

**STATE OF RHODE ISLAND  
INVESTMENT COMMISSION MEETING**

**DATA AT  
January 31st, 2017  
February 22<sup>nd</sup>, 2017  
MEETING**

**MEMBERS OF THE STATE INVESTMENT COMMISSION**

**Honorable Seth Magaziner, Chair**

**Mr. Robert K. Benson  
Mr. J. Michael Costello  
Mr. Thomas P. Fay  
Mr. Frank J. Karpinski  
Ms. Marie Langlois**

**Ms. Sylvia Maxfield  
Ms. Paula M. McNamara  
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 February 22, 2017 at 9:00 a.m. in Room 205 of the State House.

### **AGENDA**

- Chairperson Call to Order
- Membership Roll Call
- Approval of Minutes
  - State Investment Commission Meeting held on January 25th 2017\*
- Private Equity Allocation Plan
  - Cliffwater, Tom Lynch
- Riordan, Lewis & Haden Equity Partners, RLH Investor IV L.P.\*
  - Riordan, Lewis & Haden Equity Partners, Chris Lewis & Michel Glouchevitch
  - Cliffwater, Tom Lynch
- Defined Contribution Plan Quarterly Performance Review
  - TIAA, Larry Brown
- Legal Counsel Report
- Chief Investment Officer Report
  - Portfolio Performance
  - Asset Allocation Implementation Update
- Treasurer's General Comments

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

**POSTED ON February 17<sup>th</sup>, 2017**

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Tiffany Kaschel at (401) 462-7699 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, January 25, 2017**  
**9:00 a.m.**  
**Room 205, State House**

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:01, Wednesday, January 25<sup>th</sup> 2017 in Room 205, State House.

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

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

Also in attendance: Mr. John Burns and Mr. John Linder, Pension Consulting Alliance (PCA), general consultants; Mr. Justin Bullion, Payden & Rygel; Mr. Steve Johnson and Mr. Kerry Polk, Fidelity Investments; Ms. Kerri Baker, Treasury Cash Manager; Mr. Tim Nguyen, Treasury Chief Investment Officer (interim); Ms. Sally Dowling, Adler, Pollock & Sheehan, legal counsel; and other members of the Treasurer's staff.

Treasurer Magaziner called the meeting to order at 9:01 a.m.

## **II. Approval of Minutes**

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

**VOTED: to approve the draft minutes of the December 16th, 2016 meeting of the State Investment Commission.**

## **III. Review and Consideration of Long Duration Investment Policy Statement**

The board reviewed the updated Investment Policy Statement (IPS) language that specified the term "full faith government backed bonds" per last month's suggestion from the Board. It also included new language that the tracking error target be within the range of 1% or less.

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

**VOTED: to approve the Long Duration IPS**

## **IV. Review and Consideration of Cash Investment Policy Statement**

Mr. Nguyen noted the language of the cash mandate was modeled after the current Ocean State Investment Pool (OSIP) IPS. Treasurer Magaziner reiterated the purpose of the cash portion of the portfolio is to maintain liquidity and not increase risk to maximize returns in this area.

The Board reviewed the IPS.

Ms. Maxfield asked Mr. Bullion if there was a practice of observing and recording events as a way to track potential market issues and ensure liquidity in those events. Mr. Nguyen interjected that the office was currently in the process of finding a provider to create a risk dashboard for the entire plan that would perform different analysis under various scenarios of which Ms. Maxfield is concerned. Treasurer Magaziner added that the output from such a dashboard would serve to establish protocols in which staff would engage Payden & Rygel under such circumstances.

The board asked additional questions.

On a motion by Ms. Maxfield and seconded by Ms. Reback, it was unanimously  
**VOTED: to approve the Cash IPS**

## **V. Update on the Crisis Protection Class**

Treasurer Magaziner noted the name change of the Crisis Risk Offset to Crisis Protection Class (CPC), as it will be known going forward. CPC program has three components: long duration treasuries manager, which has been selected, and the platform manager and the systematic trend following manager, neither of which have been determined.

Mr. Nguyen outlined the timeline for implementing the new class, stating it will be off the ground in April. This timeline is contingent on the selection and approval of the CPC platform and systematic trend following managers, including adequate time for evaluation and due diligence of the managers.

Mr. Nguyen spoke about the hedge fund redemption timeline, which will largely fund the new cash program as well as a portion of the upcoming income oriented strategies. It is important the timing of the redemptions coincide with the selection of managers in order to properly fund and balance the programs.

The board asked questions.

## **VI. Ocean State Investment Pool Update**

Ms. Baker prefaced Fidelity's presentation with background information on OSIP and its purpose, noting it is an investment option for municipalities and quasi-public agencies. Treasurer Magaziner added that since its establishment in 2011, the rates have been prohibitively low, affecting participation. With rates rising and becoming more competitive, participation is expected to increase.

Mr. Johnson echoed the Treasurer's point on rising rates, stating Fidelity will be doing outreach to municipalities to showcase those rising rates and attractiveness of products.

Mr. Polk spoke about current market conditions and how they affect their products due to their market driven nature. He then highlighted that participation has increased over the year, with several more accounts being added. The pool value now totals \$460 million. He concluded that they are pleased with performance and are achieving their objectives. With rates increasing, they expect they will become more competitive relative to other similar bank products.

The board asked questions.

## **VII. Legal Counsel Report**

There was no legal counsel report.

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

Mr. Nguyen provided the performance update for December, apprising the Board of domestic and global market conditions. For the month, the portfolio increased 1.35% matching the 60/40 allocation. For calendar year 2016, the portfolio increased 7.35%, exceeding both the benchmark of 6.34% and the 60/40 allocation's 5.92% return.

Treasurer Magaziner added it is indeed noteworthy the portfolio outperformed the 60/40, which is indicative the portfolio of adding value, attributing it in part to high performing asset classes such as private equity and real estate. He stated he is optimistic the implementation of the new asset allocation will further improve performance. He acknowledged staff for their manager selection as it is key to good performance.

Mr. Nguyen also advised the Board that in the coming month staff will be focused on getting the platform manager up and running, will be selecting the systematic trend strategies and vetting income oriented strategies.

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

Treasurer Magaziner remarked that 2016, while volatile at times, produced a solid overall performance for the portfolio.

There being no other business to come before the Board, on a motion by Ms. Maxfield and seconded by Ms. McNamara the meeting adjourned at 10:06 a.m.

Respectfully submitted,

**Seth Magaziner,  
General Treasurer**

## Section III.

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### Staff Summary

# Portfolio Highlights

## PORTFOLIO PERFORMANCE

January 2017

On the month (and calendar year to date), the total portfolio value increased by approximately \$94.5 million to rest at \$7.8 billion. The month's increase comes from \$118.9 million of positive investment performance offset by \$24.4 million of transfers to meet pension payroll in excess of pension contributions. On a percentage basis, the portfolio increased 1.55%, lagging both the plan benchmark of 1.66% and basic 60% global equity/40% fixed income allocation of 1.72%.

Fiscal year-to-date, the total portfolio has increased by \$289.9 million, with portfolio gains of \$458.4 million offset by \$168.5 million in pension payments. The portfolio's 6.18% return exceeded the 5.71% benchmark and well surpassed the 4.63% 60/40 return.

Over a 3-year time frame and when comparing against a 60/40 portfolio, the ERSRI portfolio outperformed at 4.94% while the 60/40 portfolio earned 4.48%. Over a 5-year time frame, the ERSRI portfolio earned 7.14%, outperforming the 60/40 portfolio which posted 6.19%.

Global equity markets gained ground in the month of January. U.S. equities registered positive returns with major indices hitting new all-time highs amid optimism over President Trump's plans for tax cuts and higher infrastructure spending.

Global bond markets diverged in the month of January. According to market watchers, this theme is expected to persist in 2017. A steady and stable U.S. Treasuries market contrasted with higher yields in Europe, where a combination of political developments and another jump in Eurozone inflation drove bonds.



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

Seth Magaziner

General Treasurer

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

February 15, 2017

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 January 31, 2017.

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

<b>Asset Class</b>		<b>Base Market Value</b>
<b>Grand Total</b>		<b>7,790,554,784</b>
CASH EQUIVALENT*		113,880,024
EQUITY HEDGE FUNDS**		576,498,307
GLOBAL PUBLIC EQUITY		3,589,905,176
CREDIT		415,693,216
INFLATION-LINKED BDS		244,018,557
PRIVATE EQUITY**		535,955,931
REAL ESTATE**		555,593,180
REAL RET HEDGE FUNDS**		515,121,707
INFRASTRUCTURE**		294,822,519
US TRADITIONAL FIXED		949,066,168

<b>Plan Allocations</b>	<b>%</b>	<b>Base Market Value</b>
<b>Grand Total</b>	<b>100.00%</b>	<b>7,790,554,784</b>
STATE EMP RET PLAN	75.7%	5,870,637,902
MUNI EMP RET PLAN	17.9%	1,411,581,602
TEACHER'S SURVIVOR BENEFIT	3.8%	298,520,018
STATE POLICE RET PL	1.6%	122,972,173
JUDICIAL RET PLAN	0.8%	64,104,832
NON-CONTRIB JUD RET	0.0%	550,977
NON-CONT ST POL RET	0.2%	22,187,280

\* 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

## Section IV.

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### Asset Allocation

# Asset Summary

Balance Date: 1/31/2017



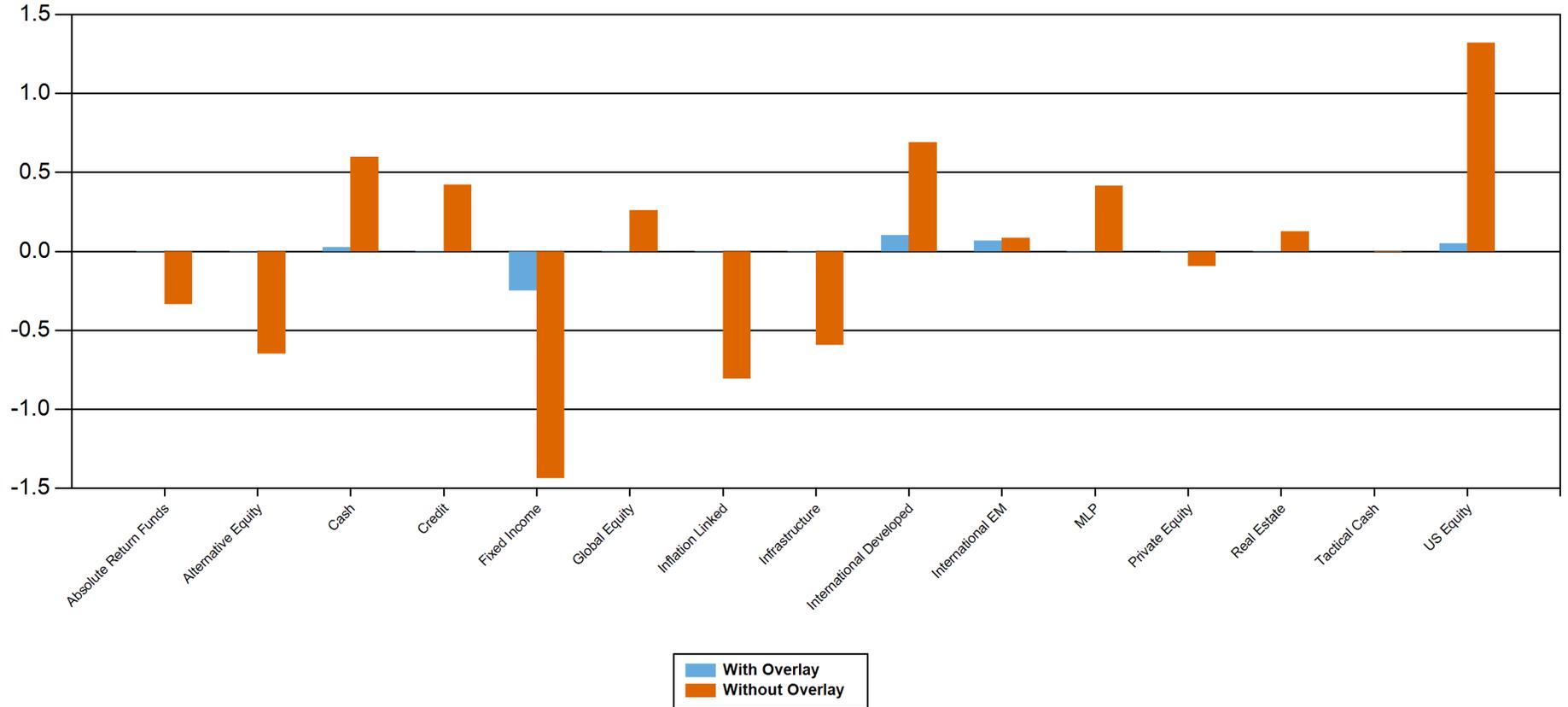
<u>Asset Class</u>	<u>Physical Exposure</u>		<u>Synthetic Exposure</u>		<u>Net Position</u>		<u>Overlay Target</u>		<u>Policy Target</u>	
<b>Total Market Value</b>	<b>7,769.8</b>	<b>100.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>7,769.8</b>	<b>100.0 %</b>	<b>7,769.9</b>	<b>100.0 %</b>	<b>7,769.9</b>	<b>100.00 %</b>
<b>Cash</b>	<b>46.4</b>	<b>0.6 %</b>	<b>-39.6</b>	<b>-0.5 %</b>	<b>6.8</b>	<b>0.1 %</b>	<b>4.6</b>	<b>0.1 %</b>	<b>0.0</b>	<b>0.00 %</b>
Cash	46.4	0.6 %	-39.6	-0.5 %	6.8	0.1 %	4.6	0.1 %	0.0	0.00 %
<b>Equity</b>	<b>4,709.4</b>	<b>60.6 %</b>	<b>-63.3</b>	<b>-0.8 %</b>	<b>4,646.1</b>	<b>59.8 %</b>	<b>4,628.9</b>	<b>59.6 %</b>	<b>4,584.2</b>	<b>59.00 %</b>
Alternative Equity	571.2	7.4 %	0.0	0.0 %	571.2	7.4 %	571.2	7.4 %	621.6	8.00 %
Global Equity	1,107.9	14.3 %	0.0	0.0 %	1,107.9	14.3 %	1,107.9	14.3 %	1,087.8	14.00 %
International Developed	830.6	10.7 %	-18.3	-0.2 %	812.3	10.5 %	804.4	10.4 %	777.0	10.00 %
International EM	317.3	4.1 %	9.8	0.1 %	327.1	4.2 %	321.7	4.1 %	310.8	4.00 %
Private Equity	536.6	6.9 %	0.0	0.0 %	536.6	6.9 %	536.6	6.9 %	543.9	7.00 %
US Equity	1,345.8	17.3 %	-54.8	-0.7 %	1,291.0	16.6 %	1,287.0	16.6 %	1,243.2	16.00 %
<b>Fixed</b>	<b>976.0</b>	<b>12.6 %</b>	<b>102.9</b>	<b>1.3 %</b>	<b>1,078.9</b>	<b>13.9 %</b>	<b>1,098.4</b>	<b>14.1 %</b>	<b>1,087.8</b>	<b>14.00 %</b>
Fixed Income	976.0	12.6 %	102.9	1.3 %	1,078.9	13.9 %	1,098.4	14.1 %	1,087.8	14.00 %
<b>Other</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>2,097.9</b>	<b>27.00 %</b>
Absolute Return Funds	517.8	6.7 %	0.0	0.0 %	517.8	6.7 %	517.8	6.7 %	543.9	7.00 %
Credit	421.2	5.4 %	0.0	0.0 %	421.2	5.4 %	421.2	5.4 %	388.5	5.00 %
Inflation Linked	248.1	3.2 %	0.0	0.0 %	248.1	3.2 %	248.1	3.2 %	310.8	4.00 %
Infrastructure	109.4	1.4 %	0.0	0.0 %	109.4	1.4 %	109.4	1.4 %	155.4	2.00 %
MLP	187.8	2.4 %	0.0	0.0 %	187.8	2.4 %	187.8	2.4 %	155.4	2.00 %
Real Estate	553.7	7.1 %	0.0	0.0 %	553.7	7.1 %	553.7	7.1 %	543.9	7.00 %
Tactical Cash	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.00 %

# Asset Summary

Balance Date: 1/31/2017



Percent Deviation from Overlay Target



Total Absolute Notional Value: 185.8 (USD)

# Asset Summary

Balance Date: 1/31/2017



<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>7,769.9</b>	<b>100.0 %</b>	<b>4,709.4</b>	<b>60.6 %</b>	<b>976.0</b>	<b>12.6 %</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>46.4</b>	<b>0.6 %</b>
<b>Cash</b>	<b>46.4</b>	<b>0.6 %</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>46.3</b>	<b>0.6 %</b>
Cash Acct (Pooled Trust)	28.3	0.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	28.2	0.4 %
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	18.1	0.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	18.1	0.2 %
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 %
Tactical Cash-offset Template	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Equity</b>	<b>4,709.5</b>	<b>60.6 %</b>	<b>4,709.4</b>	<b>60.6 %</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>Alternative Equity</b>	<b>571.2</b>	<b>7.4 %</b>	<b>571.2</b>	<b>7.4 %</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>
Ascend Partners Fund II, LP	69.1	0.9 %	69.1	0.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Davidson Kempner	80.7	1.0 %	80.7	1.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Elliot Associates, LP	93.9	1.2 %	93.9	1.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
ESG	38.2	0.5 %	38.2	0.5 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Indus Asia Pacific Fund	0.3	0.0 %	0.3	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Luxor Capital Partners	5.3	0.1 %	5.3	0.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
PFM Diversified Fund LP	77.2	1.0 %	77.2	1.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Samlyn Onshore Fund LP	108.2	1.4 %	108.2	1.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Viking Global Equities	98.3	1.3 %	98.3	1.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Global Equity</b>	<b>1,108.0</b>	<b>14.3 %</b>	<b>1,107.9</b>	<b>14.3 %</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 %
SSGA Global Fundamental Dev LC	1,107.9	14.3 %	1,107.9	14.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>International Developed</b>	<b>830.6</b>	<b>10.7 %</b>	<b>830.6</b>	<b>10.7 %</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>
SSgA MSCI Canada	106.6	1.4 %	106.6	1.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI EAFE	724.0	9.3 %	724.0	9.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>International EM</b>	<b>317.3</b>	<b>4.1 %</b>	<b>317.3</b>	<b>4.1 %</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>
SSgA Emerging Mkts	317.3	4.1 %	317.3	4.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Private Equity</b>	<b>536.6</b>	<b>6.9 %</b>	<b>536.6</b>	<b>6.9 %</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>
Combined Private Equity	536.6	6.9 %	536.6	6.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>US Equity</b>	<b>1,345.4</b>	<b>17.3 %</b>	<b>1,345.4</b>	<b>17.3 %</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>
Rhode Island Transition Acct	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Russell 3000	1,345.4	17.3 %	1,345.4	17.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>US Large Cap</b>	<b>0.4</b>	<b>0.0 %</b>	<b>0.4</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>
Shott Capital	0.4	0.0 %	0.4	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>Fixed</b>	<b>976.0</b>	<b>12.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>976.0</b>	<b>12.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Fixed Income</b>	<b>976.0</b>	<b>12.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>976.0</b>	<b>12.6 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>
MacKay Shields Core	483.3	6.2 %	0.0	0.0 %	483.3	6.2 %	0.0	0.0 %	0.0	0.0 %
Pyramis Core	492.7	6.3 %	0.0	0.0 %	492.7	6.3 %	0.0	0.0 %	0.0	0.0 %
<b>Other</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,038.0</b>	<b>26.2 %</b>	<b>0.0</b>	<b>0.0 %</b>
<b>Tactical Cash</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>
Tactical Cash Template	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %

# Asset Summary

Balance Date: 1/31/2017

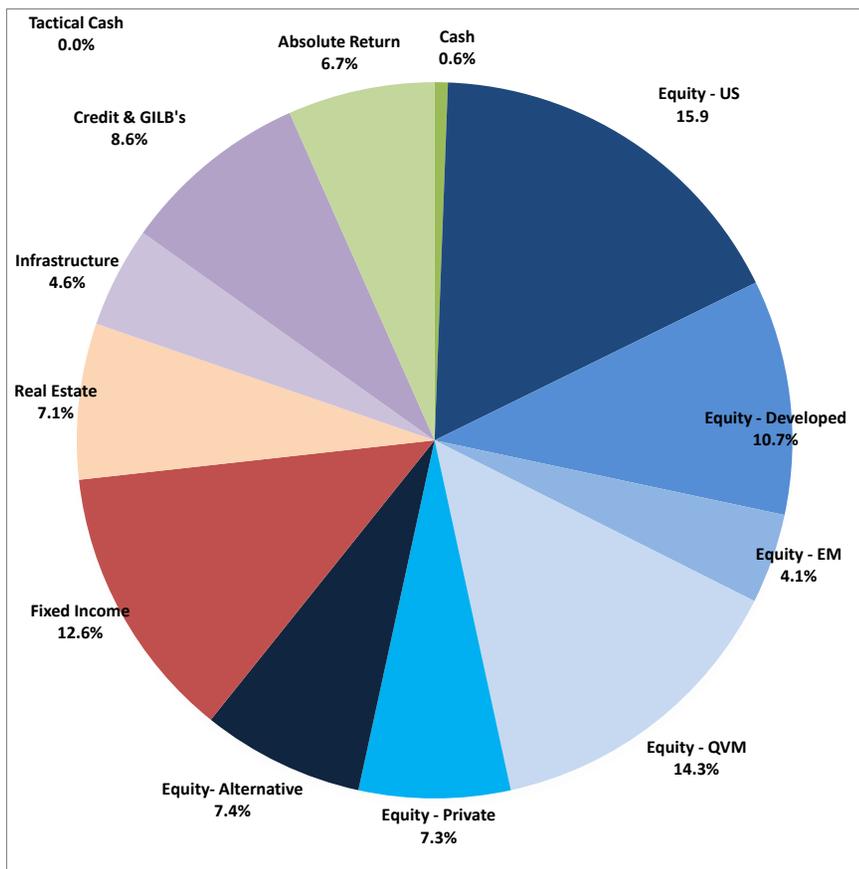


<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
<b>Absolute Return Funds</b>	<b>517.8</b>	<b>6.7 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>517.8</b>	<b>6.7 %</b>	<b>0.0</b>	<b>0.0 %</b>
Brevan Howard LP	80.7	1.0 %	0.0	0.0 %	0.0	0.0 %	80.7	1.0 %	0.0	0.0 %
Brigade Levered Capital	61.4	0.8 %	0.0	0.0 %	0.0	0.0 %	61.4	0.8 %	0.0	0.0 %
Capula Global Relative Value	68.0	0.9 %	0.0	0.0 %	0.0	0.0 %	68.0	0.9 %	0.0	0.0 %
Claren Road Cr Fund	8.8	0.1 %	0.0	0.0 %	0.0	0.0 %	8.8	0.1 %	0.0	0.0 %
D.E. Shaw Composite Fund	95.3	1.2 %	0.0	0.0 %	0.0	0.0 %	95.3	1.2 %	0.0	0.0 %
Graham Global	62.0	0.8 %	0.0	0.0 %	0.0	0.0 %	62.0	0.8 %	0.0	0.0 %
Oz Domestic Partners II	105.9	1.4 %	0.0	0.0 %	0.0	0.0 %	105.9	1.4 %	0.0	0.0 %
Winton Futures Ltd Fund	35.8	0.5 %	0.0	0.0 %	0.0	0.0 %	35.8	0.5 %	0.0	0.0 %
<b>Credit</b>	<b>421.2</b>	<b>5.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>421.2</b>	<b>5.4 %</b>	<b>0.0</b>	<b>0.0 %</b>
PIMCO	215.7	2.8 %	0.0	0.0 %	0.0	0.0 %	215.7	2.8 %	0.0	0.0 %
WAMCO	205.5	2.6 %	0.0	0.0 %	0.0	0.0 %	205.5	2.6 %	0.0	0.0 %
<b>Inflation Linked</b>	<b>248.1</b>	<b>3.2 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>248.1</b>	<b>3.2 %</b>	<b>0.0</b>	<b>0.0 %</b>
Brown Brothers Harriman-GILBS	248.1	3.2 %	0.0	0.0 %	0.0	0.0 %	248.1	3.2 %	0.0	0.0 %
<b>Infrastructure</b>	<b>109.4</b>	<b>1.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>109.4</b>	<b>1.4 %</b>	<b>0.0</b>	<b>0.0 %</b>
Combined Priv. Infrastructure	109.4	1.4 %	0.0	0.0 %	0.0	0.0 %	109.4	1.4 %	0.0	0.0 %
Infrastructure	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
<b>MLP</b>	<b>187.8</b>	<b>2.4 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>187.8</b>	<b>2.4 %</b>	<b>0.0</b>	<b>0.0 %</b>
Harvest Fund Advisor	187.8	2.4 %	0.0	0.0 %	0.0	0.0 %	187.8	2.4 %	0.0	0.0 %
<b>Real Estate</b>	<b>553.7</b>	<b>7.1 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>553.7</b>	<b>7.1 %</b>	<b>0.0</b>	<b>0.0 %</b>
Combined Real Estate	553.7	7.1 %	0.0	0.0 %	0.0	0.0 %	553.7	7.1 %	0.0	0.0 %

