability, upholding and supporting universal human rights, and developing positive relations with stakeholders. The Index includes companies considered to have (1) superior environmental policies; (2) a strong hiring and promotion record for minorities and women; and (3) a safe and healthy workplace. Excluded from the Index are companies that are involved with (1) tobacco; (2) alcohol; (3) adult entertainment; (4) firearms; (5) gambling; (6) nuclear power; or (7) those that violate fair labor practices and equal opportunity standards.

**MSCI EAFE (N):** The MSCI Europe, Australasia and Far East (EAFE®) Index is an unmanaged market capitalization-weighted index of equity securities of companies domiciled in various countries. The index is designed to represent performance of developed stock markets outside the United States and Canada and excludes certain market segments unavailable to U.S. based investors. This index is calculated using the minimum possible dividend reinvestment, after deduction of withholding tax, applying the maximum withholding tax rate.

**FID FF 2005 Comp Idx:** Fidelity Freedom 2005 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2015 Comp Idx:** Fidelity Freedom 2015 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**FID FF 2025 Comp Idx:** Fidelity Freedom 2025 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

FID FF 2035 Comp Idx: Fidelity Freedom 2035 Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Bloomberg Barclays U.S. Aggregate Bond Index; and Bloomberg Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

**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.**

Fidelity Brokerage Services LLC, Member NYSE, SIPC, 900 Salem Street, Smithfield, RI 02917  
779932.2.4

# PERFORMANCE UPDATE

## Voya Retirement Insurance and Annuity Company

### State of RI Fund Performance with Benchmark

**Average Annual Total Returns as of: 12/31/2017** (shown in percentages)

Mutual funds offered through a retirement plan are investments designed for retirement purposes. Early withdrawals will reduce your account value and if taken prior to age 59 1/2, a 10% IRS penalty may apply.

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

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

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

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

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

Investment Options	Fund Benchmark ID (BM)	1-Mo Fund	BM	3-Mo Fund	BM	YTD Fund	BM	1-Yr Fund	BM	3-Yr Fund	BM	5-Yr Fund	BM	10-Yr Fund	BM	Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
<b>Stability of Principal</b>																			
<i>Stability of Principal</i>																			
Voya Fixed Account - 043 (18)(19)	MFR	0.25	0.07	0.75	0.19	3.00	0.54	3.00	0.54	3.00	1.34	3.00	0.81	3.01	0.66				
<b>Bonds</b>																			
<i>High Yield Bond</i>																			
Prudential High Yield Fund - Class Z - 2482	BCUSH1IC	0.34	0.29	0.43	0.53	7.78	7.50	7.78	7.50	6.57	6.36	5.95	5.78	7.81	8.00		03/01/1996	0.54	0.54
<i>Inflation-Protected Bond</i>																			
PIMCO VIT Real Return Portfolio - Administrative Class - 833 (1)	LBUSTIPS	0.92	0.92	1.32	1.26	3.66	3.01	3.66	3.01	1.99	2.05	-0.14	0.13	3.68	3.53		09/30/1999	0.91	0.65