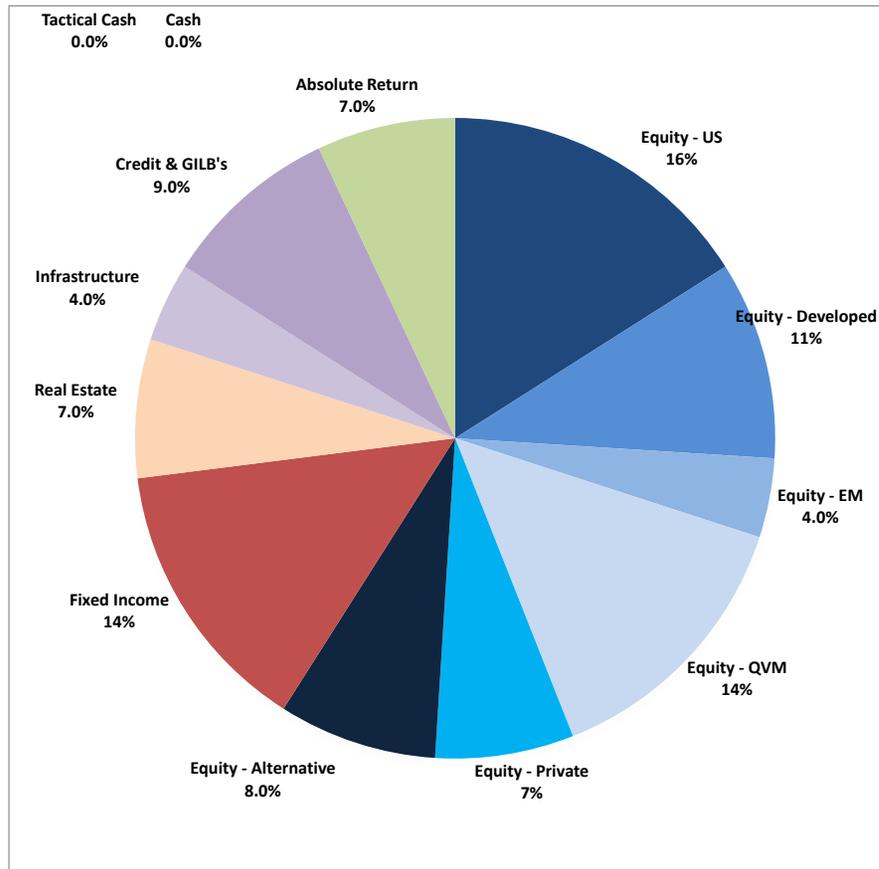
# ERSRI Portfolio

%%% - as of January 31, 2017

### Actual Allocation



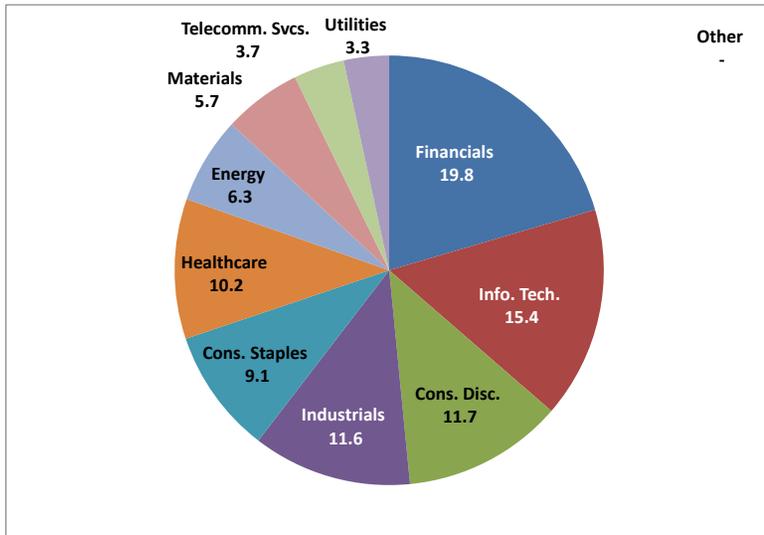
### Policy Allocation



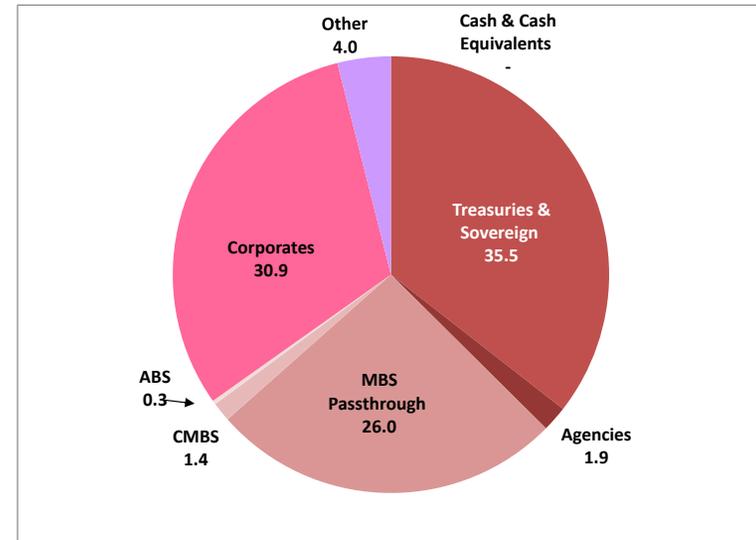
# ERSRI Asset Allocation Public-Asset Portfolios

%% - as of January 31, 2017

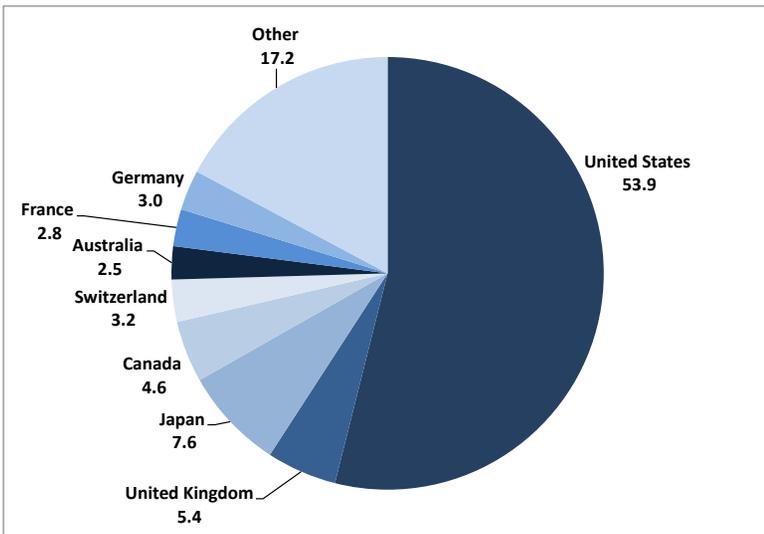
### Global Public Equity - by Industry Sector



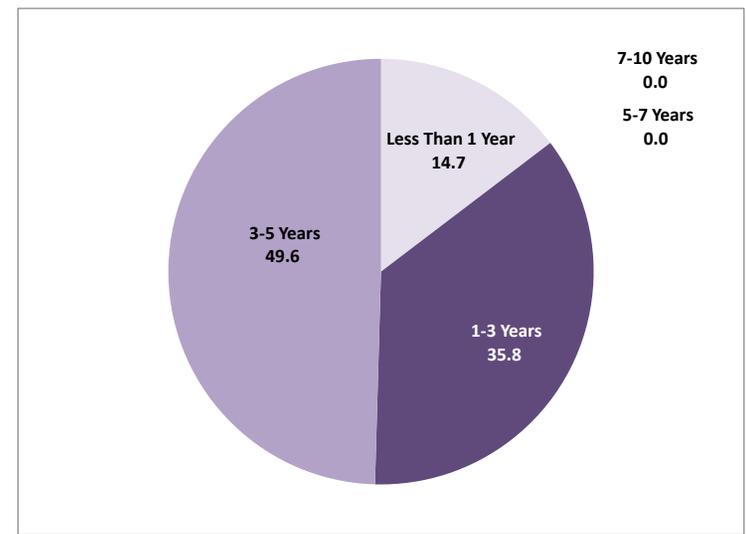
### Core Fixed Income - by Type



### Global Public Equity - by Geography



### Inflation-Linked Bonds - by Duration



## Section V.

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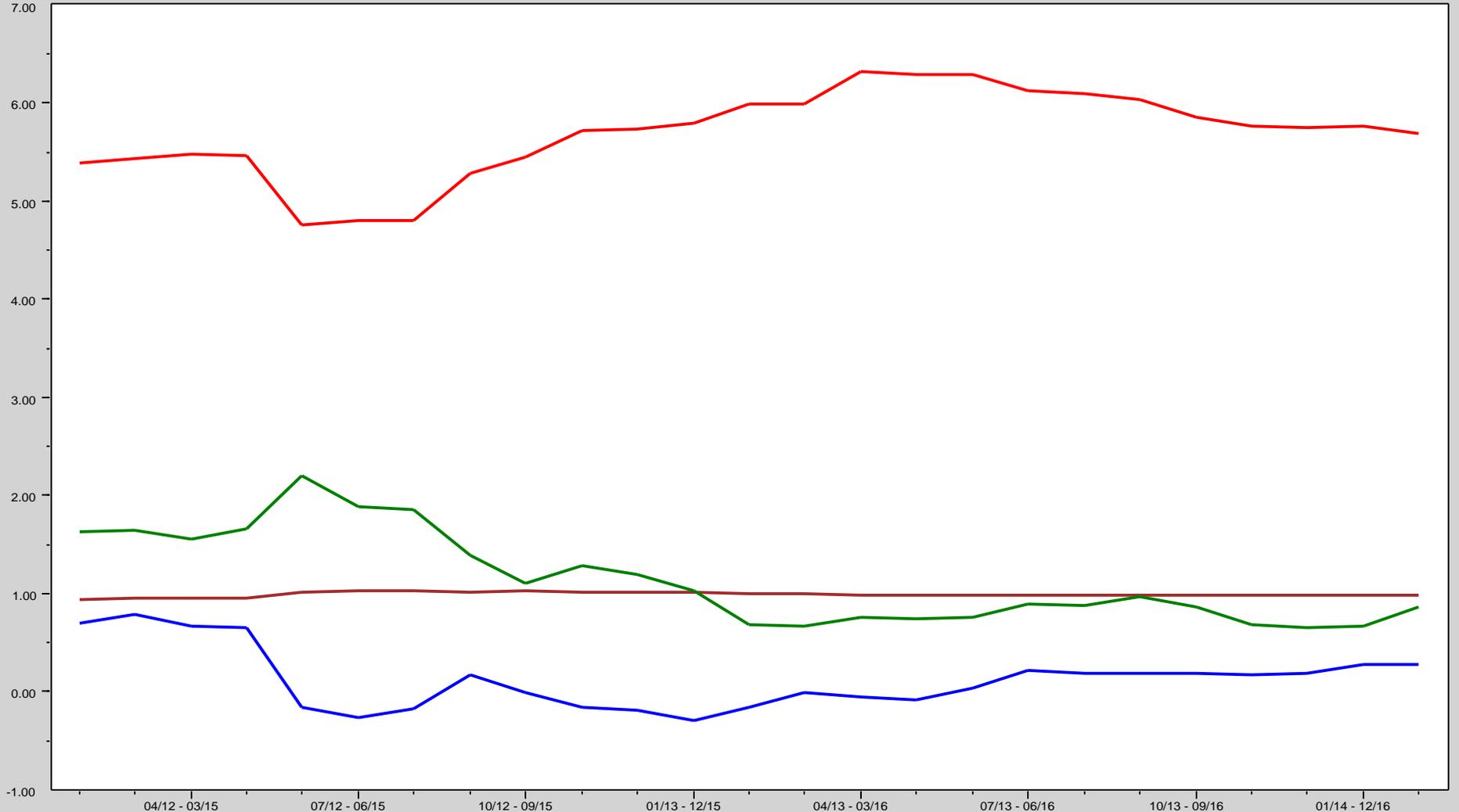
### Risk Overview

# Historical Risk - Three Year Rolling Periods

TOTAL PLAN

5 Years Ending January 31, 2017

Trend



Market Proxy: Total Plan Benchmark; Risk-Free Proxy: BofA Merrill Lynch 3 Month US Treasury Bill GOO1

Ann Std Dev      Ann Sharpe Ratio      Ann Alpha      Beta

## Risk Exposures

### 3 Years Ending January 31, 2017

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
<b>US Public Equity</b>	10.38	10.63	0.92	-0.27	0.14	0.97
<b>Non-US Public Equity</b>	1.18	12.36	1.09	0.37	0.27	2.48
<b>Equity Hedge Funds</b>	1.32	4.41	0.23	-0.27	0.04	0.74
<b>Private Equity</b>	8.31	5.24	-0.02	-0.28	0.08	1.93
<b>Traditional Fixed Income</b>	2.66	2.86	0.03	0.98	-0.02	-0.05
<b>Real Estate</b>	11.66	2.29	0.02	0.28	-0.02	-0.43
<b>Real Return Hedge Funds</b>	4.28	2.74	0.07	-0.07	0.00	-0.04
<b>Inflation-Linked Bonds</b>	1.66	2.57	0.05	0.71	0.01	0.37
<b>Cash</b>	0.70	0.37	0.00	-0.01	-0.00	-0.04
<b>Russell Overlay Fd</b>	0.02	0.09	-0.00	-0.00	-0.00	-0.03
<b>TOTAL PLAN</b>	4.94	5.68	0.52	0.14	0.11	1.07

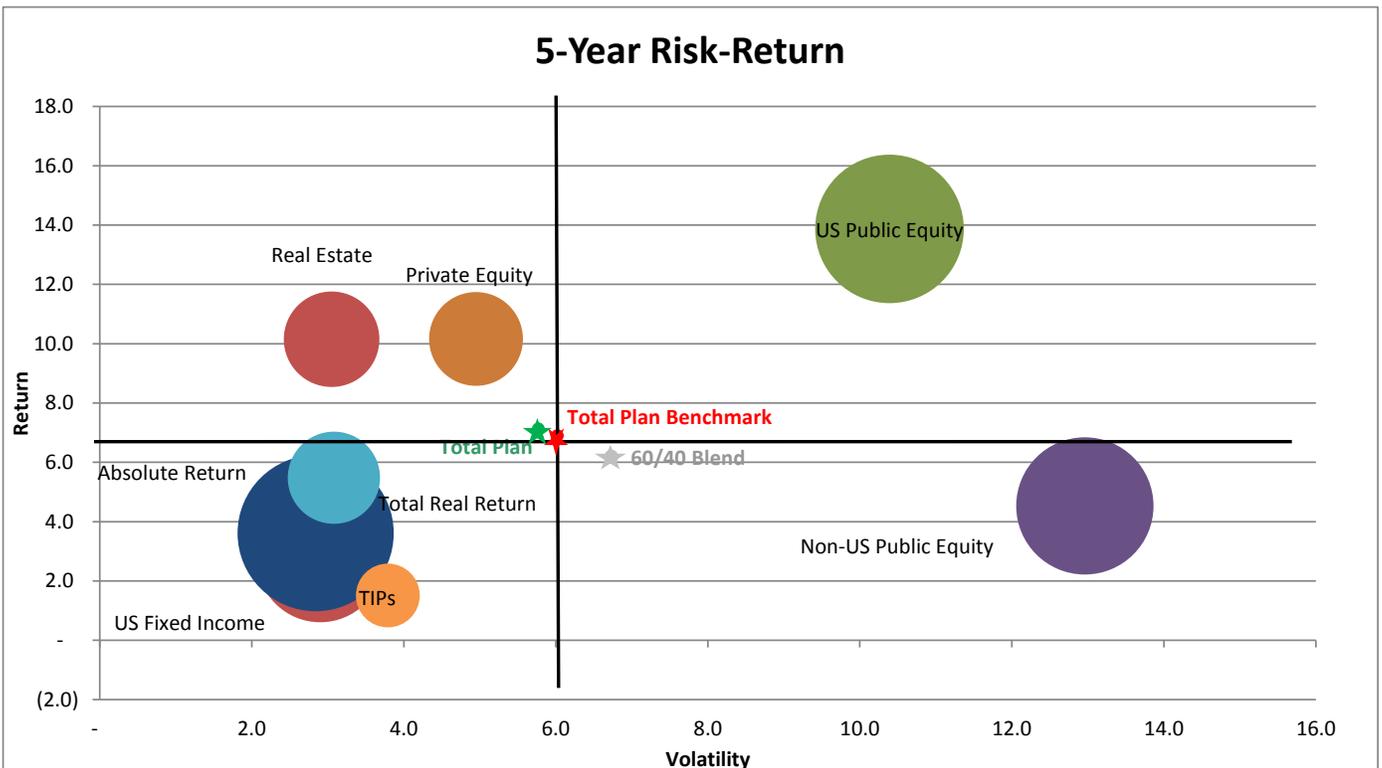
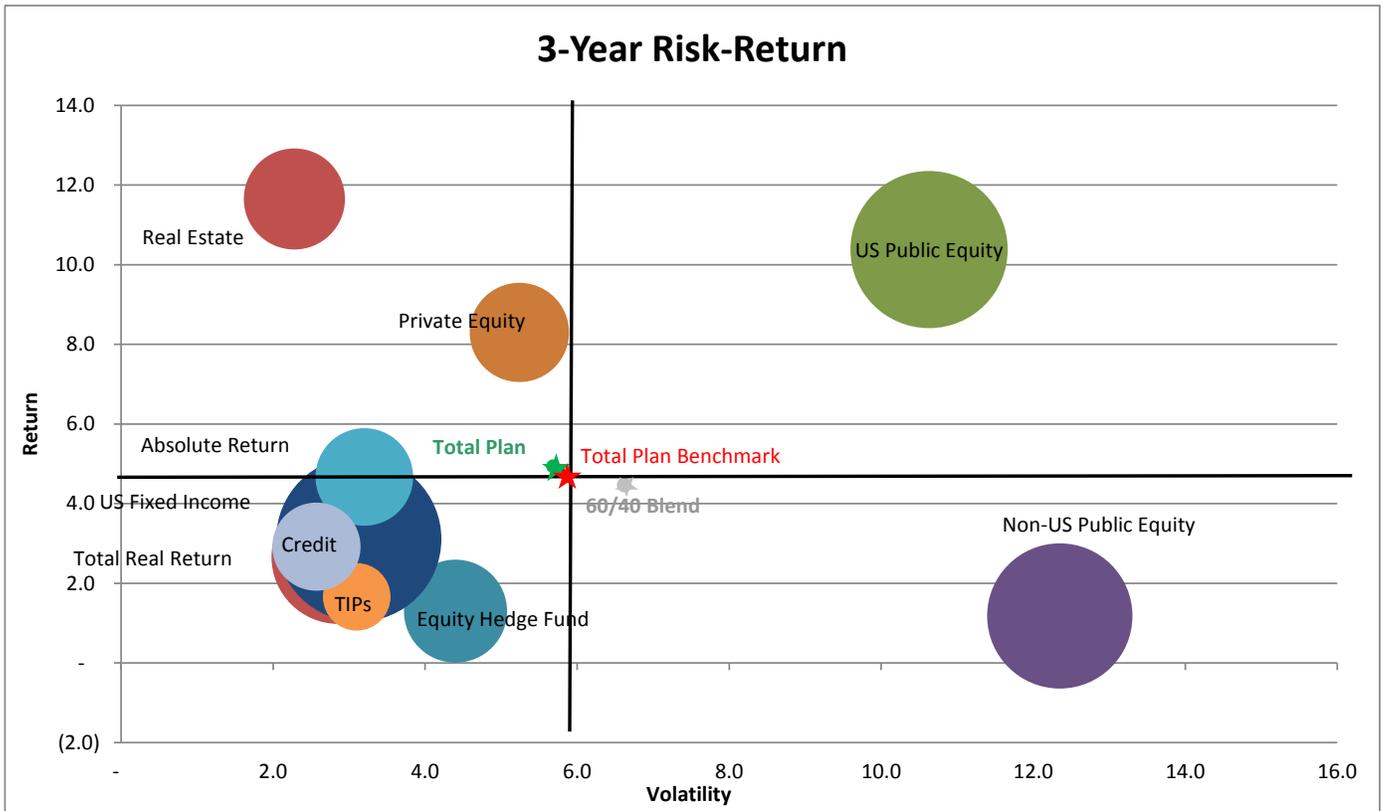
## 5 Years Ending January 31, 2017 Comparison

	<b>TOTAL PLAN</b>	<b>Total Plan Benchmark</b>	<b>60/40 Blend</b>
<b>Ann Return</b>	7.14	6.94	6.19
<b>Ann Ex Ret vs Mkt</b>	0.19		
<b>Ann Tracking Error</b>	0.94		
<b>Ann Std Dev</b>	5.77	6.03	6.74
<b>Beta</b>	0.95		
<b>R-Squared</b>	0.98		
<b>Ann Alpha</b>	0.53		
<b>Ann Sharpe Ratio</b>	1.20	1.13	0.91

# ERSRI Portfolio

% - as of January 31, 2017

Bubble-Size Scaled based on Current Allocations



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

Ann Return

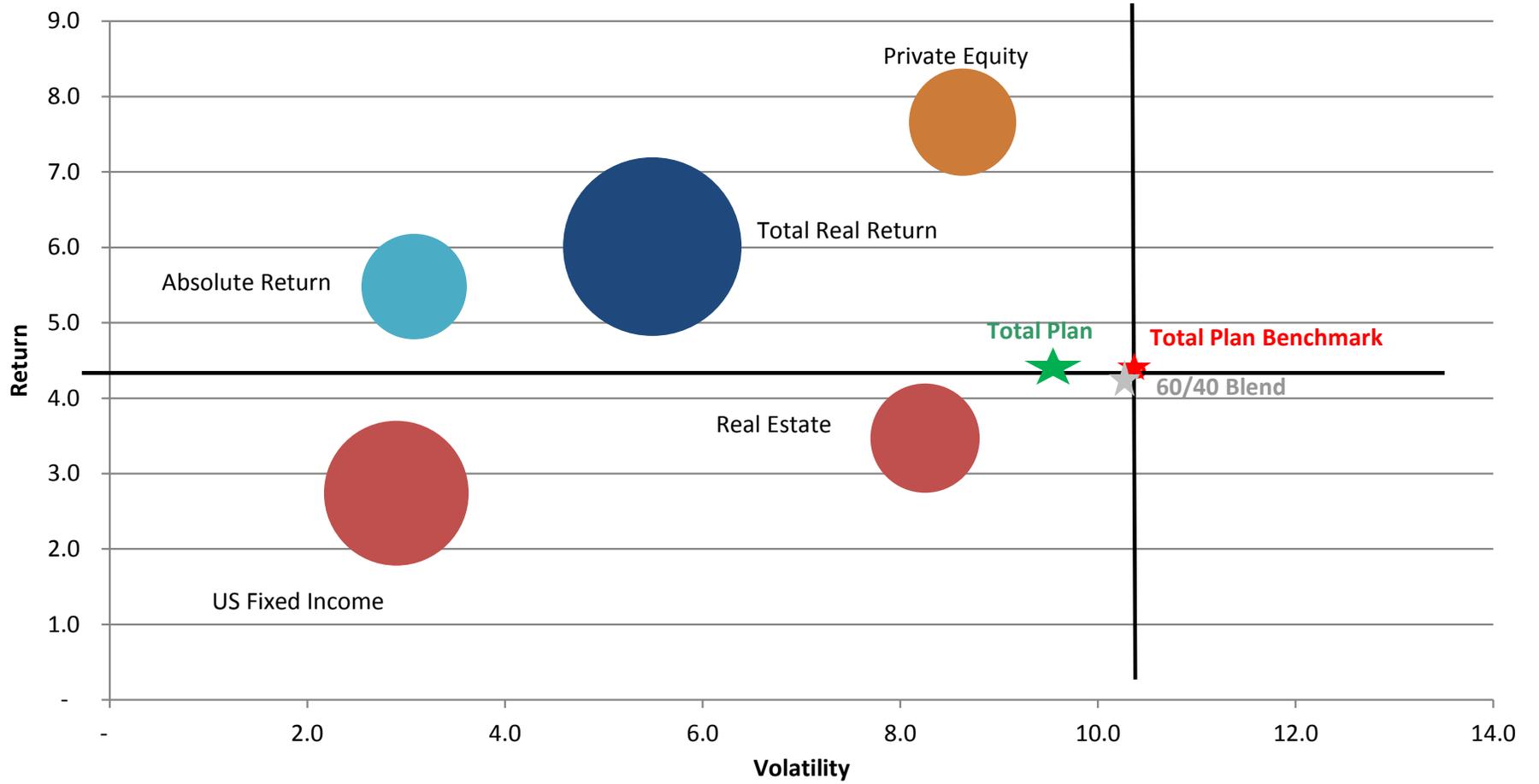
	US Pub EQ	Non-US Pub EQ	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
<b>US Pub</b>	1.00										
<b>Non-US P</b>	0.80	1.00									
<b>Eq HF</b>	0.57	0.50	1.00								
<b>PE</b>	-0.02	-0.05	-0.03	1.00							
<b>FI</b>	0.01	0.20	-0.12	-0.16	1.00						
<b>RE</b>	0.07	0.14	0.03	-0.27	0.34	1.00					
<b>RR HF</b>	0.35	0.23	0.58	-0.11	-0.04	-0.13	1.00				
<b>TIPS</b>	0.02	0.34	-0.17	-0.09	0.82	0.30	-0.02	1.00			
<b>Cash</b>	0.14	0.09	0.10	-0.11	-0.06	-0.26	0.13	-0.23	1.00		
<b>Overlay</b>	-0.26	-0.21	-0.35	-0.09	-0.07	0.09	-0.15	-0.08	-0.01	1.00	
<b>Total</b>	0.93	0.95	0.60	0.01	0.17	0.12	0.35	0.25	0.11	-0.27	1.00
<b>Tot BM</b>	0.92	0.96	0.55	-0.04	0.18	0.11	0.30	0.25	0.11	-0.25	0.99

**5 Years Ending January 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>	0.80	1.00									
<b>Eq HF</b>	0.65	0.53	1.00								
<b>PE</b>	0.11	0.08	0.05	1.00							
<b>FI</b>	-0.02	0.21	-0.11	-0.18	1.00						
<b>RE</b>	0.19	0.27	0.03	-0.03	0.31	1.00					
<b>RR HF</b>	0.38	0.29	0.60	-0.09	0.03	0.03	1.00				
<b>TIPS</b>	-0.05	0.20	-0.09	-0.15	0.79	0.26	0.13	1.00			
<b>Cash</b>	0.07	0.03	-0.02	-0.12	-0.05	-0.04	0.08	-0.13	1.00		
<b>Overlay</b>	0.19	0.26	0.10	0.06	-0.10	0.19	0.09	-0.06	-0.07	1.00	
<b>Total</b>	0.92	0.95	0.65	0.13	0.19	0.27	0.40	0.17	0.04	0.22	1.00
<b>Tot BM</b>	0.92	0.96	0.61	0.09	0.17	0.25	0.35	0.12	0.04	0.25	0.99

# 10-Year Risk-Return



**10 Years Ending January 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>	---										
<b>Non-US P</b>	---	---									
<b>Eq HF</b>	---	---	---								
<b>PE</b>	---	---	---	1.00							
<b>FI</b>	---	---	---	-0.04	1.00						
<b>RE</b>	---	---	---	0.31	-0.17	1.00					
<b>RR HF</b>	---	---	---	---	---	---	---				
<b>TIPS</b>	---	---	---	---	---	---	---	---			
<b>Cash</b>	---	---	---	0.16	0.04	0.16	---	---	1.00		
<b>Overlay</b>	---	---	---	---	---	---	---	---	---	---	
<b>Total</b>	---	---	---	0.22	0.45	0.01	---	---	-0.01	---	1.00
<b>Tot BM</b>	---	---	---	0.15	0.45	-0.02	---	---	0.00	---	0.99

## Section VI.

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### Performance Overview

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	Annualized				ITD	Inception Date
						1 Year	3 Years	5 Years	10 Years		
SSGA R3000 INDEX <i>Russell 3000 Index</i>	1,345,417,133	17	1.89 1.88	1.89 1.88	10.86 10.84	21.78 21.73	10.39 10.28			13.68 13.62	10/1/2012 10/1/2012
<b>US Public Equity</b> <i>Russell 3000 Index</i>	<b>1,345,417,208</b>	<b>17</b>	<b>1.89</b> 1.88	<b>1.89</b> 1.88	<b>10.86</b> 10.84	<b>21.78</b> 21.73	<b>10.38</b> 10.28	<b>13.87</b> 13.97		<b>7.29</b> 7.29	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE <i>MSCI EAFE Net Dividend Index</i>	724,044,259	9	2.89 2.90	2.89 2.90	8.79 8.74	12.34 12.03	0.97 0.71			6.75 6.50	9/1/2012 9/1/2012
SSGA MSCI CANADA <i>MSCI Canada Net Dividend Index</i>	106,600,071	1	3.78 3.72	3.78 3.72	12.61 12.29	33.23 32.54	1.84 1.24			2.75 2.11	9/1/2012 9/1/2012
SSGA MSCI EM <i>MSCI Emerging Markets Net Dividend Index</i>	317,326,298	4	5.44 5.47	5.44 5.47	10.04 10.20	25.04 25.41	1.19 1.44			1.20 1.42	9/1/2012 9/1/2012
<b>Non-US Public Equity</b> <i>Total International Equity BM</i>	<b>1,148,023,420</b>	<b>15</b>	<b>3.67</b> 3.54	<b>3.67</b> 3.54	<b>9.60</b> 9.31	<b>16.75</b> 16.09	<b>1.18</b> 0.92	<b>4.53</b> 4.59		<b>7.87</b> 7.04	<b>5/1/2009</b> 5/1/2009
QVM Tilt <i>MSCI World Net Dividend Index</i>	1,107,901,982	14	2.31 2.41	2.31 2.41	9.15 9.39	16.88 17.11				12.11 11.89	10/1/2015 10/1/2015
<b>Global Public Equity</b> <i>MSCI All Country World Net Index</i>	<b>3,601,342,610</b>	<b>46</b>	<b>2.58</b> 2.73	<b>2.58</b> 2.73	<b>9.85</b> 9.47	<b>18.85</b> 17.93	<b>5.71</b> 5.49	<b>9.44</b> 8.72	<b>4.49</b> 3.74	<b>4.06</b> 4.06	<b>7/1/2000</b> 7/1/2000
Private Equity <i>ILPA All Fds Custom BM 1Q Lag</i>	535,955,399	7	0.20 0.20	0.20 0.20	4.61 4.95	9.47 6.73	8.31 10.00	10.17 13.69	7.66 8.39	9.06	2/1/1989 2/1/1989
<b>Equity Hedge Funds</b> <i>HFRI Equity Hedge (Total) Index</i>	<b>577,952,000</b>	<b>7</b>	<b>1.18</b> 2.11	<b>1.18</b> 2.11	<b>4.47</b> 8.10	<b>3.16</b> 12.83	<b>1.32</b> 3.11	<b>5.27</b> 5.10		<b>5.21</b> 5.02	<b>11/1/2011</b> 11/1/2011
<b>Total Equity</b>	<b>4,715,250,009</b>	<b>61</b>	<b>2.13</b>	<b>2.13</b>	<b>8.54</b>	<b>15.54</b>	<b>5.43</b>	<b>8.99</b>	<b>4.54</b>	<b>8.87</b>	<b>6/1/1996</b>
MACKAY SHIELDS <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	483,309,954	6	0.22 0.20	0.22 0.20	-2.17 -2.34	1.55 1.45	2.57 2.59			1.77 1.69	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	492,742,493	6	0.27 0.20	0.27 0.20	-1.50 -2.34	2.88 1.45	2.74 2.59			1.84 1.69	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	<b>976,054,237</b>	<b>13</b>	<b>0.25</b> 0.20	<b>0.25</b> 0.20	<b>-1.83</b> -2.34	<b>2.23</b> 1.45	<b>2.66</b> 2.59	<b>2.74</b> 2.09	<b>4.43</b> 4.37	<b>5.24</b> 5.11	<b>7/1/2000</b> 7/1/2000

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	Annualized				ITD	Inception Date
						1 Year	3 Years	5 Years	10 Years		
<b>Real Return Hedge Funds</b>	<b>517,636,409</b>	<b>7</b>	<b>0.38</b>	<b>0.38</b>	<b>5.78</b>	<b>7.45</b>	<b>4.28</b>	<b>4.80</b>		<b>4.85</b>	<b>11/1/2011</b>
<i>HFRI Fund of Funds Composite Index</i>			<i>0.70</i>	<i>0.70</i>	<i>3.91</i>	<i>4.00</i>	<i>1.57</i>	<i>3.20</i>		<i>3.09</i>	<i>11/1/2011</i>
PIMCO	215,475,750	3	0.25	0.25	4.16	8.14	3.20			3.25	5/1/2013
<i>30%BoA1-3BB-BHY/70% JPMB/BLLI</i>			<i>0.37</i>	<i>0.37</i>	<i>4.88</i>	<i>10.15</i>	<i>3.99</i>			<i>4.17</i>	<i>5/1/2013</i>
WAMCO	207,035,531	3	1.11	1.11	7.31	15.17	2.66			3.20	4/1/2013
<i>30% BoA 1-3 BB-B HY/70% CS LLI</i>			<i>0.56</i>	<i>0.56</i>	<i>5.72</i>	<i>11.55</i>	<i>3.89</i>			<i>4.21</i>	<i>4/1/2013</i>
<b>Credit Aggregate</b>	<b>422,511,281</b>	<b>5</b>	<b>0.66</b>	<b>0.66</b>	<b>5.70</b>	<b>11.52</b>	<b>2.92</b>			<b>3.17</b>	<b>5/1/2013</b>
<i>Credit Aggregate</i>			<i>0.47</i>	<i>0.47</i>	<i>5.30</i>	<i>10.85</i>	<i>3.99</i>			<i>4.17</i>	<i>5/1/2013</i>
BROWN BROTHERS HARR	248,061,504	3	0.76	0.76	-0.23	3.34	1.66			0.62	11/1/2012
<i>BBH Inflation-Linked Custom BM</i>			<i>0.74</i>	<i>0.74</i>	<i>-0.17</i>	<i>3.45</i>	<i>1.82</i>			<i>0.61</i>	<i>11/1/2012</i>
<b>Inflation-Linked Bonds</b>	<b>248,061,504</b>	<b>3</b>	<b>0.76</b>	<b>0.76</b>	<b>-0.23</b>	<b>3.34</b>	<b>1.66</b>	<b>1.52</b>		<b>4.08</b>	<b>11/1/2009</b>
<i>Total Inflation Linked Custom</i>			<i>0.74</i>	<i>0.74</i>	<i>-0.17</i>	<i>3.45</i>	<i>1.82</i>	<i>1.46</i>		<i>4.06</i>	<i>11/1/2009</i>
Harvest Fund Advisor	187,465,056	2	3.47	3.47	9.49	42.20				-6.92	1/1/2015
<i>Alerian MLP Index</i>			<i>4.89</i>	<i>4.89</i>	<i>8.18</i>	<i>39.60</i>				<i>-8.21</i>	<i>1/1/2015</i>
Priv Listed Infrastructure	109,395,719	1	0.00	0.00	5.98	14.08				4.82	3/1/2015
<b>Total Real Return</b>	<b>1,485,069,969</b>	<b>19</b>	<b>0.88</b>	<b>0.88</b>	<b>5.10</b>	<b>11.57</b>	<b>3.11</b>	<b>3.61</b>	<b>6.01</b>	<b>5.56</b>	<b>6/1/2004</b>
Real Estate	555,593,180	7	0.96	0.96	5.52	8.85	11.66	10.15	3.47	3.07	1/1/2005
<i>NFI-ODCE Index</i>			<i>1.03</i>	<i>1.03</i>	<i>4.84</i>	<i>10.21</i>	<i>12.07</i>	<i>12.04</i>	<i>8.16</i>	<i>9.89</i>	<i>1/1/2005</i>
ERSRI CASH	25,647,432	0	0.07	0.07	0.40	1.03	0.73	0.48	1.74	12.81	7/1/2000
<i>BofA Merrill Lynch 3 Month US Treasury Bill GOO1</i>			<i>0.04</i>	<i>0.04</i>	<i>0.23</i>	<i>0.37</i>	<i>0.15</i>	<i>0.13</i>	<i>0.76</i>	<i>1.67</i>	<i>7/1/2000</i>
<b>Total Cash</b>	<b>40,087,421</b>	<b>1</b>	<b>0.06</b>	<b>0.06</b>	<b>0.37</b>	<b>0.96</b>	<b>0.70</b>	<b>0.48</b>	<b>1.25</b>	<b>2.32</b>	<b>4/1/2004</b>
<b>Russell Overlay Fd</b>	<b>18,098,436</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.05</b>	<b>0.06</b>	<b>0.02</b>	<b>0.07</b>		<b>-0.06</b>	<b>9/1/2008</b>
<b>TOTAL PLAN</b>	<b>7,790,554,783</b>	<b>100</b>	<b>1.55</b>	<b>1.55</b>	<b>6.18</b>	<b>12.34</b>	<b>4.94</b>	<b>7.14</b>	<b>4.42</b>	<b>4.70</b>	<b>7/1/2000</b>
<i>Total Plan Benchmark</i>			<i>1.66</i>	<i>1.66</i>	<i>5.71</i>	<i>11.63</i>	<i>4.83</i>	<i>6.94</i>	<i>4.37</i>		<i>7/1/2000</i>
<i>60/40 Blend</i>			<i>1.72</i>	<i>1.72</i>	<i>4.63</i>	<i>11.15</i>	<i>4.48</i>	<i>6.19</i>	<i>4.36</i>		<i>7/1/2000</i>
<b>Total Plan ex PE,RE &amp; Priv Inf</b>	<b>6,589,610,486</b>	<b>85</b>	<b>1.73</b>	<b>1.73</b>	<b>6.38</b>	<b>12.83</b>	<b>4.28</b>	<b>6.42</b>	<b>4.08</b>	<b>6.19</b>	<b>4/1/1996</b>
<i>Total Plan BM ex PE RE</i>			<i>1.81</i>	<i>1.81</i>	<i>5.82</i>	<i>12.10</i>	<i>4.08</i>	<i>6.45</i>	<i>3.99</i>		<i>4/1/1996</i>

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative				Inception Date		
				12/1/2016 - 12/31/2016	11/1/2016 - 11/30/2016	YTD	2016		2015	2014
SSGA R3000 INDEX <i>Russell 3000 Index</i>	1,345,417,133	17	1.89 1.88	1.95 1.95	4.47 4.48	1.89 1.88	12.84 12.74	0.60 0.48	12.59 12.56	10/1/2012 10/1/2012
<b>US Public Equity</b> <i>Russell 3000 Index</i>	<b>1,345,417,208</b>	<b>17</b>	<b>1.89</b> 1.88	<b>1.95</b> 1.95	<b>4.47</b> 4.48	<b>1.89</b> 1.88	<b>12.84</b> 12.74	<b>0.60</b> 0.48	<b>12.57</b> 12.56	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE <i>MSCI EAFE Net Dividend Index</i>	724,044,259	9	2.89 2.90	3.42 3.42	-1.98 -1.99	2.89 2.90	1.28 1.00	-0.59 -0.81	-4.64 -4.90	9/1/2012 9/1/2012
SSGA MSCI CANADA <i>MSCI Canada Net Dividend Index</i>	106,600,071	1	3.78 3.72	1.83 1.76	2.41 2.38	3.78 3.72	25.24 24.56	-23.70 -24.16	2.17 1.51	9/1/2012 9/1/2012
SSGA MSCI EM <i>MSCI Emerging Markets Net Dividend Index</i>	317,326,298	4	5.44 5.47	0.21 0.22	-4.64 -4.60	5.44 5.47	10.82 11.19	-15.16 -14.92	-2.34 -2.19	9/1/2012 9/1/2012
<b>Non-US Public Equity</b> <i>Total International Equity BM</i>	<b>1,148,023,420</b>	<b>15</b>	<b>3.67</b> 3.54	<b>2.38</b> 2.56	<b>-2.42</b> -2.31	<b>3.67</b> 3.54	<b>5.01</b> 4.50	<b>-5.77</b> -5.66	<b>-3.63</b> -3.87	<b>5/1/2009</b> 5/1/2009
QVM Tilt <i>MSCI World Net Dividend Index</i>	1,107,901,982	14	2.31 2.41	2.40 2.39	1.53 1.44	2.31 2.41	7.58 7.51			10/1/2015 10/1/2015
<b>Global Public Equity</b> <i>MSCI All Country World Net Index</i>	<b>3,601,342,610</b>	<b>46</b>	<b>2.58</b> 2.73	<b>2.23</b> 2.16	<b>1.21</b> 0.76	<b>2.58</b> 2.73	<b>8.78</b> 7.86	<b>-2.48</b> -2.36	<b>4.35</b> 4.16	<b>7/1/2000</b> 7/1/2000
Private Equity <i>ILPA All Fds Custom BM 1Q Lag</i>	535,955,399	7	0.20 0.20	0.27 0.27	1.16 1.41	0.20 0.20	9.19 6.51	7.08 7.16	8.02 16.39	2/1/1989 2/1/1989
<b>Equity Hedge Funds</b> <i>HFRI Equity Hedge (Total) Index</i>	<b>577,952,000</b>	<b>7</b>	<b>1.18</b> 2.11	<b>0.24</b> 0.78	<b>0.22</b> 1.25	<b>1.18</b> 2.11	<b>-1.06</b> 5.43	<b>1.27</b> -0.97	<b>2.64</b> 1.81	<b>11/1/2011</b> 11/1/2011
<b>Total Equity</b>	<b>4,715,250,009</b>	<b>61</b>	<b>2.13</b>	<b>1.74</b>	<b>1.08</b>	<b>2.13</b>	<b>7.47</b>	<b>-0.95</b>	<b>4.51</b>	<b>6/1/1996</b>
MACKAY SHIELDS <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	483,309,954	6	0.22 0.20	0.23 0.14	-2.39 -2.37	0.22 0.20	2.66 2.65	0.48 0.55	6.00 5.97	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	492,742,493	6	0.27 0.20	0.25 0.14	-2.28 -2.37	0.27 0.20	3.61 2.65	0.01 0.55	5.83 5.97	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	<b>976,054,237</b>	<b>13</b>	<b>0.25</b> 0.20	<b>0.24</b> 0.14	<b>-2.33</b> -2.37	<b>0.25</b> 0.20	<b>3.15</b> 2.65	<b>0.25</b> 0.55	<b>5.91</b> 5.97	<b>7/1/2000</b> 7/1/2000