See Performance Introduction Page for Important Information

Investment Options	Fund Benchmark ID (BM)	1-Mo Fund	BM	3-Mo Fund	BM	YTD Fund	BM	1-Yr Fund	BM	3-Yr Fund	BM	5-Yr Fund	BM	10-Yr Fund	BM	Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
<b>Intermediate-Term Bond</b>																			
Voya Intermediate Bond Portfolio - Class I - 004	LEHM	0.51	0.46	0.52	0.39	5.05	3.54	5.05	3.54	3.30	2.24	3.27	2.10	4.48	4.01		05/23/1973	0.54	0.54
Voya U.S. Bond Index Portfolio - Class I - 1554 (2)	LEHM	0.48	0.46	0.31	0.39	3.20	3.54	3.20	3.54	1.91	2.24	1.75	2.10			3.59	03/07/2008	0.41	0.40
<b>Asset Allocation</b>																			
<b>Lifecycle</b>																			
Voya Solution 2025 Portfolio - Initial Class - 790 (3)(4)	SPT2025	0.92	0.92	3.79	3.73	15.62	14.55	15.62	14.55	7.13	7.20	8.68	8.76	4.80	5.53		04/29/2005	0.90	0.78
Voya Solution 2035 Portfolio - Initial Class - 761 (4)(5)	SP2035	1.21	1.09	4.92	4.71	19.82	17.78	19.82	17.78	8.35	8.51	10.22	10.29	5.28	5.90		04/29/2005	0.95	0.83
Voya Solution 2045 Portfolio - Initial Class - 764 (4)(6)	SP2045	1.43	1.17	5.46	5.20	21.53	19.56	21.53	19.56	8.81	9.24	11.14	11.15	5.39	6.06		04/29/2005	0.96	0.86
Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(7)	SPT2055	1.44	1.20	5.57	5.38	21.94	20.48	21.94	20.48	8.93	9.62	11.28	11.95			10.17	03/08/2010	0.96	0.86
Voya Solution Income Portfolio - Initial Class - 767 (4)(8)	SPTREIN	0.75	0.69	2.36	2.24	9.66	8.54	9.66	8.54	4.81	4.39	5.54	4.86	4.58	4.12		04/29/2005	0.81	0.68
<b>Balanced</b>																			
<b>Allocation--50% to 70% Equity</b>																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 (9)	SPXLBGC	-0.10	0.88	2.91	4.16	15.39	14.41	15.39	14.41	9.66	7.87	12.67	10.27	9.08	7.02		01/24/1989	0.64	0.64
<b>Large Cap Value</b>																			
<b>Large Blend</b>																			
Voya Growth and Income Portfolio - Class I - 001 (10)	SPXRE	1.49	1.11	6.22	6.64	20.34	21.83	20.34	21.83	9.20	11.41	13.50	15.79	7.27	8.50		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class - 829	SPXRE	1.06	1.11	6.54	6.64	21.46	21.83	21.46	21.83	11.10	11.41	15.47	15.79	8.22	8.50		05/03/2004	0.27	0.27
<b>Large Value</b>																			
BlackRock Equity Dividend Fund - Institutional Shares - 8518 (11)	RS1000V	0.91	1.46	5.41	5.33	16.76	13.66	16.76	13.66	10.67	8.65	13.07	14.04	7.44	7.10		11/29/1988	0.72	0.72
<b>Large Cap Growth</b>																			
<b>Large Growth</b>																			
Voya Large Cap Growth Portfolio - Institutional Class - 742 (12)	RS1000G	1.56	0.78	7.94	7.86	29.74	30.21	29.74	30.21	12.79	13.79	16.38	17.33	11.87	10.00		05/03/2004	0.67	0.67
<b>Small/Mid/Specialty</b>																			
<b>Mid-Cap Blend</b>																			
Voya Russell Mid Cap Index Portfolio - Class I - 1560 (13)	RSMID	0.87	0.93	5.92	6.07	17.97	18.52	17.97	18.52	9.14	9.58	14.48	14.96			10.49	03/04/2008	0.44	0.43
<b>Mid-Cap Growth</b>																			
Principal MidCap Fund - Class R-5 - 3412	RSMID	0.19	0.93	4.86	6.07	25.16	18.52	25.16	18.52	11.74	9.58	15.91	14.96	11.25	9.11		12/06/2000	0.85	0.85
<b>Small Blend</b>																			
Voya Russell Small Cap Index Portfolio - Class I - 1563 (14)	RS2000	-0.45	-0.40	3.23	3.34	14.27	14.65	14.27	14.65	9.72	9.96	13.97	14.12			10.59	03/04/2008	0.46	0.45
Voya Small Company Portfolio - Class I - 042	RS2000	0.05	-0.40	3.29	3.34	11.29	14.65	11.29	14.65	11.18	9.96	15.07	14.12	9.44	8.71		12/27/1996	0.89	0.89
<b>Global / International</b>																			
<b>Foreign Large Blend</b>																			