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative			YTD	2016	2015	2014	Inception Date
				12/1/2016 - 12/31/2016	11/1/2016 - 11/30/2016						
<b>Real Return Hedge Funds</b>	<b>517,636,409</b>	<b>7</b>	<b>0.38</b>	<b>1.03</b>	<b>1.98</b>	<b>0.38</b>	<b>7.04</b>	<b>0.86</b>	<b>4.70</b>	<b>11/1/2011</b>	
<i>HFRI Fund of Funds Composite Index</i>			<i>0.70</i>	<i>0.92</i>	<i>0.24</i>	<i>0.70</i>	<i>0.53</i>	<i>-0.27</i>	<i>3.37</i>	<i>11/1/2011</i>	
PIMCO	215,475,750	3	0.25	0.94	0.27	0.25	7.59	1.13	1.22	5/1/2013	
<i>30%BoA1-3BB-BHY/70% JPMB/BLLI</i>			<i>0.37</i>	<i>0.99</i>	<i>0.24</i>	<i>0.37</i>	<i>9.17</i>	<i>1.00</i>	<i>2.11</i>	<i>5/1/2013</i>	
WAMCO	207,035,531	3	1.11	2.06	0.05	1.11	11.69	-3.69	0.10	4/1/2013	
<i>30% BoA 1-3 BB-B HY/70% CS LLI</i>			<i>0.56</i>	<i>1.10</i>	<i>0.25</i>	<i>0.56</i>	<i>10.09</i>	<i>-0.18</i>	<i>2.03</i>	<i>4/1/2013</i>	
<b>Credit Aggregate</b>	<b>422,511,281</b>	<b>5</b>	<b>0.66</b>	<b>1.49</b>	<b>0.16</b>	<b>0.66</b>	<b>9.59</b>	<b>-1.29</b>	<b>0.66</b>	<b>5/1/2013</b>	
<i>Credit Aggregate</i>			<i>0.47</i>	<i>1.05</i>	<i>0.24</i>	<i>0.47</i>	<i>9.63</i>	<i>0.49</i>	<i>2.11</i>	<i>5/1/2013</i>	
BROWN BROTHERS HARR	248,061,504	3	0.76	0.04	-1.51	0.76	3.91	-0.26	1.72	11/1/2012	
<i>BBH Inflation-Linked Custom BM</i>			<i>0.74</i>	<i>0.11</i>	<i>-1.47</i>	<i>0.74</i>	<i>4.01</i>	<i>-0.15</i>	<i>2.04</i>	<i>11/1/2012</i>	
<b>Inflation-Linked Bonds</b>	<b>248,061,504</b>	<b>3</b>	<b>0.76</b>	<b>0.04</b>	<b>-1.51</b>	<b>0.76</b>	<b>3.91</b>	<b>-0.26</b>	<b>1.72</b>	<b>11/1/2009</b>	
<i>Total Inflation Linked Custom</i>			<i>0.74</i>	<i>0.11</i>	<i>-1.47</i>	<i>0.74</i>	<i>4.01</i>	<i>-0.15</i>	<i>2.04</i>	<i>11/1/2009</i>	
Harvest Fund Advisor	187,465,056	2	3.47	3.71	3.45	3.47	20.64	-31.01		1/1/2015	
<i>Alerian MLP Index</i>			<i>4.89</i>	<i>4.39</i>	<i>2.30</i>	<i>4.89</i>	<i>18.31</i>	<i>-32.59</i>		<i>1/1/2015</i>	
Priv Listed Infrastructure	109,395,719	1	0.00	1.21	0.03	0.00	13.35			3/1/2015	
<i>CPI + 4%</i>				<i>0.35</i>	<i>0.16</i>		<i>6.07</i>			<i>3/1/2015</i>	
<b>Total Real Return</b>	<b>1,485,069,969</b>	<b>19</b>	<b>0.88</b>	<b>1.32</b>	<b>0.87</b>	<b>0.88</b>	<b>9.30</b>	<b>-2.76</b>	<b>2.74</b>	<b>6/1/2004</b>	
Real Estate	555,593,180	7	0.96	0.45	0.84	0.96	9.77	14.22	10.90	1/1/2005	
<i>NFI-ODCE Index</i>			<i>1.03</i>	<i>1.83</i>	<i>0.00</i>	<i>1.03</i>	<i>9.08</i>	<i>13.86</i>	<i>12.26</i>	<i>1/1/2005</i>	
ERSRI CASH	25,647,432	0	0.07	0.03	0.03	0.07	0.97	0.40	0.75	7/1/2000	
<i>BofA Merrill Lynch 3 Month US Treasury Bill GOO1</i>			<i>0.04</i>	<i>0.04</i>	<i>0.02</i>	<i>0.04</i>	<i>0.33</i>	<i>0.05</i>	<i>0.03</i>	<i>7/1/2000</i>	
<b>Total Cash</b>	<b>40,087,421</b>	<b>1</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.06</b>	<b>0.91</b>	<b>0.38</b>	<b>0.74</b>	<b>4/1/2004</b>	
<b>Russell Overlay Fd</b>	<b>18,098,436</b>	<b>0</b>	<b>0.00</b>	<b>-0.02</b>	<b>0.05</b>	<b>0.00</b>	<b>0.06</b>	<b>0.00</b>	<b>-0.02</b>	<b>9/1/2008</b>	
<b>TOTAL PLAN</b>	<b>7,790,554,783</b>	<b>100</b>	<b>1.55</b>	<b>1.35</b>	<b>0.61</b>	<b>1.55</b>	<b>7.35</b>	<b>-0.28</b>	<b>4.52</b>	<b>7/1/2000</b>	
<i>Total Plan Benchmark</i>			<i>1.66</i>	<i>1.34</i>	<i>0.19</i>	<i>1.66</i>	<i>6.32</i>	<i>-0.25</i>	<i>5.04</i>	<i>7/1/2000</i>	
<i>60/40 Blend</i>			<i>1.72</i>	<i>1.35</i>	<i>-0.49</i>	<i>1.72</i>	<i>5.92</i>	<i>-0.98</i>	<i>4.96</i>	<i>7/1/2000</i>	
<b>Total Plan ex Overlay</b>	<b>7,772,456,347</b>	<b>100</b>	<b>1.55</b>	<b>1.37</b>	<b>0.55</b>	<b>1.55</b>	<b>7.29</b>	<b>-0.28</b>	<b>4.54</b>	<b>8/1/2008</b>	
<i>Total Plan Benchmark</i>			<i>1.66</i>	<i>1.34</i>	<i>0.19</i>	<i>1.66</i>	<i>6.32</i>	<i>-0.25</i>	<i>5.04</i>	<i>8/1/2008</i>	



# Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2016	2015	2014	Inception Date
				12/1/2016 - 12/31/2016	11/1/2016 - 11/30/2016					
<b>Total Plan ex PE,RE &amp; Priv Inf</b>	<b>6,589,610,486</b>	<b>85</b>	<b>1.73</b>	<b>1.52</b>	<b>0.55</b>	<b>1.73</b>	<b>6.97</b>	<b>-1.68</b>	<b>3.98</b>	<b>4/1/1996</b>
<i>Total Plan BM ex PE RE</i>			<i>1.81</i>	<i>1.40</i>	<i>0.10</i>	<i>1.81</i>	<i>6.12</i>	<i>-1.64</i>	<i>3.90</i>	<i>4/1/1996</i>

END NOTES

1/31/2017

1 RI6G23000000 TOTAL PLAN

Month - Current Month

Cumulative Months - Prior Month and Second Prior Month

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

2014, 2013, 2012 - Calendar Years

RI6G23000000 TOTAL PLAN

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

15.0% Barclays U.S. Aggregate Bond Index

44.5% MSCI All Country World Net Index

7.0% HFRI Fund of Funds Composite Index

3.0% BofA Merrill Lynch 3 Month US Treasury Bill

8.0% HFRI Equity Hedge (Total) Index

5.0% NFI-ODCE Index

4.0% Barclays U.S. Treasury Inflation Notes: 1-10 Year Index

5.0% Credit Aggregate Custom: 30% BoA1-3BB-B HY/35%CSInstLLI/35% JPM BB/B Leveraged Loan Index

7.0% ILPA All Funds Index

1.5% Alerian MLP Total Return Index

## Section VII.

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### Hedge Fund Returns

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

Hedge Fund Portfolio  
 Portfolio Performance Summary  
 Estimated as of January 31, 2017

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Jan	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
<b>Global Equities</b>													
Ascend ERSRI Fund LP	70,433,058	6.4%	1.95%	1.95%	1.95%	3.42%	-0.95%	1.02%	3.31%	3.10%	3.45%	0.78	Nov-11
Davidson Kempner Institutional Partners, L.P.	81,324,632	7.4%	0.72%	0.72%	0.72%	4.87%	7.45%	4.41%	5.97%	5.96%	2.04%	2.65	Nov-11
Elliott Associates, L.P.	98,276,861	9.0%	2.10%	2.10%	2.10%	10.00%	17.76%	8.41%	10.40%	9.85%	3.80%	2.40	Nov-11
ESG Cross Border Equity Fund LP	37,269,098	3.4%	-2.50%	-2.50%	-2.50%	-9.34%	-16.69%	-	-	-10.41%	8.13%	-1.37	Jun-14
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series (liquidating trust)	336,001	0.0%	0.10%	0.10%	0.10%	11.94%	-24.17%	-24.50%	-14.64%	-14.01%	18.41%	-0.74	Jan-12
Luxor Capital Partners, LP - Holdback	1,453,695	0.1%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	0.00%	-	Jul-16
Luxor Capital Partners, LP - Liquidating SPV	3,838,370	0.3%	0.86%	0.86%	0.86%	-9.19%	-	-	-	-9.19%	4.87%	-	Jul-16
PFM Diversified Fund, L.P.	78,978,374	7.2%	2.28%	2.28%	2.28%	5.30%	2.58%	1.00%	-	5.78%	8.87%	0.63	Mar-12
Samlyn Onshore Fund, L.P.	109,924,249	10.0%	1.60%	1.60%	1.60%	7.73%	7.60%	3.81%	7.09%	7.73%	6.30%	1.15	Jan-12
Viking Global Equities, LP	100,216,048	9.1%	2.00%	2.00%	2.00%	4.01%	0.76%	6.11%	10.48%	10.44%	7.49%	1.31	Dec-11
<b>Total Global Equities</b>	<b>582,050,384</b>	<b>53.0%</b>	<b>1.48%</b>	<b>1.48%</b>	<b>1.48%</b>	<b>4.75%</b>	<b>3.83%</b>	<b>1.53%</b>	<b>5.39%</b>	<b>5.29%</b>	<b>4.35%</b>	<b>1.11</b>	<b>Nov-11</b>
MSCI AC World Index Free - Net			2.73%	2.73%	2.73%	9.47%	17.93%	5.49%	8.72%	8.78%	11.27%	0.77	Nov-11
Russell 3000 Index (DRI)			1.88%	1.88%	1.88%	10.84%	21.73%	10.28%	13.97%	14.45%	10.41%	1.31	Nov-11
HFRI Equity Hedge (Total) Index			2.11%	2.11%	2.11%	8.10%	12.83%	3.11%	5.10%	5.02%	6.17%	0.76	Nov-11
<b>Real Return</b>													
Brevan Howard LP	79,537,739	7.2%	-1.47%	-1.47%	-1.47%	2.68%	0.97%	0.02%	0.79%	1.13%	5.63%	0.15	Nov-11
Brigade Leveraged Capital Structures Fund LP	62,718,453	5.7%	2.21%	2.21%	2.21%	11.09%	24.73%	4.20%	-	4.72%	5.74%	0.76	Mar-12
Capula Global Relative Value Fund Ltd.	68,091,555	6.2%	0.23%	0.23%	0.23%	5.36%	7.54%	7.70%	6.60%	6.16%	1.90%	2.94	Dec-11
Claren Road Credit Fund, Ltd.	4,196,131	0.4%	0.00%	0.00%	0.00%	9.91%	9.08%	-3.36%	-	-1.75%	11.20%	-0.14	Apr-13
DE Shaw Composite Fund LLC	96,102,017	8.8%	0.90%	0.90%	0.90%	4.22%	7.41%	12.28%	13.48%	13.25%	4.24%	2.86	Nov-11
Graham Absolute Return Trading Ltd.	60,785,100	5.5%	-1.98%	-1.98%	-1.98%	9.09%	8.96%	4.38%	3.82%	3.91%	5.11%	0.70	Jan-12
OZ Domestic Partners II, L.P.	108,334,674	9.9%	2.18%	2.18%	2.18%	8.60%	8.44%	3.87%	7.39%	7.26%	4.64%	1.45	Nov-11
Winton Futures Fund Limited	35,363,747	3.2%	-1.09%	-1.09%	-1.09%	-3.97%	-5.83%	4.14%	2.95%	3.23%	8.67%	0.36	Dec-11
<b>Total Real Return</b>	<b>515,129,416</b>	<b>47.0%</b>	<b>0.37%</b>	<b>0.37%</b>	<b>0.37%</b>	<b>5.80%</b>	<b>7.44%</b>	<b>4.15%</b>	<b>4.81%</b>	<b>4.84%</b>	<b>2.64%</b>	<b>1.65</b>	<b>Nov-11</b>
ML 3-month T-Bills			0.04%	0.04%	0.04%	0.22%	0.37%	0.15%	0.13%	0.12%	0.04%	-	Nov-11
HFRI Fund of Funds Composite Index			0.70%	0.70%	0.70%	3.91%	3.99%	1.57%	3.20%	3.09%	3.46%	0.78	Nov-11
<b>Total Hedge Fund Portfolio</b>	<b>1,097,179,799</b>	<b>100.0%</b>	<b>0.95%</b>	<b>0.95%</b>	<b>0.95%</b>	<b>5.24%</b>	<b>5.49%</b>	<b>2.73%</b>	<b>5.12%</b>	<b>5.10%</b>	<b>3.22%</b>	<b>1.43</b>	<b>Nov-11</b>
HFRI Fund of Funds Composite Index			0.70%	0.70%	0.70%	3.91%	3.99%	1.57%	3.20%	3.09%	3.46%	0.78	Nov-11

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

Hedge Fund Portfolio

Portfolio Performance Summary

Estimated as of January 31, 2017

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Jan	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
<b>Market Indices</b>													
Libor3Month			0.09%	0.09%	0.09%	0.53%	0.80%	0.46%	0.41%	0.42%	0.06%	-	Nov-11
Barclays Aggregate Bond Index			0.20%	0.20%	0.20%	-2.34%	1.46%	2.60%	2.10%	2.37%	2.87%	0.68	Nov-11
Barclays High Yield Credit Bond Index			1.45%	1.45%	1.45%	8.97%	20.78%	4.93%	7.04%	7.39%	5.61%	1.23	Nov-11
S&P 500 TR			1.90%	1.90%	1.90%	9.87%	20.04%	10.85%	14.09%	14.50%	10.14%	1.35	Nov-11
MSCI EAFE - Net			2.90%	2.90%	2.90%	8.74%	12.03%	0.71%	6.04%	5.59%	13.45%	0.44	Nov-11
MSCI EMF (Emerging Markets Free) - Net			5.47%	5.47%	5.47%	10.20%	25.41%	1.44%	0.19%	0.68%	16.23%	0.10	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.

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

Hedge Fund Portfolio

Fund Level Performance Report

Estimated as of January 31, 2017

Fund	Trailing Returns					Calendar Year Returns					5 Yr Std Dev	Sharpe Ratio			Start Date			
	QTD	YTD	Jan	Dec	Nov	1 Year	3 Year	5 Year	2016	2015		2014	2013	2012		3 yr	5 yr	Incep.
<b>Global Equities</b>																		
Ascend Partners Fund II LP	1.20%	1.20%	1.20%	0.93%	-0.66%	-0.26%	1.73%	3.85%	-3.51%	2.66%	5.09%	12.22%	2.50%	2.97%	0.42	1.14	0.96	Jan-04
Davidson Kempner Institutional Partners, L.P.	0.72%	0.72%	0.72%	0.52%	0.10%	7.17%	4.30%	5.70%	6.71%	1.51%	4.45%	9.52%	6.87%	2.05%	1.73	2.53	1.57	Mar-96
Elliott Associates, L.P.	2.10%	2.10%	2.10%	1.70%	2.20%	17.23%	7.93%	9.83%	12.98%	2.51%	8.24%	12.44%	13.18%	3.58%	1.82	2.54	1.94	Jan-90
ESG Cross Border Equity Fund LP	-2.50%	-2.50%	-2.50%	0.20%	-5.50%	-16.72%	-8.83%	-2.01%	-13.04%	-5.06%	-7.16%	13.59%	6.74%	7.49%	-1.15	-0.29	0.57	Jan-04
Indus Asia Pacific Fund, LP	0.10%	0.10%	0.10%	-0.32%	-2.31%	-24.17%	-24.48%	-14.39%	-26.00%	-33.23%	-15.60%	4.97%	8.21%	18.63%	-1.11	-0.75	0.02	Dec-00
Luxor Capital Partners, LP	7.50%	7.50%	7.50%	1.83%	7.17%	22.98%	-5.49%	0.89%	8.42%	-19.05%	-9.83%	19.53%	5.21%	9.78%	-0.47	0.10	0.81	Apr-02
PFM Diversified Fund, L.P.	2.28%	2.28%	2.28%	-0.83%	0.50%	2.69%	1.01%	5.98%	-7.11%	8.10%	2.84%	22.17%	5.59%	8.69%	0.10	0.67	0.81	Nov-04
Samlyn Onshore Fund, L.P.	1.52%	1.52%	1.52%	1.20%	0.64%	7.41%	3.52%	6.83%	1.17%	-1.29%	9.24%	18.93%	10.49%	6.17%	0.48	1.04	1.02	Mar-07
Viking Global Equities, LP	2.00%	2.00%	2.00%	0.10%	-1.50%	0.83%	6.07%	10.38%	-3.92%	8.27%	13.47%	22.65%	12.75%	7.54%	0.65	1.30	1.42	Oct-99
<b>Real Return</b>																		
Brevan Howard LP	-1.46%	-1.46%	-1.46%	0.21%	5.57%	0.98%	0.01%	0.86%	2.99%	-1.98%	-0.78%	2.68%	3.91%	5.81%	-0.04	0.10	0.92	Sep-05
Brigade Leveraged Capital Structures Fund LP	2.21%	2.21%	2.21%	2.49%	0.30%	24.71%	4.19%	4.73%	23.04%	-10.73%	0.61%	6.13%	6.91%	5.69%	0.55	0.77	0.74	Jan-07
Capula Global Relative Value Fund Ltd.	0.23%	0.23%	0.23%	1.69%	1.41%	7.58%	7.71%	6.59%	8.37%	7.54%	8.14%	7.60%	0.41%	1.81%	4.45	3.32	1.90	Oct-05
Claren Road Credit Fund, Ltd.	0.00%	0.00%	0.00%	0.50%	1.25%	-13.97%	-10.97%	-4.78%	-12.72%	-7.96%	-10.10%	5.43%	1.49%	7.00%	-1.50	-0.72	0.35	Jan-06
DE Shaw Composite Fund LLC	0.90%	0.90%	0.90%	-1.00%	0.40%	6.97%	11.60%	12.01%	6.12%	13.68%	15.57%	11.51%	13.94%	4.08%	2.45	2.71	1.56	Mar-01
Graham Absolute Return Trading Ltd.	-1.98%	-1.98%	-1.98%	2.38%	4.94%	8.74%	7.56%	7.94%	11.78%	1.50%	10.42%	10.50%	9.29%	7.51%	0.84	1.00	1.05	Jan-05
OZ Domestic Partners II, L.P.	2.18%	2.18%	2.18%	0.77%	1.46%	8.17%	3.71%	6.98%	3.79%	-0.44%	5.45%	14.20%	12.01%	4.56%	0.62	1.42	1.07	Jan-04
Winton Futures Fund Limited	-1.09%	-1.09%	-1.09%	1.38%	-0.81%	-5.84%	4.14%	2.95%	-3.01%	0.95%	13.88%	9.43%	-3.56%	8.80%	0.43	0.33	0.67	Oct-97
<b>Benchmark</b>																		
HFRI Fund of Funds Composite Index	0.70%	0.70%	0.70%	0.92%	0.24%	3.99%	1.57%	3.20%	0.53%	-0.27%	3.37%	8.96%	4.79%	3.42%				Jan-90
HFRI Fund Weighted Composite Index	1.21%	1.21%	1.21%	1.00%	0.78%	9.57%	3.00%	4.18%	5.45%	-1.12%	2.98%	9.13%	6.36%	3.97%				Jan-90
<b>Market Indices</b>																		
3 Month Libor - BOM	0.09%	0.09%	0.09%	0.08%	0.08%	0.80%	0.46%	0.41%	0.76%	0.33%	0.23%	0.27%	0.42%	0.06%				Jan-87
Barclays Aggregate Bond Index	0.20%	0.20%	0.20%	0.14%	-2.37%	1.46%	2.60%	2.10%	2.66%	0.57%	5.94%	-2.02%	4.23%	2.89%				Jan-76
Barclays High Yield Credit Bond Index	1.45%	1.45%	1.45%	1.85%	-0.47%	20.78%	4.93%	7.04%	17.14%	-4.46%	2.46%	7.46%	15.81%	5.43%				Jul-83
S&P 500 (TR)	1.90%	1.90%	1.90%	1.98%	3.70%	20.04%	10.85%	14.09%	11.96%	1.38%	13.69%	32.39%	16.00%	10.26%				Jun-88
MSCI EAFE - Net - USD	2.90%	2.90%	2.90%	3.42%	-1.99%	12.03%	0.71%	6.04%	1.00%	-0.81%	-4.90%	22.78%	17.31%	13.38%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	5.47%	5.47%	5.47%	0.22%	-4.60%	25.41%	1.44%	0.19%	11.19%	-14.92%	-2.19%	-2.60%	18.23%	15.54%				Dec-87

Note: The above is manager composite history.