See Performance Introduction Page for Important Information

Investment Options	Fund Benchmark ID (BM)	1-Mo		3-Mo		YTD		1-Yr		3-Yr		5-Yr		10-Yr		Incept	Fund Inception Date	Gross Fund Exp %*	Net Fund Exp %*
		Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM				
Voya International Index Portfolio - Class I - 1551 (15)	MSEAFANET	1.23	1.61	3.67	4.23	24.88	25.03	24.88	25.03	7.67	7.80	7.35	7.90			3.03	03/04/2008	0.55	0.45
<b>Foreign Large Growth</b>																			
American Funds EuroPacific Growth Fund - Class R-4 - 573 (16)	MSCIXUS	1.09	2.24	4.14	5.00	30.70	27.19	30.70	27.19	9.28	7.83	8.83	6.80	3.59	1.84		04/16/1984	0.85	0.85
<b>World Large Stock</b>																			
VY® Oppenheimer Global Portfolio - Initial Class - 432 (17)	MSCIACN	1.09	1.61	7.25	5.73	36.49	23.97	36.49	23.97	12.51	9.30	13.13	10.80	7.19	4.65		05/01/2002	0.75	0.75

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

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

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

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

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

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

# PERFORMANCE UPDATE

## Voya Retirement Insurance and Annuity Company

### State of RI Fund Performance with Benchmark

#### Separate Account D

**Average Annual Total Returns as of: 12/31/2017** (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><b>Stability of Principal</b></i>									
Voya Fixed Account - 043 (18)(19) <i>This fund is not part of the product's separate account.</i>	0.25	0.75	3.00	3.00	3.00	3.00	3.01		
<b>Bonds</b>									
<i><b>High Yield Bond</b></i>									
Prudential High Yield Fund - Class Z - 2482	0.33	0.39	7.59	7.59	6.39	5.78	7.64		03/01/1996
<i><b>Inflation-Protected Bond</b></i>									
PIMCO VIT Real Return Portfolio - Administrative Class - 833 (1)	0.90	1.28	3.50	3.50	1.83	-0.29	3.52		09/30/1999
<i><b>Intermediate-Term Bond</b></i>									

See Performance Introduction Page for Important Information

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
Voya Intermediate Bond Portfolio - Class I - 004	0.50	0.48	4.88	4.88	3.15	3.12	4.32		05/23/1973
Voya U.S. Bond Index Portfolio - Class I - 1554 (2)	0.47	0.27	3.04	3.04	1.76	1.60		3.43	03/07/2008
<b>Asset Allocation</b>									
<b>Lifecycle</b>									
Voya Solution 2025 Portfolio - Initial Class - 790 (3)(4)	0.91	3.75	15.45	15.45	6.97	8.52	4.64		04/29/2005
Voya Solution 2035 Portfolio - Initial Class - 761 (4)(5)	1.19	4.88	19.64	19.64	8.19	10.06	5.12		04/29/2005
Voya Solution 2045 Portfolio - Initial Class - 764 (4)(6)	1.42	5.42	21.35	21.35	8.65	10.97	5.23		04/29/2005
Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(7)	1.43	5.53	21.76	21.76	8.77	11.11		10.01	03/08/2010
Voya Solution Income Portfolio - Initial Class - 767 (4)(8)	0.74	2.32	9.49	9.49	4.65	5.39	4.42		04/29/2005
<b>Balanced</b>									
<b>Allocation--50% to 70% Equity</b>									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 (9)	-0.12	2.87	15.21	15.21	9.49	12.50	8.92		01/24/1989
<b>Large Cap Value</b>									
<b>Large Blend</b>									
Voya Growth and Income Portfolio - Class I - 001 (10)	1.48	6.18	20.16	20.16	9.04	13.33	7.10		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class - 829	1.04	6.50	21.28	21.28	10.93	15.29	8.06		05/03/2004
<b>Large Value</b>									
BlackRock Equity Dividend Fund - Institutional Shares - 8518 (11)	0.90	5.37	16.58	16.58	10.51	12.90	7.28		11/29/1988
<b>Large Cap Growth</b>									
<b>Large Growth</b>									
Voya Large Cap Growth Portfolio - Institutional Class - 742 (12)	1.55	7.90	29.55	29.55	12.62	16.20	11.70		05/03/2004
<b>Small/Mid/Specialty</b>									
<b>Mid-Cap Blend</b>									
Voya Russell Mid Cap Index Portfolio - Class I - 1560 (13)	0.86	5.88	17.80	17.80	8.98	14.31		10.33	03/04/2008
<b>Mid-Cap Growth</b>									
Principal MidCap Fund - Class R-5 - 3412	0.17	4.82	24.98	24.98	11.57	15.73	11.08		12/06/2000
<b>Small Blend</b>									
Voya Russell Small Cap Index Portfolio - Class I - 1563 (14)	-0.46	3.19	14.09	14.09	9.56	13.80		10.42	03/04/2008
Voya Small Company Portfolio - Class I - 042	0.03	3.25	11.12	11.12	11.02	14.90	9.27		12/27/1996
<b>Global / International</b>									
<b>Foreign Large Blend</b>									
Voya International Index Portfolio - Class I - 1551 (15)	1.21	3.63	24.69	24.69	7.51	7.19		2.87	03/04/2008
<b>Foreign Large Growth</b>									
American Funds EuroPacific Growth Fund - Class R-4 - 573 (16)	1.08	4.10	30.51	30.51	9.12	8.67	3.43		04/16/1984
<b>World Large Stock</b>									



Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
VY® Oppenheimer Global Portfolio - Initial Class - 432 (17)	1.07	7.21	36.28	36.28	12.35	12.96	7.03		05/01/2002

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

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

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

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

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

#### Additional Notes

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

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

(1)PIMCO VIT Real Return Portfolio - Administrative Class: "Other Expenses" within the fund's prospectus reflect interest expense and is based on the amount incurred during the Portfolio's most recent fiscal year as a result of entering into certain investments, such as reverse repurchase agreements. Interest expense is required to be treated as a Portfolio expense for accounting purposes and is not payable to PIMCO. The amount of interest expense (if any) will vary based on the Portfolio's use of such investments as an investment strategy. Total Annual Portfolio Operating Expenses excluding interest expense is 0.65%.

(2)Voya U.S. Bond Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.40% through May 1, 2018. The limitation does not extend to interest, taxes, interest-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(3)Voya Solution 2025 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.78% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

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

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.

**Additional Notes**

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.

(5)Voya Solution 2035 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.83% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(6)Voya Solution 2045 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(7)Voya Solution 2055 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(8)Voya Solution Income Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.68% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(9)The VY T. Rowe Price Capital Appreciation - Inst. Class commenced operations on May 1, 2003. The fund has identical investment objectives and policies, the same portfolio manager, and invests in the same holdings as the Service Class of this fund. The performance information for the VY T.Rowe Price Capital Appreciation Portfolio - Inst. Class prior to May 1, 2003 is based upon the Service Class performance, NOT adjusted by fees associated with the Inst. Class.

(10)Voya Growth and Income Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.70% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2018. Termination or modification of these obligations requires approval by the Portfolio's board.

(11)BlackRock Equity Dividend Fund - Institutional Shares: As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 36, BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund's assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee through November 30, 2017. The contractual agreement may be terminated upon 90 days' notice by a majority of the non-interested trustees of the Fund or by a vote of a majority of the outstanding voting securities of the Fund. The Total Annual Fund Operating Expenses do not correlate to the ratio of expenses to average net assets given in the Fund's most recent annual report which does not include Acquired Fund Fees and Expenses.

(12)Voya Large Cap Growth Portfolio - Institutional Class: The adviser is contractually obligated to limit expenses to 0.67% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

(13)Voya Russell (TM) Mid Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.43% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(14)Voya Russell (TM) Small Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.45% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

**Additional Notes**

(15)Voya International Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.50% through May 1, 2018. In addition, the adviser is contractually obligated to further limit expenses to 0.45% through May 1, 2018. These limitations do not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. These limitations are subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of these obligations requires approval by the Portfolio's board.

(16)EuroPacific Growth Fund - Class R-4 commenced operations on May 15, 2002. Class R-4 has identical investment objectives and policies, the same portfolio manager, and invests in the same holdings as Class A. The performance information above prior to May 15, 2002 is based upon the Class A performance adjusted by the fee differences between classes.

(17)VY Oppenheimer Global Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.80% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(18)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.

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

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

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

<b>Benchmark Id</b>	<b>Benchmark Description</b>
BCUSH1IC	Barclays US HY 1% Issuer Cap TR USD
LBUSTIPS	Barclays Capital U.S. Treasury U.S. TIPS Index measures the performance of rulesbased, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).
LEHM	Barclays Capital U.S. Aggregate Bond Index measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.
MFR	MFR Money Market Index is comprised of returns which are based upon historical average 30-day compound yields on a universe of taxable money market funds. The data for the universe, which includes approximately 980 funds, is compiled by iMoneynet, Inc. Goal of ING Fixed Account - 457/401 is to outperform the MFR by 150 - 200 basis points over 3 - 5 year time periods.
MSCIACN	MSCI ACWI (All Country World Index) measures the performance of the large and mid-cap segment of the particular regions equity securities,including developed and emerging market. It is free float-adjusted market-capitalization weighted.
MSCIXUS	MSCI ACWI (All Country World Index) ex USA Index measures the performance of the large and mid-cap segment of the particular regions, excluding USA equity securities,including developed and emerging market. It is free float-adjusted market-capitalization weighted.
MSEAFANET	MSCI EAFE Index measures the performance of the large and mid-cap segment of developed markets, excluding the U.S. & Canada equity securities. It is free float-adjusted market-capitalization weighted.
RS1000G	Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.

See Performance Introduction Page for Important Information

<b>Benchmark Id</b>	<b>Benchmark Description</b>
RS1000V	Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted.
RS2000	Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.
RSMID	Russell Mid-Cap Index measures the performance of the mid-cap segment of the U.S. equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.
SP2035	S&P Target Date 2035 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2035, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SP2045	S&P Target Date 2045 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2045, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2025	S&P Target Date 2025 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2025, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2055	S&P Target Date 2055+ Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2055, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPTREIN	S&P Target Date Retirement Income Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPXLBGC	S&P 500 60% / Barclays Capital Corp/Gov Bond Index 40% consists of a mix of 60% of an unmanaged stock index (The Standard & Poor's 500) and 40% of an unmanaged bond index (Barclays Capital Gov't Corp. Bond Index).
SPXRE	S&P 500 Index measures the performance of 500 widely held stocks in U.S. equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid 1989, this composition has been more flexible and the number of issues in each sector has varied. The index is market capitalization-weighted.

## Section XV.

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### OPEB Trust

**TOTAL NET OF FEES**
**12/31/2017**

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	89,695,072.5	35.1	0.52	3.78	1.40	3.78	2.17			2.03	5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			0.46	3.54	1.24	3.54	2.24			2.06	5/1/2013
SSGA S&P 500 INDX	165,825,640.3	64.9	1.11	21.80	11.42	21.80	11.44	15.74		13.70	5/1/2011
S&P 500 - Total Return Index			1.11	21.83	11.42	21.83	11.41	15.79		13.02	5/1/2011
<b>Total OPEB</b>	<b>255,520,712.8</b>	<b>100.0</b>	<b>0.91</b>	<b>15.32</b>	<b>7.85</b>	<b>15.32</b>	<b>8.23</b>	<b>10.26</b>		<b>9.52</b>	<b>5/1/2011</b>
OPEB Custom Blend <sup>1</sup>			0.88	15.14	7.78	15.14	8.26	10.27		8.74	5/1/2011

END NOTES

12/31/2017

1	RI7GX0903OPE	OPEB Custom Blend	35% Barclays Aggregate and 65% S&P 500
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**TOTAL NET OF FEES**
**12/31/2017**

Account Name Benchmark Name	Market Value	% of Total	YTD	Month	Cumulative		2017	2016	2015	Inception Date
					11/1/2017 - 11/30/2017	10/1/2017 - 10/31/2017				
Mackay Shields OPEB	89,695,072.5	35.1	3.78	0.52	-0.18	0.14	3.78	2.28	0.46	5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			3.54	0.46	-0.13	0.06	3.54	2.65	0.55	5/1/2013
SSGA S&P 500 INDX	165,825,640.3	64.9	21.80	1.11	3.06	2.33	21.80	11.99	1.46	5/1/2011
S&P 500 - Total Return Index			21.83	1.11	3.07	2.33	21.83	11.96	1.38	5/1/2011
<b>Total OPEB</b> <sup>1</sup>	<b>255,520,712.8</b>	<b>100.0</b>	<b>15.32</b>	<b>0.91</b>	<b>1.93</b>	<b>1.58</b>	<b>15.32</b>	<b>8.69</b>	<b>1.16</b>	<b>5/1/2011</b>
OPEB Custom Blend <sup>2</sup>			15.14	0.88	1.95	1.54	15.14	8.77	1.31	5/1/2011



## END NOTES

12/31/2017

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