## Section VIII.

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### Private Equity Returns

# Portfolio Summary

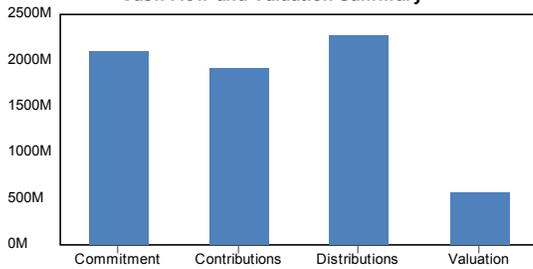
9/30/2016

All Portfolio Investments

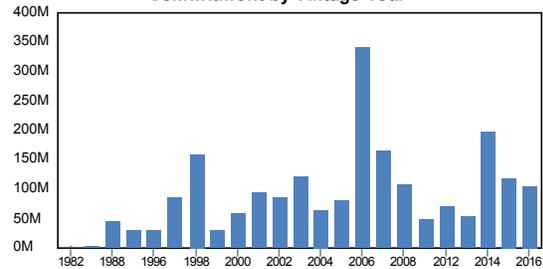
## Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost	IRR	TWR
Private Equity Funds	Agriculture	1	30,000,000	9,902,288	0	7,874,908	0.80	-27.72	-85.96
	Buyout	75	1,241,079,211	1,154,922,769	1,482,743,638	294,677,507	1.54	13.08	13.18
	Direct Lending	3	75,000,000	44,733,420	17,916,170	32,808,026	1.13	9.13	8.38
	Distressed Debt	14	238,000,000	213,994,269	225,536,527	69,591,803	1.38	10.31	9.97
	Energy	8	148,000,000	135,088,542	178,595,240	25,385,229	1.51	23.84	6.93
	Fund of Funds	1	45,000,000	45,000,000	106,748,821	0	2.37	19.94	-100.00
	Secondary	4	60,000,000	54,909,565	58,559,657	26,820,187	1.55	10.79	12.73
	Venture Capital	22	281,250,000	248,911,227	207,434,076	111,655,706	1.28	5.02	1.87
<b>Total:</b>	Private Equity Funds	<b>128</b>	<b>2,118,329,211</b>	<b>1,907,462,080</b>	<b>2,277,534,129</b>	<b>568,813,366</b>	<b>1.49</b>	<b>13.46</b>	<b>10.95</b>

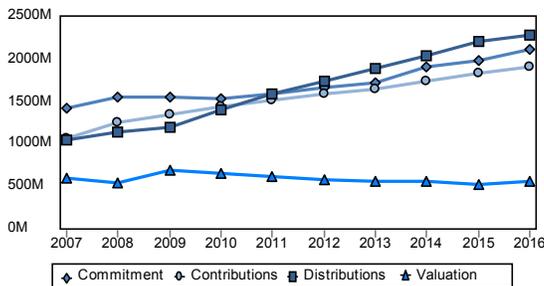
Cash Flow and Valuation Summary



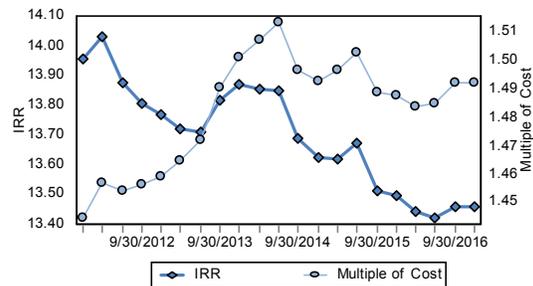
Commitment by Vintage Year



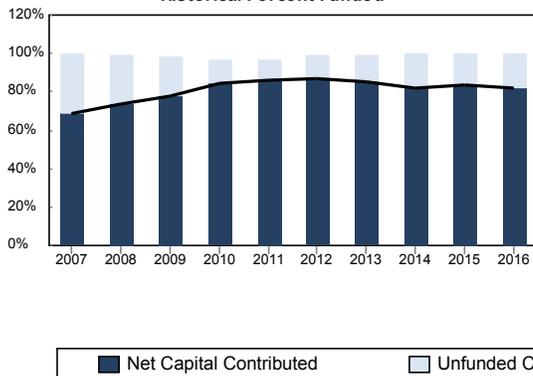
Historical Cash Flows and Valuation



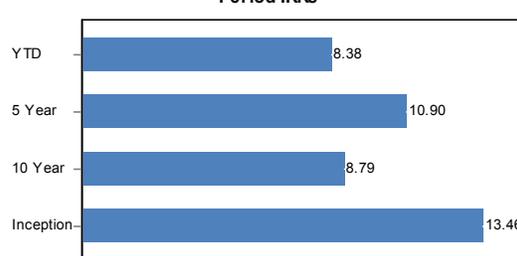
Historical Performance



Historical Percent Funded



Period IRRs



**Employees' Retirement System of Rhode Island Private Equity Performance**  
9/30/2016

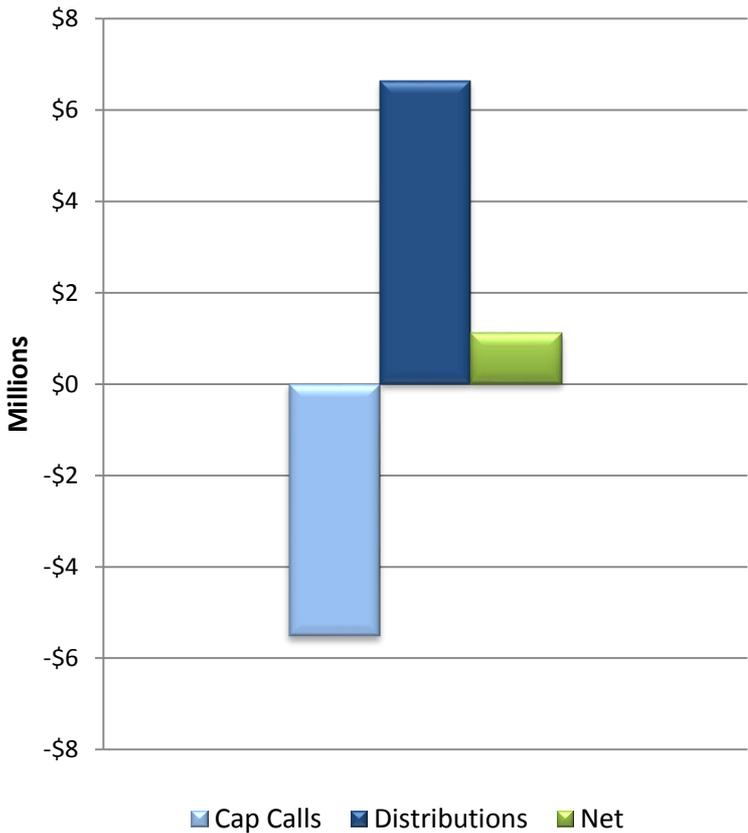
Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)				Cumulative Performance*	
			Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Advent International GPE VII	2012	20,000,000	17,070,000	2,670,000	2,930,000	21,439,908	16.7	1.4
Advent International GPE VIII	2016	20,000,000	420,000	-	19,580,000	311,297	-99.9	0.7
Alta BioPharma Partners III	2003	15,000,000	14,250,000	20,297,956	750,000	472,608	5.8	1.5
Alta Partners VIII	2006	15,000,000	15,000,000	22,518,408	-	8,422,547	16.0	2.1
Aurora Equity Partners III	2004	15,000,000	16,242,296	26,640,090	835,850	1,649,318	15.6	1.7
Avenue Special Situations Fund IV	2006	20,000,000	25,179,595	32,706,000	-	170,482	8.3	1.3
Avenue Special Situations Fund V	2007	20,000,000	20,329,267	26,322,021	-	159,605	10.6	1.3
Bain Capital Fund X	2008	25,000,000	24,370,048	21,732,175	692,452	12,668,609	7.7	1.4
Baring Asia Private Equity Fund VI	2015	15,000,000	5,480,919	22,568	9,519,081	5,837,888	11.2	1.1
Birch Hill Equity Partners III	2005	CAD 18,000,000	18,887,577	29,210,055	255,847	6,790,578	13.0	1.9
Capital Spring Investment Partners	2016	30,000,000	7,540,877	-	22,459,123	7,342,893	-3.3	1.0
Carlyle Asia Partners IV	2014	30,000,000	15,966,227	1,021,160	15,096,343	15,964,603	4.3	1.1
Castile Ventures III	2006	5,000,000	5,009,730	1,396,371	-	1,595,590	-10.1	0.6
Centerbridge Capital Partners	2006	15,000,000	23,550,697	34,877,590	1,095,594	7,515,241	20.2	1.8
Centerbridge Capital Partners III	2015	25,000,000	6,656,949	263,547	18,606,598	7,575,896	17.6	1.2
Centerbridge Special Credit Partners II	2012	25,000,000	22,500,000	9,754,266	2,500,000	13,798,354	1.5	1.1
Charterhouse Capital Partners VIII	2006	€ 15,000,000	18,183,957	17,390,855	634,428	19,498	-0.7	1.0
Coller International Partners IV	2002	15,000,000	13,294,667	17,638,731	150,000	357,387	11.5	1.4
Coller International Partners V	2006	15,000,000	12,520,679	14,394,691	3,270,000	3,737,346	8.8	1.5
CVC European Equity Partners III	2001	20,000,000	23,158,043	59,551,716	899,966	521,545	41.1	2.6
CVC European Equity Partners IV	2005	€ 16,500,000	21,266,657	35,521,758	2,152,092	5,174,799	17.0	1.9
CVC European Equity Partners V	2008	€ 20,000,000	28,881,959	28,999,019	878,841	14,038,623	12.4	1.5
CVC Capital Partners VI	2014	€ 15,000,000	6,622,932	546,229	10,931,447	5,930,775	-1.9	1.0
EnCap Energy Capital Fund IX	2013	18,000,000	15,947,015	4,129,598	3,448,106	15,063,588	13.9	1.2
EnCap Energy Capital Fund X	2015	25,000,000	6,635,643	-	18,364,357	6,273,483	-9.8	1.0
Fenway Partners Capital Fund II	1998	15,000,000	18,513,234	20,350,029	232,336	1,781,949	4.9	1.2
Fenway Partners Capital Fund III	2006	15,000,000	16,976,092	13,756,197	1,266,241	5,315,631	2.4	1.1
First Reserve Fund X	2004	20,000,000	19,999,999	36,485,800	-	79,385	31.0	1.8
First Reserve Fund XI	2006	20,000,000	22,125,580	13,938,027	-	2,073,861	-8.6	0.7
Focus Ventures III	2006	15,000,000	15,000,000	5,411,619	-	3,808,843	-8.9	0.6
Garrison Opportunity Fund IV	2014	30,000,000	15,562,346	(498,315)	14,382,700	16,478,597	2.3	1.0
Granite Global Ventures II	2004	15,000,000	14,333,510	15,007,914	675,000	8,688,238	6.6	1.7
Granite Global Ventures III	2006	15,000,000	14,625,503	21,339,969	375,000	11,087,460	15.6	2.2
Green Equity Investors V	2007	20,000,000	20,422,385	24,689,826	1,731,092	14,237,124	17.6	1.9
Industry Ventures Partnership Holdings III	2014	25,000,000	16,500,000	803,450	8,500,000	19,128,231	14.2	1.2
Industry Ventures Partnership Holdings III C	2015	15,000,000	2,662,500	-	12,337,500	2,576,319	-4.9	1.0
Industry Ventures Partnership Holdings IV	2016	10,000,000	400,000	-	9,600,000	382,881	-13.1	1.0
Kayne Anderson Energy Fund III	2005	15,000,000	15,965,344	14,983,550	366,426	406,307	-2.0	1.0
Kayne Anderson Energy Fund IV	2007	15,000,000	16,605,519	16,345,850	-	1,488,605	2.5	1.1
Leapfrog Ventures II	2005	10,000,000	9,490,000	6,811,564	510,000	3,775,902	2.0	1.1
Leeds Equity Partners IV	2003	10,000,000	10,209,327	11,467,347	1,099,639	2,156,587	4.7	1.3
Lighthouse Capital Partners V	2003	11,250,000	10,462,500	12,208,726	787,500	98,388	3.8	1.2
Lighthouse Capital Partners VI	2007	15,000,000	14,250,000	19,271,256	750,000	1,419,209	7.2	1.5
LNK Partners	2006	12,500,000	12,062,334	16,651,771	439,919	2,584,653	10.6	1.6
MHR Institutional Partners III	2006	20,000,000	20,800,000	20,133,259	6,974,396	8,871,987	7.0	1.4
Nautic Partners V	2000	20,000,000	20,325,743	40,372,953	641,735	1,665,008	17.2	2.1
Nautic Partners VI	2007	20,000,000	23,972,088	44,047,795	777,633	8,496,822	17.4	2.2
Nautic Partners VII	2014	20,000,000	13,567,043	5,135,745	7,619,590	17,115,674	70.8	1.6
Nordic Capital Fund V	2003	€ 14,615,550	21,434,529	57,872,857	-	916,025	21.0	2.7
Nordic Capital Fund VI	2006	€ 15,000,000	22,435,404	23,273,674	-	9,433,926	6.4	1.5
Nordic Capital Fund VII	2008	€ 15,000,000	20,035,142	6,471,638	1,614,531	17,096,654	3.2	1.2
Nordic Capital Fund VIII	2013	€ 15,000,000	9,987,631	368,111	7,976,487	9,320,463	-1.6	1.0
Oaktree European Principal Fund III	2011	20,000,000	17,150,000	2,432,019	5,271,496	19,466,302	8.8	1.3
Paine & Partners Capital Fund IV	2015	30,000,000	9,902,288	-	20,104,571	7,874,908	-27.7	0.8
Paladin III	2008	10,000,000	12,353,480	5,622,527	423,623	9,983,851	6.6	1.3
Parthenon Investors II	2001	23,960,000	23,409,381	37,045,489	1,821,022	990,630	12.4	1.6
Point 406 Ventures I	2006	10,000,000	10,331,265	4,123,844	520,000	13,730,976	10.4	1.7
Point Judith Venture Fund II	2006	5,000,000	6,030,136	2,085,239	216,950	3,143,800	-2.9	0.9
Providence Equity Partners IV	2000	25,000,000	35,971,884	68,445,391	1,995,291	202,251	23.9	1.9
Providence Equity Partners V	2005	25,000,000	31,136,262	34,127,175	2,196,098	3,867,689	3.8	1.2
Providence Equity Partners VI	2007	25,000,000	29,081,469	25,486,075	1,467,411	13,652,250	6.4	1.4
Providence Equity Partners VII	2012	25,000,000	18,250,646	3,960,222	10,723,763	17,633,091	11.5	1.2
Riverside Capital Appreciation Fund VI	2013	20,000,000	13,916,528	24,470	6,083,472	16,024,301	10.8	1.2
Riverside Micro-Cap Fund III	2014	20,000,000	17,758,317	(4,719)	2,241,683	21,536,111	11.9	1.2
Sorenson Capital Partners III	2014	30,000,000	13,666,010	-	16,776,753	13,417,662	-1.8	1.0
Southwest Partners VII	2016	30,000,000	691,249	-	29,308,751	68,591	-100.0	0.1
Tenex Capital Partners II	2016	25,000,000	1,885,611	-	23,114,052	1,594,848	-14.8	0.9
TPG Partners IV	2003	15,000,000	16,672,684	30,295,297	64,421	2,315,615	15.8	2.0
TPG Partners V	2006	20,000,000	20,697,887	20,658,284	1,774,959	7,944,490	5.3	1.4
TPG Partners VI	2008	10,000,000	13,549,362	11,384,330	924,624	6,745,782	9.3	1.3
Trilantic Capital Partners IV	2007	11,098,351	11,528,514	15,849,474	1,229,733	2,110,634	13.9	1.6
W Capital Partners	2004	15,000,000	14,197,500	10,229,777	802,500	529,283	-9.4	0.8
W Capital Partners II	2007	15,000,000	14,896,718	16,296,457	1,596,691	4,952,110	11.4	1.4
WLR Recovery Fund IV	2007	8,000,000	7,277,318	8,374,194	765,256	1,536,387	8.0	1.4
Other funds in aggregate**	various	120,000,000	112,035,382	99,562,553	13,523,510	49,255,493		
<b>Total</b>		<b>\$ 1,434,895,119</b>	<b>\$ 1,256,079,378</b>	<b>\$ 1,250,303,514</b>	<b>\$ 356,654,478</b>	<b>\$ 551,894,245</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.

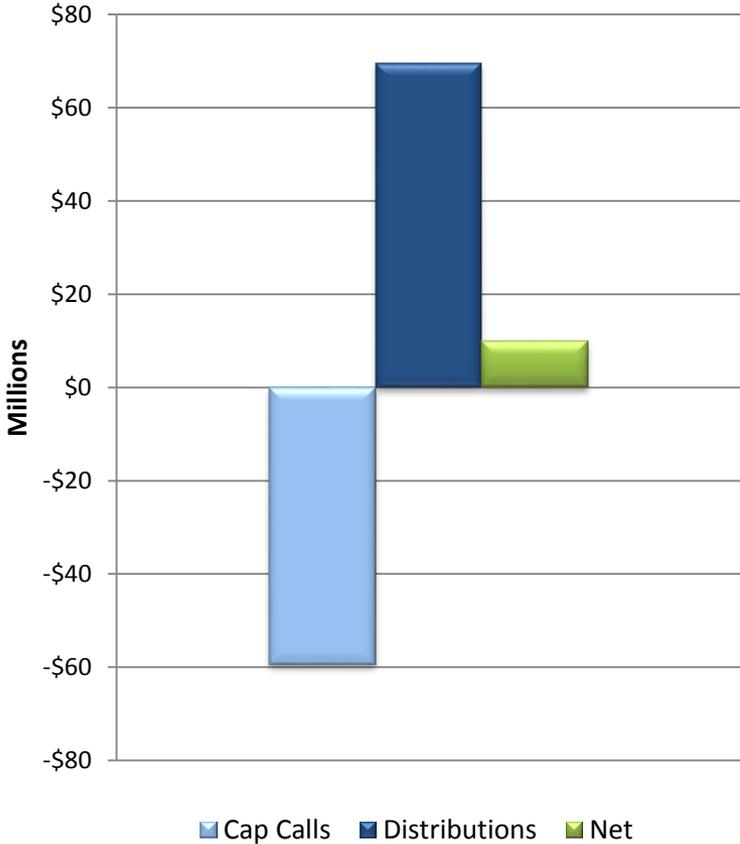
\*\*Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Braemar Energy Ventures III, Constellation Ventures III, Summit Partners Credit Fund, Summit Partners Credit Fund II, Thomas, McEnerney & Partners, Thomas McEnerney & Partners II and Wellspring Capital Partners III.

# Private Equity Cash Flows

January 2017



Fiscal YTD January 2017



Section IX.

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## Real Estate Returns

## PORTFOLIO SUMMARY

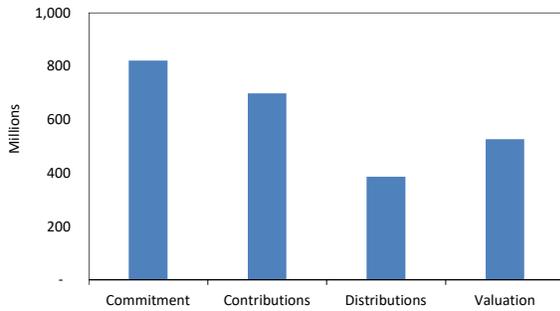
9/30/2016

All Portfolio Investments - Real Estate

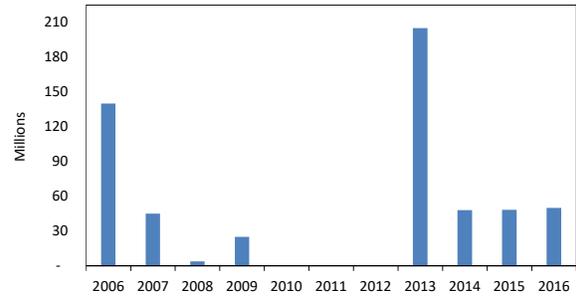
### Performance Summary

Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost	IRR	TWR
Real Estate Funds	Core	8	405,000,000	434,922,810	245,916,816	401,942,561	1.5x	5.3%	5.6%
	Non-Core	21	415,260,817	308,883,160	140,726,419	124,553,220	0.8x	-4.1%	0.9%
<b>Total: Real Estate Funds</b>		<b>29</b>	<b>820,260,817</b>	<b>743,805,970</b>	<b>386,643,235</b>	<b>526,495,781</b>	<b>1.2x</b>	<b>3.7%</b>	<b>4.7%</b>
<b>Total:</b>		<b>29</b>	<b>820,260,817</b>	<b>743,805,970</b>	<b>386,643,235</b>	<b>526,495,781</b>	<b>1.2x</b>	<b>3.7%</b>	<b>4.7%</b>

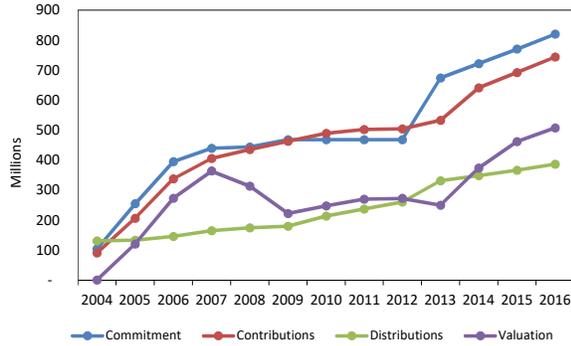
#### Cash Flow and Valuation Summary



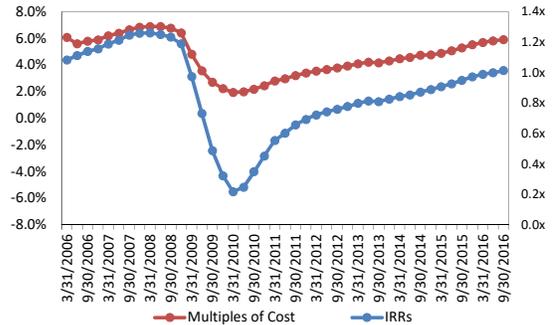
#### Commitment by Vintage Year



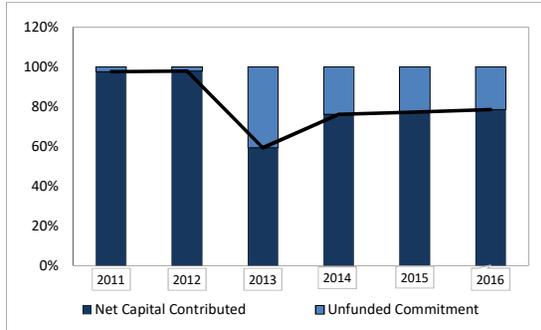
#### Historical Cash Flows and Valuation



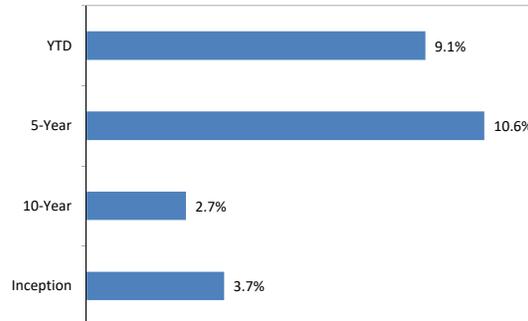
#### Historical Performance



#### Historical Percent Funded



#### Period IRRs



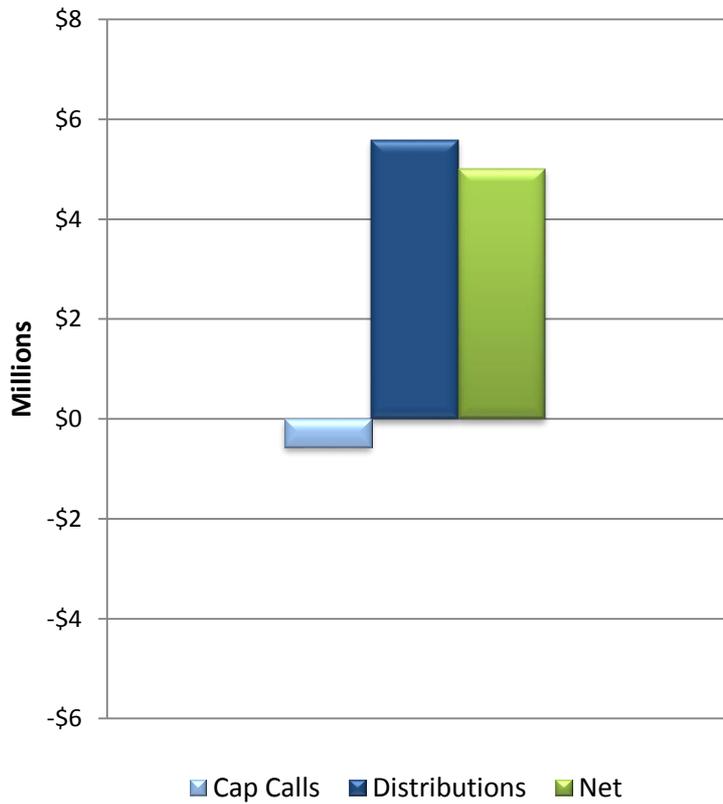
**Employees' Retirement System of Rhode Island Real Estate Performance**  
**9/30/2016**

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)				Cumulative Performance*	
			Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	open-end	60,000,000	60,000,000	10,480,447	-	91,098,997	12.4%	1.7
Crow Holdings Retail Fund	2015	24,000,000	11,861,234	-	12,138,766	12,191,396	6.6%	1.0
Exeter Industrial Value Fund III	2014	30,000,000	21,000,000	1,372,503	9,000,000	23,060,391	16.6%	1.2
GEM Realty Fund V	2013	50,000,000	28,159,592	5,815,000	21,840,408	29,478,429	12.9%	1.2
Heitman America Real Estate Trust	open-end	60,000,000	60,000,000	5,498,362	-	75,475,490	12.9%	1.2
IC Berkeley Partners III	2013	18,000,000	16,038,326	4,361,760	1,961,674	15,908,692	22.5%	1.3
IC Berkeley Partners IV	2016	30,000,000	3,087,000	-	26,913,000	2,854,155	-26.9%	0.9
JP Morgan Strategic Property Fund	open-end	75,000,000	75,000,000	22,466,103	-	103,308,695	6.3%	1.5
JP Morgan Alternative Property Fund	2006	20,000,000	20,000,000	14,727,125	-	191,440	-4.4%	0.7
Lone Star Real Estate Fund IV	2015	24,260,817	10,406,905	713,204	13,853,912	10,255,754	11.5%	1.1
Magna Hotel Fund III	2008	4,000,000	3,403,043	4,463,951	596,957	1,722,645	16.7%	1.8
Morgan Stanley Prime Property Fund	open-end	35,000,000	35,000,000	18,766,799	-	59,511,313	7.2%	1.9
Prudential (PRISA)	open-end	50,000,000	50,000,000	17,442,739	-	73,035,612	5.2%	1.6
TriCon Capital Fund VII	2005	15,000,000	14,571,533	3,923,226	428,467	1,120,807	-19.3%	0.3
Waterton Fund XII	2014	35,000,000	23,644,184	2,074,195	11,355,816	27,769,508	21.3%	1.2
<b>Total</b>		<b>\$ 530,260,817</b>	<b>\$ 432,171,818</b>	<b>\$ 112,105,414</b>	<b>\$ 98,088,999</b>	<b>\$ 526,983,323</b>		

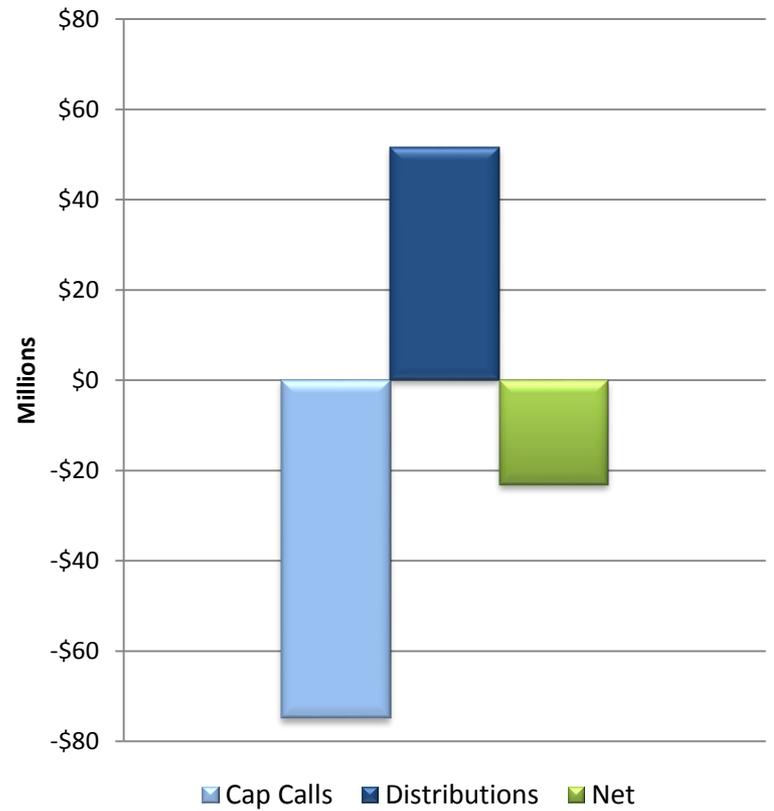
\*IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private real estate where there are multiple points at which capital is invested (capital called) and at which it is distributed. A positive IRR means that 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.

# Real Estate Cash Flows

## January 2017



## Fiscal YTD January 2017



Section X.

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## Infrastructure Returns

# Portfolio Summary

9/30/2016

All Portfolio Investments – Infrastructure

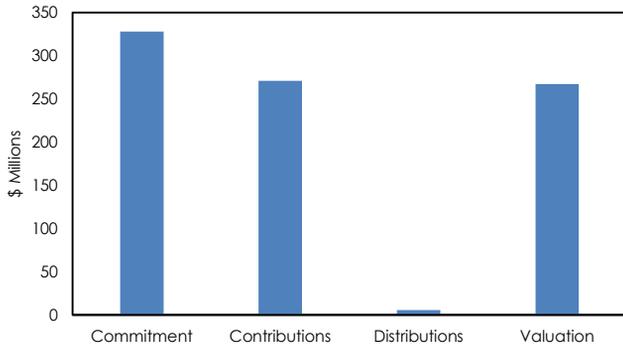


Investment	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost*	Since Inception IRR*	1-yr IRR*	YTD IRR*
Harvest MLP Alpha Strategy	185,000,000	185,000,000	0	178,491,472	0.96	-2.2	28.2	40.4
IFM Global Infrastructure	50,000,000	50,000,000	1,160,536	53,808,574	1.10	6.9	6.6	6.0
ISQ Global Infrastructure Fund	50,000,000	21,448,994	4,791,186 <sup>1</sup>	17,632,750	1.05	7.0	31.8	14.5
Stonepeak Infrastructure Fund II	43,000,000	14,085,671	187,070	17,043,923	1.22	31.2	N/A	42.6
<b>Total</b>	<b>328,000,000</b>	<b>270,534,665</b>	<b>6,138,792</b>	<b>266,976,719</b>	<b>1.01</b>	<b>0.7</b>	<b>23.7</b>	<b>29.9</b>

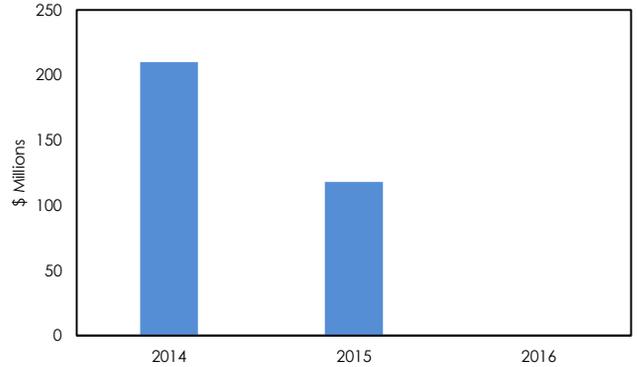
\*Net of Fees and Expenses

1. Recallable Distributions

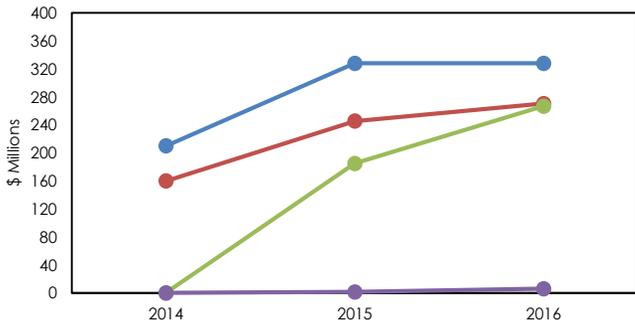
## Cash Flow and Valuation Summary



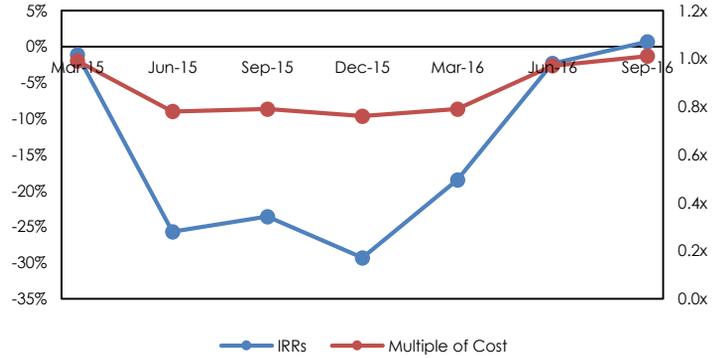
## Commitment by Vintage Year



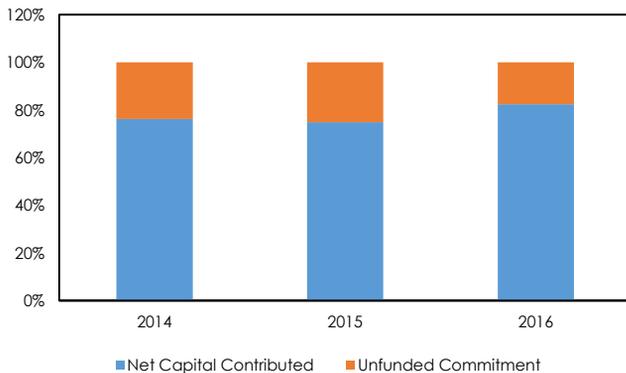
## Historical Cash Flows and Valuation



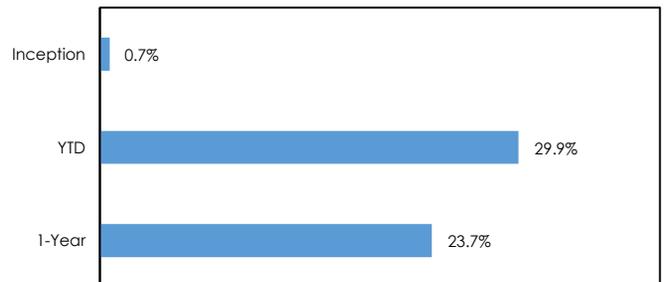
## Historical Performance



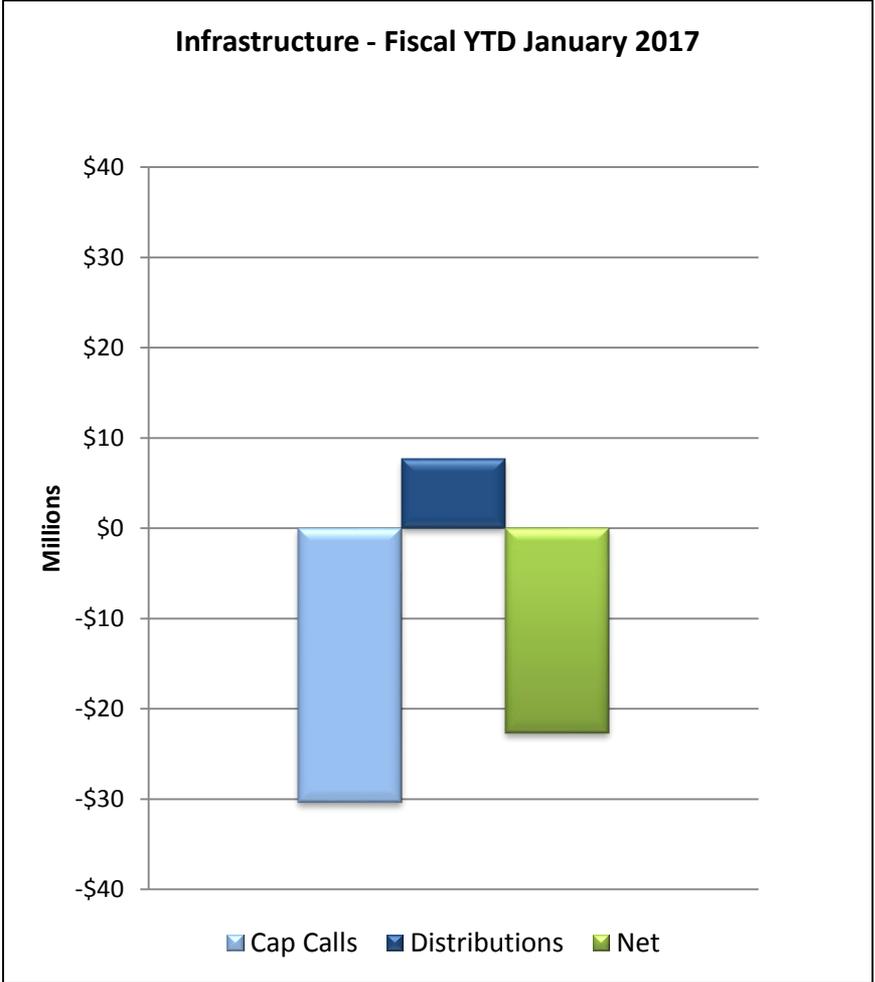
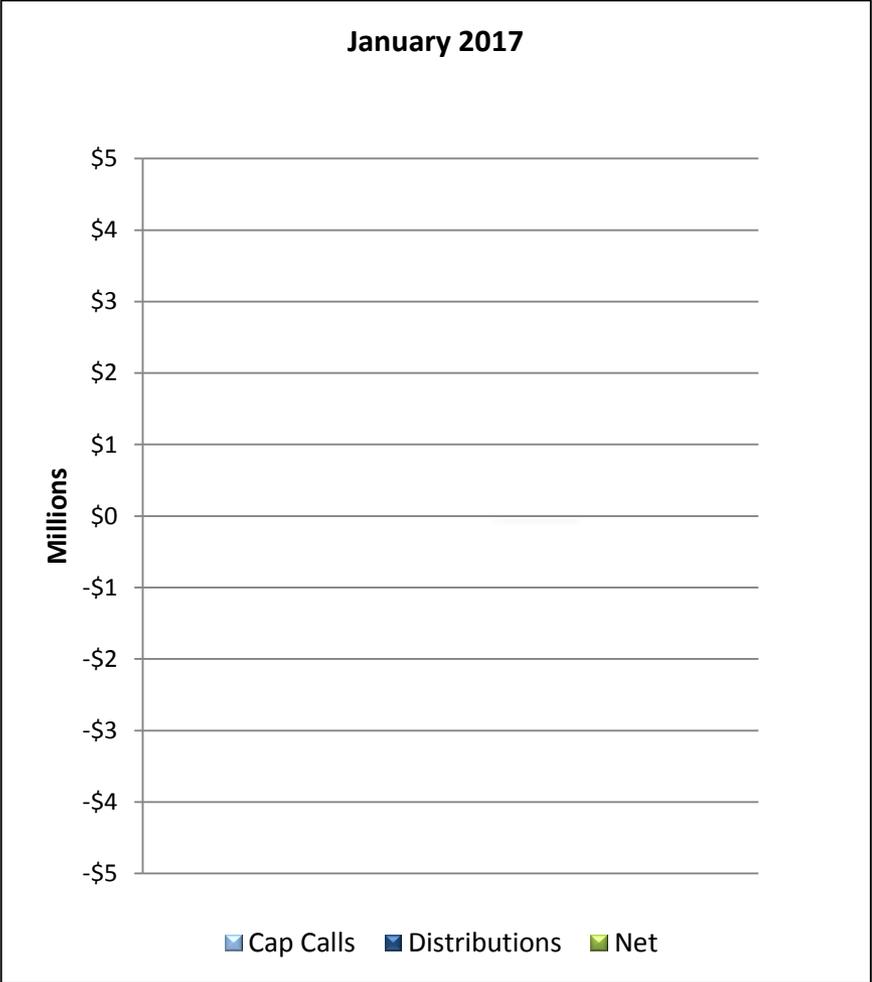
## Historical Percent Funded



## Period IRRs



# Infrastructure Cash Flows



**Employees' Retirement System of Rhode Island Private Infrastructure Performance  
9/30/2016**

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)				Cumulative Performance*	
			Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
IFM Global Infrastructure, L.P.	open-end	50,000,000	50,000,000	1,160,536	-	53,808,574	6.9	1.1
ISO Global Infrastructure Fund, L.P.	2015	50,000,000	21,448,994	4,791,186	28,551,006	17,632,750	7.0	1.1
Stonepeak Infrastructure Fund II, L.P.	2016	43,000,000	14,085,671	187,070	28,914,329	17,043,923	31.2	1.2
<b>Total</b>		<b>\$ 143,000,000</b>	<b>\$ 85,534,665</b>	<b>\$ 6,138,792</b>	<b>\$ 57,465,335</b>	<b>\$ 88,485,247</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 : 2017-01-01 - 2017-01-31

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
<b>Grand Total</b>		<b>7,790,554,783.15</b>	<b>118,931,315.61</b>	<b>(24,385,643.00)</b>	<b>7,696,009,110.54</b>
<b>Total Global Equity</b>		<b>4,179,241,743.74</b>	<b>97,349,763.52</b>	<b>99,669.65</b>	<b>4,081,792,310.57</b>
<b>Global Equity</b>		<b>3,601,289,743.54</b>	<b>90,601,867.12</b>	<b>99,669.65</b>	<b>3,510,588,206.77</b>
	SSGA R3000 INDEX	1,345,417,133.33	24,994,954.22	39,652.87	1,320,382,526.24
	SSGA MSCI EAFE	724,044,259.43	20,344,016.56	52,465.03	703,647,777.84
	SSGA MSCI CANADA	106,600,071.07	3,880,143.37	7,551.75	102,712,375.95
	SSGA MSCI EM	317,326,298.08	16,375,563.36	0.00	300,950,734.72
	QVM TILT	1,107,901,981.63	25,007,189.61	0.00	1,082,894,792.02
<b>Global Equity Hedge Funds</b>		<b>577,952,000.20</b>	<b>6,747,896.40</b>	<b>0.00</b>	<b>571,204,103.80</b>
	DAVIDSON KEMPNER	81,324,631.62	634,832.23	0.00	80,689,799.39
	ELLIOTT ASSOCIATES	94,178,478.23	276,724.22	0.00	93,901,754.01
	INDUS ASIA PACIFIC	336,000.62	327.15	0.00	335,673.47
	PFM DIVERSIFIED	78,978,374.39	1,749,588.75	0.00	77,228,785.64
	SAMLYN ON/OFFSHORE	109,924,248.56	1,730,327.98	0.00	108,193,920.58
	VIKING GLOBAL EQUITI	100,216,047.85	1,945,787.60	0.00	98,270,260.25
	LUXOR CAP PTNS LP	5,292,063.15	32,850.09	0.00	5,259,213.06
	ESG CBE FUND LP	37,269,097.51	(955,617.89)	0.00	38,224,715.40
	ASCENT ERSRI FUND LP	70,433,058.27	1,333,076.27	0.00	69,099,982.00
<b>Private Equity</b>		<b>535,955,398.76</b>	<b>1,088,164.84</b>	<b>(8,414,695.47)</b>	<b>543,281,929.39</b>
<b>Private Equity</b>		<b>535,955,398.76</b>	<b>1,088,164.84</b>	<b>(8,414,695.47)</b>	<b>543,281,929.39</b>
	PRIVATE EQUITY	535,955,398.76	1,088,164.84	(8,414,695.47)	543,281,929.39
<b>Total Fixed Income</b>		<b>976,052,446.72</b>	<b>2,388,615.11</b>	<b>0.00</b>	<b>973,663,831.61</b>
<b>Fixed Income</b>		<b>976,052,446.72</b>	<b>2,388,615.11</b>	<b>0.00</b>	<b>973,663,831.61</b>
	MACKAY SHIELDS	483,309,953.82	1,054,599.82	0.00	482,255,354.00
	PYRAMIS GLOBAL ADV	492,742,492.90	1,334,015.29	0.00	491,408,477.61
<b>Total Real Return</b>		<b>1,485,069,968.86</b>	<b>12,908,609.54</b>	<b>(2,872,475.91)</b>	<b>1,475,033,835.23</b>
<b>Alternative Absolute Return</b>		<b>380,125,219.09</b>	<b>418,110.61</b>	<b>0.00</b>	<b>379,707,108.48</b>
	BREVAN HOWARD	79,537,738.89	(1,183,087.12)	0.00	80,720,826.01
	DE SHAW	96,102,017.33	814,336.16	0.00	95,287,681.17
	OZ DOMESTIC PTRS	108,334,673.76	2,387,693.16	0.00	105,946,980.60
	WINTON FUTURE FD	35,365,689.19	(387,770.24)	0.00	35,753,459.43
	GRAHAM ABS RETURN	60,785,099.92	(1,213,061.35)	0.00	61,998,161.27
<b>Alternative Fixed Income</b>		<b>137,511,190.13</b>	<b>1,542,448.48</b>	<b>0.00</b>	<b>135,968,741.65</b>
	BRIGADE LEV CAP	62,718,453.04	1,356,107.83	0.00	61,362,345.21
	CAPULA GLOBAL	68,091,554.94	125,233.43	0.00	67,966,321.51
	CLAREN ROAD CR. FUND	6,701,182.15	61,107.22	0.00	6,640,074.93
<b>Credit</b>		<b>422,511,280.98</b>	<b>2,803,717.22</b>	<b>(2,872,475.91)</b>	<b>422,580,039.67</b>
	PIMCO	215,475,749.72	534,216.50	0.00	214,941,533.22
	WAMCO	207,035,531.26	2,269,500.72	(2,872,475.91)	207,638,506.45
<b>GILBs</b>		<b>248,061,504.30</b>	<b>1,859,107.84</b>	<b>0.00</b>	<b>246,202,396.46</b>
	BROWN BROTHERS HARR	248,061,504.30	1,859,107.84	0.00	246,202,396.46
<b>Publicly Traded Infrastructure</b>		<b>296,860,774.36</b>	<b>6,285,225.39</b>	<b>0.00</b>	<b>290,575,548.97</b>
	PRIV INFRASTR AGGR	109,395,718.79	0.00	0.00	109,395,718.79
	HARVEST FUND ADVISOR	187,465,055.57	6,285,225.39	0.00	181,179,830.18
<b>Real Estate</b>		<b>555,593,179.66</b>	<b>5,301,974.25</b>	<b>(5,013,058.04)</b>	<b>555,304,263.45</b>

# Monthly Valuation Change

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

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
<b>Real Estate</b>		<b>555,593,179.66</b>	<b>5,301,974.25</b>	<b>(5,013,058.04)</b>	<b>555,304,263.45</b>
	REAL ESTATE	555,593,179.66	5,301,974.25	(5,013,058.04)	555,304,263.45
<b>Total Cash</b>		<b>40,087,421.48</b>	<b>(53,611.78)</b>	<b>(8,185,083.23)</b>	<b>48,326,116.49</b>
<b>Cash Accounts</b>		<b>40,087,421.48</b>	<b>(53,611.78)</b>	<b>(8,185,083.23)</b>	<b>48,326,116.49</b>
	ERSRI CASH	25,647,432.48	(53,611.78)	(16,199,440.23)	41,900,484.49
	CITIZENS CASH	14,439,989.00	0.00	8,014,357.00	6,425,632.00
<b>Total Other</b>		<b>18,098,435.84</b>	<b>(66,198.96)</b>	<b>0.00</b>	<b>18,164,634.80</b>
<b>Other</b>		<b>18,098,435.84</b>	<b>(66,198.96)</b>	<b>0.00</b>	<b>18,164,634.80</b>
	RUSSELL OVERLAY FD	18,098,435.84	(66,198.96)	0.00	18,164,634.80
<b>Total Miscellaneous</b>		<b>456,188.09</b>	<b>13,999.09</b>	<b>0.00</b>	<b>442,189.00</b>
<b>Miscellaneous Accounts</b>		<b>456,188.09</b>	<b>13,999.09</b>	<b>0.00</b>	<b>442,189.00</b>
	RI TRANS ACCT	5,183.82	144.20	0.00	5,039.62
	SHOTT CAPITAL	396,348.40	12,274.22	0.00	384,074.18
	DOM EQUITY TRANS	74.25	0.00	0.00	74.25
	NON-US EQUITY TRANS	52,791.84	1,606.54	0.00	51,185.30
	FIXED INC TRANS	1,789.78	(25.87)	0.00	1,815.65

FISCAL YEAR 2017

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

ERSRI &amp; MERSRI

ACCRUAL BASIS

	Actual Jul 16	Projected Aug	Projected Sept	Projected Oct	Projected Nov	Projected Dec	Projected Jan 17	Projected Feb	Projected Mar	Projected Apr	Projected May	Projected June	Projected TOTAL
<b>EQUITIES US</b>													
SSGA Russell 3000			<b>37,971</b>			<b>39,653</b>			42,000			42,000	161,624
Shott Capital/Hamilton Lane			<b>8,259</b>			1,000			1,000			1,000	11,259
SSGA QVM Tilt			<b>105,563</b>			<b>70,000</b>			<b>70,000</b>			<b>70,000</b>	<b>315,563</b>
			151,794			110,653			113,000			119,800	179,684
<b>FIXED INCOME</b>													
Pyramis			<b>175,251</b>			180,000			180,000			180,000	715,251
Mackay Shields			<b>181,878</b>			180,000			180,000			180,000	721,878
Brown Bros.TIPS/GILB			<b>82,477</b>			<b>84,000</b>			84,000			<b>84,000</b>	<b>334,477</b>
			439,607			444,000			444,000			444,000	1,771,607
<b>INT'L EQUITIES</b>													
SSGA MSCI EAFE			<b>54,233</b>			<b>52,465</b>			65,000			65,000	236,698
SSGA MSCI CAD			<b>7,383</b>			<b>7,552</b>			8,000			8,000	30,935
SSGA MSCI Emerg Mkts			<b>85,001</b>			<b>80,000</b>			80,000			<b>80,000</b>	<b>325,001</b>
			146,617			140,017			153,000			153,000	592,634
<b>CREDIT</b>													
WAMCO			<b>129,958</b>			100,000			100,000			100,000	429,958
PIMCO			<b>133,852</b>			<b>134,840</b>			130,000			<b>130,000</b>	<b>528,692</b>
			263,810			234,840			230,000			230,000	958,651
<b>Infrastructure</b>													
Harvest Partners			<b>319,128</b>			220,000			220,000			220,000	979,128
<b>REAL ESTATE</b>													
Direct Billed Real Estate	<b>331,011</b>	<b>192,928</b>	<b>0</b>	<b>513,718</b>	<b>94,274</b>	<b>0</b>	<b>411,042</b>	91,634	0	79,200	104,358	0	1,818,165
<b>ALTERNATIVE INVESTMENTS</b>													
Direct Billed Private Equity	<b>267,199</b>	<b>428,254</b>	<b>1,586,067</b>	<b>287,868</b>	<b>1,880,276</b>	<b>(8,795)</b>	<b>3,044</b>	507,595	1,245,019	673,084	1,231,877	135,737	8,237,225
<b>SUB TOTAL-INV MGMT FEES</b>													
	598,210	621,182	2,907,023	801,586	1,974,550	1,140,715	414,085	599,228	2,405,019	752,284	1,336,235	1,302,537	<b>14,537,093</b>
<b>PROFESSIONAL FEES</b>													
Legal	<b>3,488</b>	<b>5,000</b>	<b>2,875</b>	<b>5,125</b>	<b>2,563</b>	<b>4,915</b>	0	7,964	18,469	12,347	5,960	9,763	78,469
BNY Mellon - Custodial	<b>60,277</b>	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	423,277
Cliffwater	<b>37,500</b>	<b>37,500</b>	<b>37,500</b>	<b>37,500</b>	<b>37,500</b>	37,500	37,500	37,500	37,500	37,500	37,500	37,500	450,000
PCA/Russell	<b>14,583</b>	<b>14,583</b>	<b>210,233</b>	<b>14,583</b>	<b>33,333</b>	<b>72,831</b>	14,583	14,583	82,263	14,583	14,583	33,333	534,077
PCA Real Estate	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>10,417</b>	<b>125,004</b>
	126,265	100,500	294,025	100,625	116,813	158,664	95,500	103,464	181,650	107,848	101,460	124,013	1,610,826
<b>OPERATING EXPENSE</b>													
Retirement Transfers	<b>359,498</b>	<b>596,617</b>	<b>1,310,274</b>	<b>921,394</b>	<b>456,008</b>	<b>870,703</b>	512,091	865,046	920,987	823,990	442,116	1,303,711	<b>9,382,434</b>
Other Expense	<b>0</b>	<b>0</b>	<b>4,375</b>	<b>13,270</b>	<b>10,000</b>	<b>23,820</b>	<b>1,625</b>	<b>0</b>	<b>49,974</b>	<b>0</b>	<b>0</b>	<b>1,000</b>	<b>104,064</b>
	359,498	596,617	1,314,649	934,664	466,008	894,523	513,716	865,046	970,961	823,990	442,116	1,304,711	9,486,498
<b>TOTAL:</b>	<b>1,083,973</b>	<b>1,318,298</b>	<b>4,515,697</b>	<b>1,836,875</b>	<b>2,557,371</b>	<b>2,193,902</b>	<b>1,023,302</b>	<b>1,567,738</b>	<b>3,557,630</b>	<b>1,684,122</b>	<b>1,879,811</b>	<b>2,731,261</b>	<b>25,634,417</b>

Note: Numbers in bold are actual.

CASH FLOW ANALYSIS - INCOME & EXPENSES

Employees Retirement System

FISCAL YEAR 2017

	FY 2016-17												
	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Actual January 2017	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	842,968,654	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	68,285,631	68,412,007	68,470,352	68,479,638	69,638,749	80,260,148	69,422,131
ADMINISTRATIVE EXPENSES	9,981,891	1,402,923.56	718,107	1,403,401	1,327,462	490,334	484,162	1,428,567	415,373	625,257	642,177	670,460	373,667
INVESTMENT EXPENSES	9,011,932	109,133	1,202,775	290,754	1,489,542	391,688	329,085	(6,989)	1,354,605	637,021	1,260,447	1,476,800	477,072
TOTAL OUTFLOW	861,962,477	71,512,056	71,920,881	71,694,154	72,817,004	70,882,023	69,098,878	69,833,584	70,240,330	69,741,916	71,541,373	82,407,407	70,272,870
CONTRIBUTIONS	516,752,676	25,172,944	40,513,703	36,341,134	44,799,731	37,789,948	53,349,987	58,176,740	43,254,275	36,194,139	40,690,939	53,520,677	46,948,459
OTHER INCOME*	81,025,478	6,214,325	15,712,147	3,394,010	6,136,870	6,008,319	6,918,798	13,717,971	5,469,260	8,150,581	4,338,494	1,605,841	3,358,861
TOTAL INCOME	597,778,154	31,387,269	56,225,850	39,735,144	50,936,601	43,798,267	60,268,785	71,894,711	48,723,535	44,344,720	45,029,433	55,126,518	50,307,320
DIFFERENCE	(264,184,322)	(40,124,787)	(15,695,031)	(31,959,011)	(21,880,402)	(27,083,755)	(8,830,093)	2,061,127	(21,516,795)	(25,397,196)	(26,511,940)	(27,280,889)	(19,965,550)

Municipal Employees Retirement System

	FY 2016-17												
	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2017	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	94,806,410	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,753,097	7,742,633	7,715,117	7,702,047	7,634,888	10,139,174	7,619,454
ADMINISTRATIVE EXPENSES	2,180,967	303,792	155,113	302,293	285,305	105,032	109,317	322,493	105,608	141,149	144,969	122,026	83,870
INVESTMENT EXPENSES	1,823,927	23,632	259,802	62,628	320,139	83,902	74,303	(1,578)	354,234	143,805	284,540	111,440	107,080
TOTAL OUTFLOW	98,811,304	8,027,424	8,114,915	8,064,921	8,305,444	7,888,934	7,936,718	8,063,547	8,174,960	7,987,001	8,064,397	10,372,640	7,810,403
CONTRIBUTIONS	65,185,558	302,987	4,051,743	4,513,754	5,412,174	4,816,573	6,943,950	6,219,708	5,806,255	6,763,262	5,550,861	7,700,000	7,104,291
OTHER INCOME*	17,147,072	1,345,664	3,393,857	731,070	1,318,966	1,287,012	1,562,174	3,096,771	476,838	1,839,957	979,396	361,465	753,901
TOTAL INCOME	82,332,630	1,648,651	7,445,600	5,244,824	6,731,140	6,103,585	8,506,124	9,316,479	6,283,093	8,603,219	6,530,257	8,061,465	7,858,192
DIFFERENCE	(16,478,674)	(6,378,773)	(669,314)	(2,820,097)	(1,574,304)	(1,785,349)	569,406	1,252,932	(1,891,867)	616,219	(1,534,140)	(2,311,175)	47,789

CASH FLOW ANALYSIS - INCOME & EXPENSES

State Police

Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2017	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	4,722,887	385,000	385,000	385,000	385,000	385,000	402,415	402,415	402,415	402,415	393,280	410,224	384,724
ADMINISTRATIVE EXPENSES	183,479	25,127	12,771	24,801	23,304	8,553	9,455	27,863	9,124	12,195	12,525	10,543	7,216
INVESTMENT EXPENSES	154,212	1,955	21,391	5,138	26,150	6,833	6,427	(136)	30,606	12,425	24,584	9,628	9,212
TOTAL OUTFLOW	5,060,578	412,082	419,163	414,940	434,454	400,386	418,297	430,141	442,145	427,034	430,389	430,396	401,152
CONTRIBUTIONS	5,765,879	441,275	393,221	415,000	395,000	485,000	571,989	583,556	479,499	490,382	533,942	592,292	384,724
OTHER INCOME*	1,446,818	111,301	279,439	59,980	107,736	104,808	135,118	267,558	41,198	158,971	84,619	31,230	64,861
TOTAL INCOME	7,212,698	552,576	672,660	474,980	502,736	589,808	707,106	851,114	520,697	649,352	618,561	623,523	449,585
DIFFERENCE	2,152,120	140,495	253,497	60,040	68,282	189,422	288,810	420,973	78,552	222,318	188,172	193,127	48,433

Judicial

Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2017	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	2,753,384	230,000	230,000	230,000	230,000	230,000	227,841	227,841	227,841	227,841	227,841	236,341	227,841
ADMINISTRATIVE EXPENSES	95,099	12,912	6,598	12,804	12,022	4,410	4,915	14,561	4,768	6,373	6,545	5,442	3,748
INVESTMENT EXPENSES	80,080	1,004	11,051	2,653	13,490	3,523	3,341	(71)	15,994	6,493	12,847	4,969	4,786
TOTAL OUTFLOW	2,928,563	243,917	247,649	245,457	255,512	237,934	236,096	242,330	248,603	240,706	247,233	246,752	236,375
CONTRIBUTIONS	4,561,970	291,448	263,142	280,000	270,000	270,000	602,903	590,610	454,249	443,861	436,053	431,866	227,841
OTHER INCOME*	750,841	57,197	144,363	30,965	55,579	54,043	70,235	139,821	21,529	83,075	44,220	16,119	33,694
TOTAL INCOME	5,312,811	348,645	407,505	310,965	325,579	324,043	673,138	730,430	475,778	526,936	480,273	447,984	261,534
DIFFERENCE	2,384,248	104,728	159,856	65,509	70,067	86,110	437,042	488,100	227,175	286,229	233,040	201,233	25,160

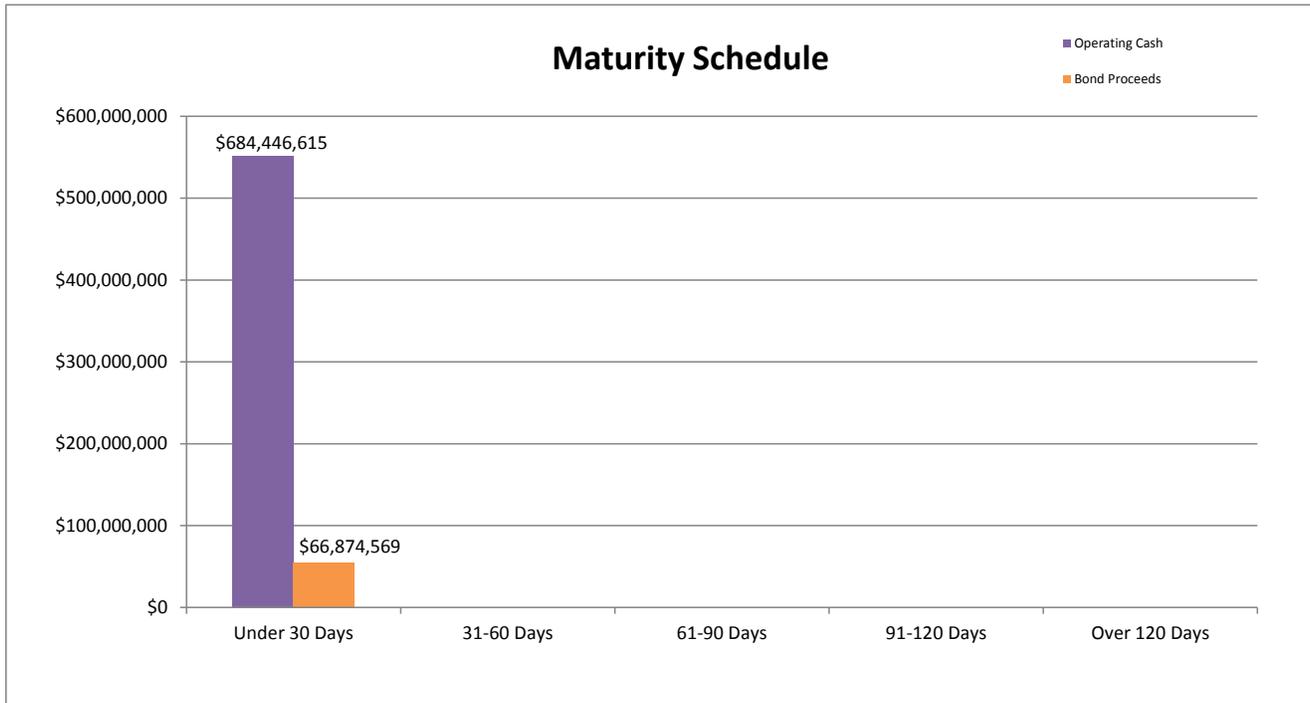
\*includes income from Real Estate Investments, Private Equity, and Cash Accounts

## Section XII.

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### Short-Term Investments

**Short-Term Investment Maturity Schedule & SIC Compliance Report at January 31, 2016**



Vendor	CP	CD	Agency	Money Mkt	PIP	Repo	CDP	OSIP	Total (\$)
Guidelines-Total/Vendor	25%/10%	50%/20%	75%/35%	75%/35%	75%/35%	100%/20%	75%/35%	50%/50%	
OSIP	0	0	0	0	0	0	0	310,759,313	310,759,313
	0%	0%	0%	0%	0%	0%	0%	56%	56%
Bank RI	0	15,300,949	0	5,107,793	0	0	0	0	20,408,742
	0%	3%	0%	1%	0%	0%	0%	0%	4%
Santander Bank	0	0	0	0	53,862,206	0	0	0	53,862,206
	0%	0%	0%	0%	10%	0%	0%	0%	10%
Citizens Bank	0	0	0	0	25,240,987	0	0	0	25,240,987
	0%	0%	0%	0%	5%	0%	0%	0%	5%
Webster Bank	0	0	0	0	2,381,699	0	0	0	2,381,699
	0%	0%	0%	0%	0%	0%	0%	0%	0%
Customers Bank	0	0	0	0	64,125,237	0	0	0	64,125,237
	0%	0%	0%	0%	12%	0%	0%	0%	12%
Washington Trust	0	0	0	60,812,281	0	0	1,474,808	0	62,287,089
	0%	0%	0%	11%	0%	0%	0%	0%	11%
TD Bank	0	0	0	0	12,591,152	0	0	0	12,591,152
	0%	0%	0%	0%	2%	0%	0%	0%	2%
<b>TOTALS</b>	-	<b>15,300,949</b>	-	<b>65,920,074</b>	<b>158,201,281</b>	-	<b>1,474,807.71</b>	<b>310,759,313</b>	<b>551,656,424</b>
<b>(%) PORTFOLIO</b>	<b>0.00%</b>	<b>2.77%</b>	<b>0.00%</b>	<b>11.95%</b>	<b>28.68%</b>	<b>0.00%</b>	<b>0.27%</b>	<b>56.33%</b>	<b>100.00%</b>

Note: PIP + CD must be under 75%.

Note: Maximum participation by any one vendor limited to 35% of total portfolio.

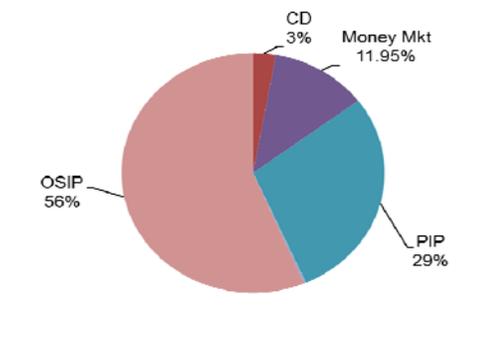
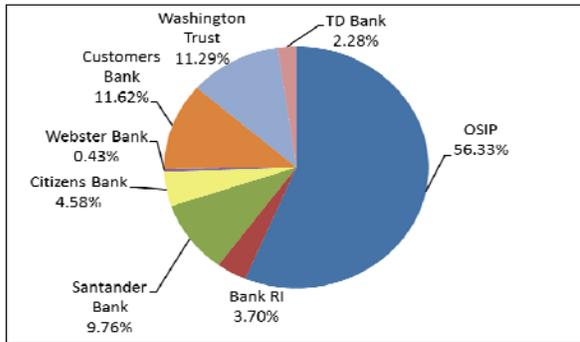
**State of Rhode Island**  
**Short Term Cash Monthly Performance**  
**Performance for**  
**January 01, 2017 to January 31, 2017**

<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	\$ 183,249,536.24	\$ 246,904,223.80	\$ 275,888,245.92	\$ 154,687.56	0.6602%
H.A.V.A	\$ 297.59	\$ 297.72	\$ 297.59	\$ 0.13	0.5143%
GENERAL FUND (HIST PRES)	\$ 541,940.99	\$ 542,326.41	\$ 541,940.99	\$ 385.42	0.8374%
HISTORIC TAX CREDITS	\$ 2,926,362.00	\$ 2,928,298.64	\$ 2,926,362.00	\$ 1,936.64	0.7792%
HIGHWAY FUND	\$ 65,511,134.86	\$ 46,244,431.50	\$ 49,388,554.22	\$ 33,296.64	0.7938%
T.D.I. RESERVE (DET)	\$ 100,185,058.71	\$ 90,034,844.59	\$ 94,694,736.13	\$ 49,785.88	0.6190%
RICAP GL FUND 21	\$ 81,831,287.58	\$ 73,879,805.08	\$ 79,218,384.35	\$ 48,517.50	0.7211%
BOND CAPITAL FUND	\$ 64,621.18	\$ 24,644.44	\$ 54,298.60	\$ 23.26	0.5044%
R.I. CLEAN WATER ACT	\$ 3,206,841.37	\$ 3,208,869.16	\$ 3,206,841.37	\$ 2,027.79	0.7445%
STATE LOTTERY FUND	\$ 45,238,992.77	\$ 46,963,799.24	\$ 42,029,315.35	\$ 24,806.47	0.6949%
ASSESSED FRINGE BEN ADM	\$ 416,100.81	\$ 416,364.48	\$ 416,100.81	\$ 263.67	0.7461%
AUTO EQUIPMENT SERVICE	\$ 1,255.04	\$ 1,255.57	\$ 1,255.04	\$ 0.53	0.4972%
HEALTH INSURANCE FUND	\$ 23,888,143.62	\$ 24,704,479.34	\$ 23,136,530.72	\$ 16,335.72	0.8313%
FLEET REVOLVING LOAN FUND	\$ 1,268,138.66	\$ 1,268,741.68	\$ 1,268,138.66	\$ 603.02	0.5599%
EMPLOYEES RETIREMENT	\$ 761,287.82	\$ 8,369,242.64	\$ 18,732,255.56	\$ 7,954.82	0.5000%
MUNICIPAL EMPLOYEES RET.	\$ 292,340.66	\$ 193,375.92	\$ 2,437,501.95	\$ 1,035.26	0.5001%
RETIREE HEALTH FUND	\$ 1,001,391.87	\$ 1,001,817.16	\$ 1,001,391.87	\$ 425.29	0.5000%
BOG RETIREE FUND	\$ 951.77	\$ 952.38	\$ 951.77	\$ 0.61	0.7546%
RIPTA HEALTH FUND	\$ 1,036,223.44	\$ 1,036,673.80	\$ 1,036,223.44	\$ 450.36	0.5117%
PERMANENT SCHOOL FUND	\$ 1,950,220.75	\$ 1,951,607.54	\$ 1,950,220.75	\$ 1,386.79	0.8373%
TEACHER RETIREE HEALTH FUND	\$ 580,496.61	\$ 580,782.92	\$ 580,496.61	\$ 286.31	0.5807%
RI ST POL RETIREE HEALTH	\$ 124,055.05	\$ 124,108.62	\$ 124,055.05	\$ 53.57	0.5084%
RI LEG RETIREE HEALTH	\$ 829.55	\$ 829.90	\$ 829.55	\$ 0.35	0.4968%
RI JUDICIAL RETIREE HEALTH	\$ 40,520.46	\$ 40,537.67	\$ 40,520.46	\$ 17.21	0.5001%
UNIVERSITY COLLEGE	\$ 12,242.09	\$ 12,250.09	\$ 12,242.09	\$ 8.00	0.7694%
INDUS. BLDG. & MTG. INS.	\$ 1,220,994.55	\$ 1,221,862.90	\$ 1,220,994.55	\$ 868.35	0.8374%
<b>Operating Funds Totals</b>	<b>\$ 515,351,266.04</b>	<b>\$ 551,656,423.19</b>	<b>\$ 599,908,685.40</b>	<b>\$ 345,157.15</b>	<b>0.677%</b>
CCDL 2004 SERIES A	\$ -	\$ -	\$ -	\$ -	
BOND CCDL 2006 SERIES C	\$ 893,815.34	\$ 887,983.86	\$ 889,644.91	\$ 632.68	0.8373%
GO BND-NTAX 2007 SERIES A	\$ 374,918.91	\$ 375,185.56	\$ 374,918.91	\$ 266.65	0.8374%
CCDL10B BOND CAPITAL COMPONENT	\$ 950,000.00	\$ 950,675.66	\$ 950,000.00	\$ 675.66	0.8374%
CCDL10C	\$ 160,402.58	\$ 160,516.66	\$ 160,402.58	\$ 114.08	0.8374%
CCDL2011A	\$ 6,076,666.09	\$ 6,075,706.98	\$ 6,073,260.61	\$ 4,319.39	0.8374%
CCDL2012B	\$ 6,212,767.87	\$ 6,217,186.53	\$ 6,212,767.87	\$ 4,418.66	0.8374%
GO CCDL 2013A	\$ 3,094,648.86	\$ 2,927,807.49	\$ 2,985,640.21	\$ 2,122.04	0.8368%
GO CCDL 2013B	\$ 6,250,000.00	\$ 6,254,445.14	\$ 6,250,000.00	\$ 4,445.14	0.8374%
GO CCDL 2014A	\$ 2,094,193.10	\$ 1,335,659.25	\$ 1,604,084.49	\$ 1,134.49	0.8327%
GO CCDL 2014B	\$ 40,664.27	\$ 40,693.19	\$ 40,664.27	\$ 28.92	0.8374%
GO CCDL 2016A	\$ 24,002,575.95	\$ 22,987,777.69	\$ 23,337,164.65	\$ 16,589.25	0.8370%
GO CCDL 2016B	\$ 5,324,002.95	\$ 4,884,131.05	\$ 5,037,905.37	\$ 3,579.35	0.8365%
CLEAN WATER 2004 SERIES A	\$ 146,728.71	\$ 146,833.07	\$ 146,728.71	\$ 104.36	0.8374%
CCDL99A 1999A	\$ 206,569.39	\$ 206,716.31	\$ 206,569.39	\$ 146.92	0.8374%
CLEAN WATER 2007 SERIES A	\$ 283,252.06	\$ 283,453.52	\$ 283,252.06	\$ 201.46	0.8374%
CCDL2011A CLEAN WATER COMPONENT	\$ 1,236,000.00	\$ 1,236,879.07	\$ 1,236,000.00	\$ 879.07	0.8374%
<b>Bond Proceeds Fund Totals</b>	<b>\$ 57,347,206.08</b>	<b>\$ 54,971,651.03</b>	<b>\$ 55,789,004.03</b>	<b>\$ 39,658.12</b>	<b>0.837%</b>
<b>Grand Totals</b>	<b>\$ 572,698,472.12</b>	<b>\$ 606,628,074.22</b>	<b>\$ 655,697,689.43</b>	<b>\$ 384,815.27</b>	<b>0.691%</b>

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

**Issuer Credit Rating  
January 31, 2017**

Issuer	Type of Instrument*	Month End % Portfolio	Issuer Ratings			S-T Debt Rating		L-T Debt Rating		Credit Outlook
			Moody's	Moody's	S&P	Moody's	S&P	S&P		
Bank RI	3,4	3.7%	N/R	N/A	N/A	N/A	N/A	N/A	N/A	
Santander Bank	3,4	9.8%	Baa2	P-1	A-2	A2	BBB+	Stable		
Bank of America		0.0%	Baa1	P-2	A-2	Baa1	BBB+	Stable		
JP Morgan Chase		0.0%	A3	P-2	A-2	A3	A-	Stable		
Fidelity		0.0%	N/R	N/A	N/A	N/A	N/A	N/A		
State Street Bank & Trust Company		0.0%	Aa3	P-1	A-1+	Aa1	AA-	Stable		
RBS Citizens	3,4	4.6%	Baa1	P-2	A-2	A1	A-	Stable		
Webster Bank	3,4	0.4%	Baa1	P-1	A-2	A1	BBB+	Stable		
Ocean State Investment Pool	6	56.3%	N/R	N/A	N/A	N/A	N/A	N/A		
Washington Trust	3,7	11.3%	N/R	N/A	N/A	N/A	N/A	N/A		
TD Bank	3	2.3%	Aa1	P-1	A-1+	Aa1	AA-	Stable		
Customers Bank	4	11.6%	N/R	N/A	N/A	N/A	N/A	N/A		



REPO = Repurchase Agreement	1*
CP = Commercial Paper	2*
CD = Certificate of Deposit	3*
CoD = Collateralized Deposit	4*
AG = US Government Agency Note	5*
MM = Government Money Market	6*
GID = Government Insured Deposit	7*

**Ratings Definitions**

**Moody's Short-Term Debt Ratings:**

- P-1** - Prime-1 have a superior ability for repayment of sr. S-T debt obligations
- P-2** - Prime-1 have a strong ability for repayment of sr. S-T debt obligations
- P-3** - Prime-1 have an acceptable ability for repayment of sr. S-T debt obligations
- NP** - Not Prime

**Moody's Issuer Rating Symbols:**

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

**Moody's Long-Term Debt Ratings:**

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

**Modifiers:**

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

**S&P Short-Term Credit Ratings:**

- A-1** - Highest rated, strong capacity to meet obligations
- A-2** - Somewhat more susceptible to adverse effects of changes in financial conditions; satisfactory
- A-3** - Exhibits adequate protection parameters
- B** - Significant speculative characteristics, faces major ongoing uncertainties
- C** - Vulnerable to non-payment
- D** - Payment default

**Modifiers:**

- + or - show relative standing within the category.

**S&P Outlook Definitions:**

- Positive** - A rating may be raised
- Negative** - A rating may be lowered
- Stable** - A rating is not likely to change
- Developing** - May be raised or lowered
- NM** - Not meaningful

**S&P Long-Term Debt Ratings:**

- AAA** - Highest rating, extremely strong
- AA** - Differs slightly from highest rating, very strong
- A** - More susceptible to adverse effects of change in economic condition, strong
- BBB** - Exhibits adequate protection parameters
- BB, B** - Have significant speculative characteristics. BB least speculative
- CCC, CC, C** - C highest degree
- D** - Payment default

**Modifiers:**

- + or - show relative standing within the category.

## Section XIII.

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### Defined Contribution Plan



# 2017 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
As of 1/31/17	Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns			Annualized Total Returns as of 12/31/2016							Since	Incep.	
Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	
TIAA Stable Value****	Current crediting rate = 2.00						0.17	0.17	1.90		1.90						1.87	3/31/2012	
<b>FIXED INCOME</b>																			
<b>Intermediate-Term Bond</b>																			
Vanguard Total Bond Market Index Adm	VBTLX	3.92	171,815.20	0.06	0.06	2	0.00	0.30	0.30	2.60	62	2.94	40	2.14	71	4.29	48	4.24	11/12/01
								0.22	0.22	2.75		2.99		2.24		4.36			
				0.85	0.71			0.34	0.34	2.96		2.82		2.66		4.32			
				1026	1026						996		951		903		798		
<b>Inflation-Linked Bond</b>																			
PIMCO Real Return Instl	PRRIX	9.08		0.58	0.45	24	0.00	1.17	1.17	5.04	21	1.85	23	0.98	13	4.60	3		01/29/97
								0.84	0.84	4.68		2.26		0.89		4.36			
				0.83	0.65			0.85	0.85	4.36		1.46		0.45		3.67			
				234	234						230		216		185		142		
<b>Equity</b>																			
<b>Large Cap Blend</b>																			
Vanguard Institutional Index I	VINIX	16.08	211,495.63	0.04	0.04	1	0.00	1.89	1.89	11.93	27	8.85	6	14.63	15	6.95	21	9.50	07/31/90
								1.90	1.90	11.96		8.87		14.66		6.95			
TIAA-CREF Social Choice Eq Instl	TISCX	11.08	2,431.67	0.18	0.18	5	0.00	1.88	1.88	13.51	14	7.22	51	13.56	52	6.76	28		07/01/99
								1.88	1.88	12.74		8.43		14.67		7.07			
				1.07	0.96			1.85	1.85	10.49		7.26		13.62		6.25			
				1426	1426						1383		1320		1235		1083		
<b>Mid Cap Blend</b>																			
Vanguard Mid Cap Index I	VMCIX	18.67	76,489.78	0.07	0.07	2	0.00	3.00	3.00	11.23	73	7.68	30	14.38	38	7.69	37	9.67	05/21/98
								2.99	2.99	11.25		7.72		14.42		7.70			
								2.99	2.99	11.25		7.72		14.56		7.62			
				1.16	1.06			1.52	15.10	15.10		6.48		13.74		7.01			
				445	445						412		386		363		314		
<b>Small Cap Blend</b>																			
Vanguard Small Cap Index Adm	VSMAX	0.75	69,441.63	0.08	0.08	2	0.00	1.57	1.57	18.30	70	7.01	40	14.83	34	8.18	19	9.00	11/13/00
								1.58	1.58	18.26		7.00		14.81		8.10			
								1.58	1.58	18.26		7.00		15.00		8.60			
				1.33	1.20			2.83	20.57	20.57		6.54		14.12		6.73			
				793	793						776		701		642		551		



# 2017 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)	
As of 1/31/17	Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 12/31/2016								Since	Incep.		
Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date		
<b>Foreign Large Blend</b>																				
TIAA-CREF International Eq Idx Instl	TCIEX	11.42	8,190.57	0.06	0.06	1	0.00	3.44	3.44	1.22	43	(1.63)	40	6.69	26	0.85	34		10/01/02	
								2.90	2.90	1.00		(1.60)		6.53		0.75				
				1.29	1.10			3.38	3.38	0.61		(2.04)		5.94		0.35				
				778	778						741		658		626		472			
<b>Diversified Emerging Markets</b>																				
Vanguard Emerging Mkts Stock Idx Adm	VEMAX	8.42	61,025.35	0.15	0.15	1	0.00	4.94	4.94	11.73	26	(1.64)	23	1.44	53	1.87	37	4.34	06/23/06	
								4.54	4.54	11.77		(1.44)		1.61		2.01				
								4.54	4.54	10.28		(0.73)		2.28		2.56				
								4.64	4.64	13.14		(1.09)		1.82		2.36				
								5.47	5.47	11.19		(2.55)		1.28		1.84				
				1.77	1.44			5.61	5.61	8.34		(2.87)		1.73		1.29				
				822	822						786		628		503		258			
<b>Miscellaneous Sector</b>																				
TIAA Real Estate Account	VA	1.42	24,301.35	0.89	0.89		0.24	0.38	0.38	5.20				8.49		9.03		3.38	10/02/95	
<b>Lifecycle</b>																				
Vanguard Target Retirement Income Trust II				0.07	0.07		0.00	0.86	0.86	5.25				3.56		4.95			4.72	02/29/08
								0.77	0.77	5.35				3.71		5.10				
				1.13	0.78			1.06	1.06	5.05				2.64		4.37		3.80		
				181	181						175		151		136		77			
Vanguard Target Retirement 2010 Trust II				0.07	0.07		0.00	0.86	0.86	5.32				3.67		6.01			4.89	02/29/08
								0.79	0.79	5.44				3.83		6.16				
				1.00	0.71			1.30	1.30	5.98				3.22		6.04		3.76		
				121	121						113		101		87		53			
Vanguard Target Retirement 2015 Trust II				0.07	0.07		0.00	1.27	1.27	6.25				4.10		7.27			5.32	02/29/08
								1.13	1.13	6.40				4.27		7.43				
				1.03	0.75			1.39	1.39	6.29				3.36		6.74		4.31		
				144	144						133		110		93		36			
Vanguard Target Retirement 2020 Trust II				0.07	0.07		0.00	1.53	1.53	7.02				4.48		8.23			5.56	02/29/08
								1.40	1.40	7.17				4.65		8.42				
				1.07	0.83			1.50	1.50	6.30				3.32		6.85		3.85		
				249	249						231		205		180		97			



# 2017 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
As of 1/31/17	Mgr. Ticker	Tenure	AUM \$ Millions	Gross ER	Net ER	Net %-ile	Rev Share	Recent Returns		Annualized Total Returns as of 12/31/2016							Since Incep.	Incep. Date	
								1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile		
	Vanguard Target Retirement 2025 Trust II			0.07	0.07		0.00	1.73	1.73	7.51		4.60		8.93				5.67	02/29/08
	<i>Vanguard Target Retirement 2025 Composite</i>							1.61	1.61	7.67		4.77		9.10					
	<i>Target Date 2021-2025 Median</i>			1.08	0.80			1.72	1.72	6.87		3.56		7.89		4.12			
	<i>Target Date 2021-2025 Number of Funds</i>			218	218						201		175		145		47		
	Vanguard Target Retirement 2030 Trust II			0.07	0.07		0.00	1.94	1.94	7.93		4.66		9.58				5.74	02/29/08
	<i>Vanguard Target Retirement 2030 Composite</i>							1.81	1.81	8.11		4.87		9.77					
	<i>Target Date 2026-2030 Median</i>			1.12	0.86			1.95	1.95	7.31		3.76		8.50		4.05			
	<i>Target Date 2026-2030 Number of Funds</i>			249	249						231		205		180		87		
	Vanguard Target Retirement 2035 Trust II			0.07	0.07		0.00	2.16	2.16	8.37	7	4.74		10.24				5.94	02/29/08
	<i>Vanguard Target Retirement 2035 Composite</i>							2.01	2.01	8.55		4.95		10.42					
	<i>Target Date 2031-2035 Median</i>			1.12	0.85			2.15	2.15	7.75		3.85		9.05		4.25			
	<i>Target Date 2031-2035 Number of Funds</i>			218	218						201		175		145		47		
	Vanguard Target Retirement 2040 Trust II			0.07	0.07		0.00	2.36	2.36	8.79		4.76		10.59				6.14	02/29/08
	<i>Vanguard Target Retirement 2040 Composite</i>							2.21	2.21	8.98		5.01		10.80					
	<i>Target Date 2036-2040 Median</i>			1.16	0.90			2.29	2.29	7.82		4.00		9.38		4.15			
	<i>Target Date 2036-2040 Number of Funds</i>			249	249						231		205		180		87		
	Vanguard Target Retirement 2045 Trust II			0.07	0.07		0.00	2.47	2.47	8.91		4.78		10.61				6.12	02/29/08
	<i>Vanguard Target Retirement 2045 Composite</i>							2.28	2.28	9.13		5.06		10.83					
	<i>Target Date 2041-2045 Median</i>			1.15	0.86			2.33	2.33	8.06		4.07		9.79		4.35			
	<i>Target Date 2041-2045 Number of Funds</i>			218	218						201		175		141		43		
	Vanguard Target Retirement 2050 Trust II			0.07	0.07		0.00	2.42	2.42	8.95		4.77		10.59				6.14	02/29/08
	<i>Vanguard Target Retirement 2050 Composite</i>							2.28	2.28	9.13		5.06		10.83					
	<i>Target Date 2046-2050 Median</i>			1.25	0.90			2.37	2.37	8.11		4.09		9.83		4.06			
	<i>Target Date 2046-2050 Number of Funds</i>			242	242						224		198		172		24		
	Vanguard Target Retirement 2055 Trust II			0.07	0.07		0.00	2.44	2.44	8.97		4.75						10.87	08/31/10
	<i>Vanguard Target Retirement 2055 Composite</i>							2.28	2.28	9.13		5.06							
	<i>Target Date 2051-2055 Median</i>			1.28	0.86			2.37	2.37	8.19		4.07							
	<i>Target Date 2051-2055 Number of Funds</i>			216	216						199		146						
	Vanguard Target Retirement 2060 Trust II			0.07	0.07		0.00	2.46	2.46	8.95		4.75						8.81	03/01/12
	<i>Vanguard Target Retirement 2060 Composite</i>							2.28	2.28	9.13		5.06							
	<i>Target Date 2060+ Median</i>			1.92	0.82			2.45	2.45	7.86		3.23							
	<i>Target Date 2060+ Number of Funds</i>			165	165						108		9						



# 2017 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
As of 1/31/17	Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 12/31/2016								Since	Incep.	
Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	

Source: Morningstar & TIAA-CREF

Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 1/31/2017. All other data as of 12/31/2016

**VA = Variable Annuity**

Since Incep. = Since Inception 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.

· %-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.

## **Sharpe Ratio (Source: Morningstar Direct)**

A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. The Sharpe Ratio can be used to compare two portfolios directly with regard to how much excess return each portfolio achieved for a certain level of risk. Morningstar first calculates a monthly Sharpe Ratio and then annualizes it to put the number in a more useful one-year context.

**Standard Deviation (Source: Morningstar Direct)** The statistical measurement of dispersion about an average, which depicts how widely a stock or portfolio's returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that is most likely for a given investment. When a stock or portfolio has a high standard deviation, the predicted range of performance is wide, implying greater volatility.

## **Information Ratio (Source: Morningstar Direct) Benchmark Specific**

Information ratio is a risk-adjusted performance measure. The information ratio is a special version of the Sharpe Ratio in that the benchmark doesn't have to be the risk-free rate.

**Beta** (Source: Morningstar Direct) **Benchmark Specific**

Beta is a measure of a portfolio's sensitivity to market movements. The beta of the market is 1.00 by definition.

**Alpha** (Source: Morningstar Direct) **Benchmark Specific**

A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta.

**Tracking Error** (Source: Morningstar Direct) **Benchmark Specific**

Tracking error is a measure of the volatility of excess returns relative to a benchmark.

**Upside** (Source: Morningstar Direct) **Benchmark Specific**

Upside Capture Ratio measures a manager's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the security's upside capture return and dividing it by the benchmark's upside capture return.

**Downside** (Source: Morningstar Direct) **Benchmark Specific**

Downside Capture Ratio measures a manager's performance in down markets relative to the market (benchmark) itself. It is calculated by taking the security's downside capture return and dividing it by the benchmark's downside capture return.

**R-Square** (Source: Morningstar Direct) **Benchmark Specific**

Reflects the percentage of a portfolio's movements that can be explained by movements in its benchmark.  
You cannot invest directly in index.

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.

Section XV.

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OPEB Trust



Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	Annualized				ITD	Inception Date
						1 Year	3 Years	5 Years	10 Years		
Mackay Shields OPEB	68,739,564.4	33.9	0.20	0.20	-2.38	1.14	2.45			1.58	5/1/2013
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			<i>0.20</i>	<i>0.20</i>	<i>-2.34</i>	<i>1.45</i>	<i>2.59</i>			<i>1.67</i>	<i>5/1/2013</i>
SSGA S&P 500 INDX	134,072,792.3	66.1	1.89	1.89	9.87	20.07	10.87	14.04		12.51	5/1/2011
<i>S&amp;P 500 - Total Return Index</i>			<i>1.90</i>	<i>1.90</i>	<i>9.87</i>	<i>20.04</i>	<i>10.85</i>	<i>14.09</i>		<i>11.72</i>	<i>5/1/2011</i>
<b>Total OPEB</b>	<b>202,812,356.6</b>	<b>100.0</b>	<b>1.32</b>	<b>1.32</b>	<b>5.46</b>	<b>13.18</b>	<b>7.95</b>	<b>8.90</b>		<b>8.65</b>	<b>5/1/2011</b>
<i>OPEB Custom Blend</i>			<i>1.30</i>	<i>1.30</i>	<i>5.49</i>	<i>13.29</i>	<i>8.04</i>	<i>8.74</i>		<i>7.78</i>	<i>5/1/2011</i>

END NOTES

1/31/2017

1 RI7GX0903OPE OPEB Custom Blend

35% Barclays Aggregate and 65% S&P 500



Total Performance Summary

Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

1/31/2017

Account Name Benchmark Name	Market Value	% of Total	YTD	Month	Cumulative			2016	2015	2014	Inception Date
					12/1/2016 - 12/31/2016	11/1/2016 - 11/30/2016					
Mackay Shields OPEB	68,739,564.4	33.9	0.20	0.20	0.21	-2.43	2.28	0.46	6.03	5/1/2013	
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			<i>0.20</i>	<i>0.20</i>	<i>0.14</i>	<i>-2.37</i>	<i>2.65</i>	<i>0.55</i>	<i>5.97</i>	<i>5/1/2013</i>	
SSGA S&P 500 INDX	134,072,792.3	66.1	1.89	1.89	1.98	3.70	11.99	1.46	13.63	5/1/2011	
<i>S&amp;P 500 - Total Return Index</i>			<i>1.90</i>	<i>1.90</i>	<i>1.98</i>	<i>3.70</i>	<i>11.96</i>	<i>1.38</i>	<i>13.69</i>	<i>5/1/2011</i>	
<b>Total OPEB</b>	<b>202,812,356.6</b>	<b>100.0</b>	<b>1.32</b>	<b>1.32</b>	<b>1.36</b>	<b>1.55</b>	<b>8.69</b>	<b>1.16</b>	<b>11.00</b>	<b>5/1/2011</b>	
<i>OPEB Custom Blend</i>			<i>1.30</i>	<i>1.30</i>	<i>1.33</i>	<i>1.58</i>	<i>8.77</i>	<i>1.31</i>	<i>11.00</i>	<i>5/1/2011</i>	

END NOTES

1/31/2017

- |   |              |                   |  |
|---|--------------|-------------------|--|
| 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                                     |